

# Industry Wage Survey: Machinery Manufacturing, February 1973



U.S. Department of Labor  
Bureau of Labor Statistics  
1975

Bulletin 1859



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U.S. Department of Labor  
John T. Dunlop, Secretary  
Bureau of Labor Statistics  
Julius Shiskin, Commissioner  
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## Preface

This bulletin summarizes the results of a Bureau of Labor Statistics survey of wages and supplementary benefits in the nonelectrical machinery manufacturing industries in 23 selected areas in February 1973.

Separate releases were issued earlier for the following metropolitan areas covered by the survey:

Atlanta	Milwaukee
Baltimore	Minneapolis-St. Paul
Boston	New York
Buffalo	Newark and Jersey City
Chicago	Philadelphia
Cleveland	Pittsburgh
Dallas	Portland
Denver	St. Louis
Detroit	San Francisco-Oakland
Hartford-New Britain-Bristol	Tulsa
Houston	Worcester
Los Angeles-Long Beach & Anaheim-Santa Ana-Garden Grove	

Copies of these releases are available from the Bureau of Labor Statistics, Washington, D.C. 20212, or any of its regional offices.

Data on occupational earnings and establishment practices and supplementary wage provisions are presented for the machinery industries as a whole in each area. Separate information on occupational pay, including averages and distributions, also is presented for selected industries (e.g., special dies and tools, die sets, jigs and fixtures; machine-tool accessories; oil-field machinery) in 10 areas.

This study was conducted in the Bureau's Office of Wages and Industrial Relations. Sandra King of the Division of Occupational Wage Structures prepared the analysis in this bulletin. Field work for the survey was directed by the Bureau's Associate Assistant Regional Directors for Operations.

Other reports available from the Bureau's program of industry wage studies, as well as the addresses of the Bureau's regional offices, are listed at the end of this bulletin.

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# Machinery Manufacturing

## Summary

Occupational hourly pay levels in the nonelectrical machinery manufacturing industries increased 13 percent between the winter of 1970-71 and February 1973 in the 21 metropolitan areas surveyed regularly by the Bureau for nearly two decades.<sup>1</sup> The average annual rate of increase for the 1970-73 period was 6.0 percent. The lowest rate of increase was about 4.5 percent in Denver and Hartford; the highest, 8.2 percent in Pittsburgh.

Based on 10 occupational classifications common to all 23 areas surveyed in 1973 (Tulsa, Okla., was surveyed for the first time in 1970-71 and Atlanta, Ga., for the first time in 1973), average hourly earnings were usually highest in San Francisco and lowest in Atlanta. Tool and diemakers usually had the highest average among the jobs studied.<sup>2</sup> Workers producing tools and dies for sale (jobbing) averaged from \$6.73 in St. Louis to \$4.77 in Hartford. Those producing or maintaining tools and dies for use within the establishment (other than jobbing) had averages from a high of \$6.76 in San Francisco to a low of \$4.48 in Atlanta and Tulsa. Janitors, one of the lowest-paid occupational groups studied, averaged from \$3.96 in San Francisco to \$2.64 in Dallas.

Nearly all of the production workers were in establishments providing paid holidays, commonly 9 a year or more, and paid vacations. Typical vacation provisions ranged from 1 week's pay after 1 year of service to 4 weeks' pay after 20 years. At least part of the cost of life, hospitalization, surgical, and medical insurance was provided to about nine-tenths or more of the production workers; retirement pension plans covered at least three-fourths of the workers in nearly all areas.

## Industry characteristics

**Products.** The nonelectrical machinery industries manufacture a wide variety of products, ranging from staple removers and pencil sharpeners to large complex engines, turbines, and oil drilling rigs. The establishments studied<sup>3</sup> were classified according to their primary product. In the tabulation, these categories and the percent of production workers employed in each are shown:

Total	100
Engines and turbines . . . . .	8
Farm machinery . . . . .	3
Construction and related machinery . . . . .	17
Metalworking machinery . . . . .	21
Special industry machinery . . . . .	10
General industrial machinery . . . . .	16
Office and computing machinery . . . . .	8
Service industry machinery . . . . .	7
Miscellaneous machinery, except electrical . . . . .	11

NOTE: Because of rounding, sums of individual items do not equal 100.

Among the 23 areas in the study, the types of products manufactured varied considerably. In Houston, seven-tenths of the workers were in establishments primarily producing oil-field machinery (part of the construction and related machinery category). In Tulsa, two-thirds of the workers were in establishments manufacturing construction and related machinery, and in Detroit and Worcester, nearly one-half were in plants producing metalworking machinery. Except for Hartford, where slightly more than one-half of the employees were in establishments manufacturing general industrial machinery, no one product category furnished employment to a majority of the workers in the remaining areas.

**Employment.** The 23-area survey covered one-third of the approximately 1,341,100 production and related workers estimated to be employed in the nonelectrical

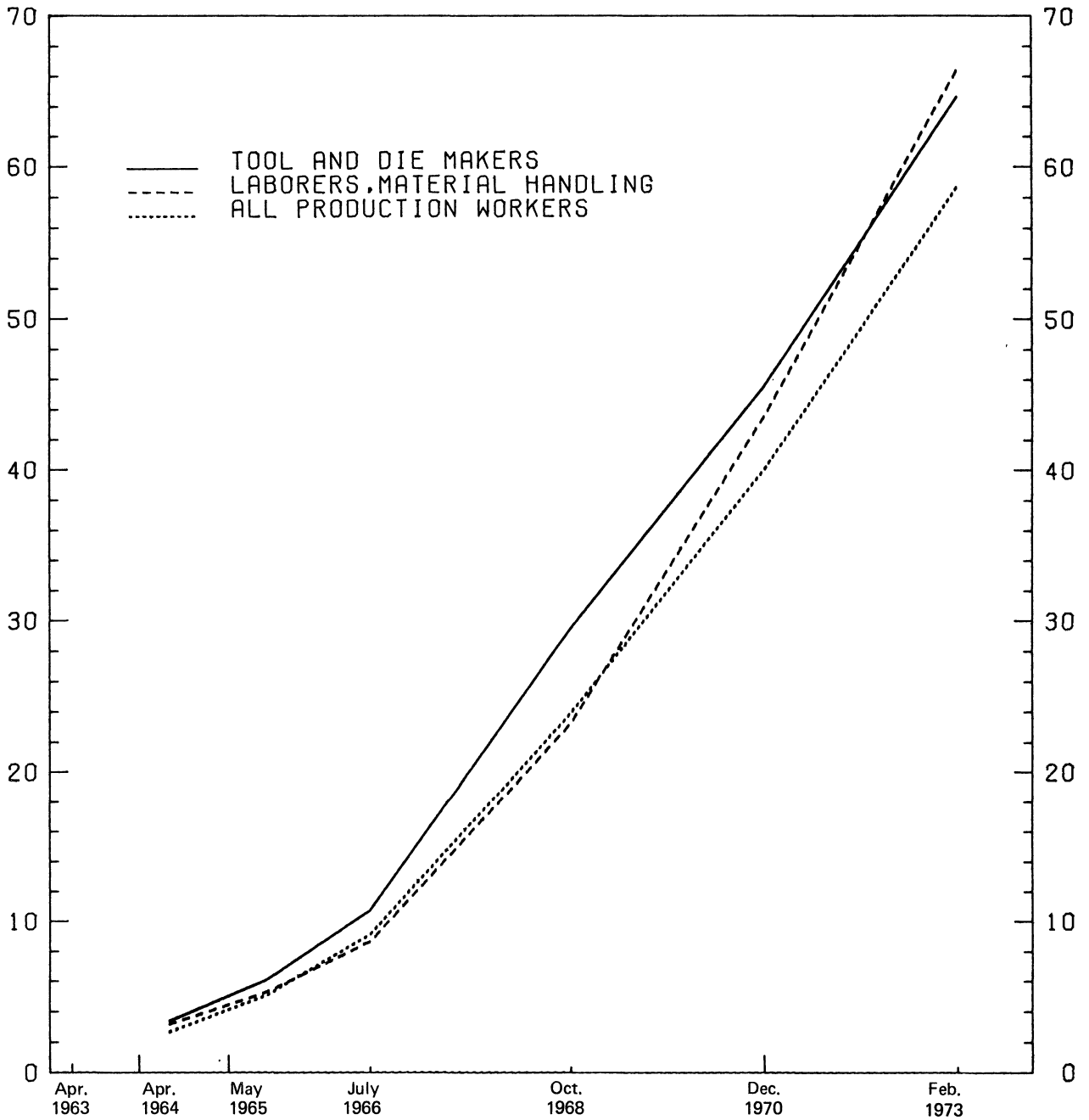
<sup>1</sup> See appendix A for scope and method of 1973 survey, which covered a total of 23 areas including Atlanta, Ga., for the first time. Surveys conducted from 1955 through the fall of 1968 covered 21 areas, and earnings trend data in this report are limited to these areas. The winter 1970-71 study covered 22 areas. Wage data presented in this bulletin exclude premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> See appendix B for job descriptions.

<sup>3</sup> The survey included establishments primarily engaged in manufacturing nonelectrical machinery. Omitted from the survey were (1) establishments with fewer than 8 workers and primarily manufacturing special dies, tools, jigs and fixtures, or machine-tool accessories, and (2) other nonelectrical machinery establishments with fewer than 20 workers.

**Percent increase in average straight-time hourly earnings, nonelectrical machinery manufacturing in 21 areas, April 1963 to specified dates**

PERCENT



machinery industries (nationwide) at the time of the study.<sup>4</sup> Production employment, according to the survey, ranged from 3,000 to 8,000 workers in Atlanta, Baltimore, Buffalo, Denver, Portland, San Francisco, Tulsa, and Worcester to nearly 71,000 in Chicago. The next four largest machinery centers studied were Detroit (47,700), the Los Angeles<sup>5</sup> area (41,000), Milwaukee (37,900) and Cleveland (29,000). (See appendix table A-1.)

For the 22 areas comparable to both the 1970-71 and 1973 surveys, the aggregate employment of production workers increased by about 2,000 workers—from 437,531 to 439,529—or less than 1 percent. The largest gains were recorded in Dallas (29 percent) and Denver (21 percent). Declines were recorded in eight areas—ranging from about 15 percent in Hartford and Philadelphia to 3 percent in Detroit and Pittsburgh.

Although the two surveys do not provide a precise measure of changes in occupational employment, some general observations can be made. For example, machine tool operators declined slightly in all areas combined, resulting from decreases in class A and B workers and a modest gain for class C operators (those with least skill and experience). Inspectors also exhibited a mixed pattern: Class A recorded no change between 1970 and 1973; class B rose slightly; and class C dropped by less than one-tenth. All skill levels in the assembler classification gained slightly between the two survey periods.

In the 23 areas combined, about 44 percent of the production workers were in establishments with 100 to 999 employees, compared with 26 percent in establishments with fewer than 100 workers and 30 percent in those with 1,000 workers or more. Only in New York and Atlanta were approximately one-half of the employees in establishments with fewer than 100 workers; in Baltimore and Milwaukee, a majority were in establishments employing at least 1,000 workers.

**Processes.** Production methods used in the manufacture of nonelectrical machinery have many similarities and generally include machining, assembling (floor, bench, or conveyor line), and inspecting. Depending on a firm's particular organization and the product it manufactures, casting, forging, stamping, heat-treating, polishing, plating, and painting also may be part of the production process. Tools, dies, and fixtures are items frequently manufactured to meet customers' specifications, but products having a large demand usually are mass-produced.

One of the newest technological developments in the mass production process is the use of numerically controlled (N/C) machine tools. This technique permits

the automatic operation of the machine through the use of electronic devices (control units) and programmed changeable tapes. The control unit interprets coded tape instructions, prepared in advance by a programmer, and directs the machine tool through the programmed sequence of machining operations to control functions such as machine speeds and feeds, movement of the tool, flow of coolant, and even selection of the proper preset cutting tool for each operation.

The Bureau developed information on the number of operators on these N/C machines for the first time in the 1970-71 survey. At that time, approximately 3,100 N/C operators were recorded, compared with 4,300 in the current survey. (See table 1 for earnings of these N/C operators.) The largest concentrations of N/C operators in 1973 were between 500 and 600 in Chicago and Philadelphia. Approximately 400 were in Houston and Minneapolis-St. Paul and about 300 in Cleveland and Los Angeles. Fewer than 100 N/C machine operators were found in each of 9 of the 23 areas surveyed.

In February 1973, slightly more than one-half of the workers in the 23 areas combined were in establishments with no numerically controlled machines and no plans for purchasing them. In plants with N/C machines, however, policies regarding wage setting for operators of these machine tools varied. Three-tenths of the 202,127 workers in plants with N/C machines were under wage policies which did not establish a formal rate relationship between operators of N/C equipment and conventional machine tools; slightly over one-half were in plants with wage rates formally set the same for both types of operators; and less than one-fifth were in plants with rates for N/C operators set higher than those for conventional operators. Almost no establishments reported N/C rates set formally lower than conventional rates. This same relationship generally held in most areas studied. Numerically controlled machines were used to make a variety of machinery products including oil-field and construction machinery, machine tools, metalworking and woodworking machinery, pumps and compressors, and printing equipment.

Another production arrangement frequently used by machinery manufacturers is the multiple operation of machine tools. In the 23 areas combined, 39 percent of the workers were employed in establishments that used this multiple operation system. Commonly referred to as "bank operations," this system permits one employee to simultaneously operate two production

<sup>4</sup> Nationwide employment as reported in the Bureau's *Employment and Earnings* series.

<sup>5</sup> Refers to the combined areas of Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove.



machine tools or more of the same type. Approximately one-fifth of the workers assigned to multiple operations received separate wage differentials for such work.

In the 23 areas combined, slightly more than four-fifths of the workers were in establishments having assembly work. About one-third each were employed in plants primarily using bench or floor assembly systems and nearly one-tenth in plants using conveyor lines. Types of assembly systems varied somewhat among the areas. Proportions of workers in floor assembly plants, for example, ranged from slightly less than one-fifth in Denver and Detroit to three-fourths in Worcester and nine-tenths in Portland.

*Unionization.* Establishments with collective bargaining agreements covering a majority of their production workers employed nearly two-thirds of the work force in the survey. As the tabulation indicates, the proportions of workers in such establishments varied widely among the areas:

Portland . . . . .	90-99
Buffalo, Pittsburgh, Milwaukee, San Francisco . . . . .	80-89
Hartford, Newark, New York, Philadelphia, Tulsa, Cleveland, St. Louis . . . . .	70-79
Chicago, Detroit, Minneapolis- St. Paul . . . . .	60-69
Houston . . . . .	50-59
Boston, Worcester, Baltimore, Dallas . . . . .	40-49
Atlanta, Denver . . . . .	30-39
Los Angeles . . . . .	20-29

Most workers in the survey covered by bargaining agreements were represented by the Machinists (IAM), Auto Workers (UAW), or Steelworkers (USA).

*Method of wage payment.* Four-fifths or more of the plant workers in all areas except Milwaukee were paid on a time-rated basis, usually under formal plans that provided for ranges of rates for specific occupations. (See table 27.) Informal systems, which based rates primarily on the qualifications of individual workers, applied to slightly more than one-fourth of the employees in New York and approximately one-fifth in Atlanta, Detroit, Newark and Jersey City, and Philadelphia. Incentive wage systems applied to two-fifths of the workers in Milwaukee and to about one-fifth in Chicago, Hartford, and Pittsburgh. In 12 areas, less than one-tenth of the workers were paid on incentive systems.

*Sex.* Slightly more than 10 percent of the production work force in the 23 areas surveyed were women. Their share of the work force ranged from nearly 20

percent in Minneapolis-St. Paul and St. Louis to 5 percent or less in 7 areas. Among occupations selected for separate study, women were employed most frequently as assemblers, inspectors, and machine-tool operators in routine and less difficult tasks.

### Trends in earnings

Between the winter of 1970-71 and February 1973, average straight-time hourly earnings of machinery workers increased 13 percent, or at an average annual rate of 6 percent. During this period, the average annual rate of increase in the 21 areas compared ranged from 4.5 percent in Denver and Hartford to 8.2 percent in Pittsburgh. (See text table 1.)

As indicated in text table 2, these average annual rates of increase were consistently less than those recorded for skilled and unskilled plant workers in all manufacturing establishments within the same city. When comparisons were limited to specific jobs, however, this pattern remained in only about half the areas. These findings are based on comparisons of average earnings increases between nonelectrical machinery manufacturing industries and the manufacturing segment of the Bureau's area wage studies.<sup>6</sup>

Much of the increases in average hourly earnings in nonelectrical machinery manufacturing resulted from wage rate changes granted through collective bargaining or individually by employers. However, the machinery industries' principal method of wage payment (nearly three-fifths of the production workers paid under ranges of rates for specified jobs) coupled with relatively stable employment may have contributed to the advancing averages. During periods of labor force stability, the increasing seniority of a disproportionate number of workers at the upper end of the pay scale can affect average rates.

For all areas combined, material handling laborers had a 7.1 percent annual rate of increase between the two survey periods, and tool and diemakers (other than jobbing) a 5.9-percent rise. The higher percentage increase for the lesser skilled job than for tool and diemakers is a return to the relationship commonly found in surveys conducted during the 1950's and observed more recently in the 1963 and 1970-71 studies.

<sup>6</sup> The Bureau's area wage survey program covers establishments in the following industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and selected services. Only wage data from the manufacturing division, however, were used in the above comparisons. Area wage surveys were conducted throughout the country in 90 metropolitan areas in 1970 and in 95 areas in 1973. Atlanta and Tulsa were not included in the nonelectrical machinery survey in 1970-71 and 1968, respectively, and Hartford is not included in the regular area wage survey program.

**Text table 1. Percent increases in average hourly earnings<sup>1</sup> of production workers in nonelectrical machinery manufacturing in selected areas and occupations and indexes of average hourly earnings**

Area and occupation	Percent increases in average earnings prorated on an annual basis <sup>2</sup>							Indexes <sup>3</sup> (1966-68=100)	
	1962 to 1963	1963 to 1964	1964 to 1965	1965 to 1966	1966 to 1968	1968 to 1970	1970 to 1973	Winter 1970-71	February 1973
All areas combined .....	2.7	2.7	2.3	3.6	5.7	5.8	6.0	120.1	136.1
<b>Areas</b>									
Baltimore .....	4.9	3.0	2.4	3.5	5.0	4.6	6.4	116.4	133.7
Boston .....	2.8	1.4	1.8	4.1	5.9	7.1	5.5	123.0	138.7
Buffalo .....	3.5	3.2	2.9	2.2	5.9	6.3	6.5	120.7	138.9
Chicago .....	3.4	3.7	2.0	2.5	6.5	7.2	5.7	125.1	140.3
Cleveland .....	2.7	2.7	2.4	3.3	4.9	5.2	6.3	117.0	134.2
Dallas .....	2.6	4.0	2.8	3.5	6.6	7.2	4.7	124.3	137.2
Denver .....	2.7	2.6	2.7	2.8	7.0	8.3	4.5	128.0	141.1
Detroit .....	2.6	2.1	2.4	3.1	7.0	5.9	6.0	122.5	138.2
Hartford .....	3.2	3.9	2.1	3.5	5.9	5.7	4.5	119.3	131.7
Houston .....	1.9	1.4	2.0	4.7	5.3	5.8	6.8	118.7	136.9
Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove ..	3.4	1.0	3.8	4.3	5.1	4.6	5.2	116.0	129.9
Milwaukee .....	2.7	2.6	1.3	4.6	5.2	6.5	7.0	122.0	140.5
Minneapolis—St. Paul .....	2.5	4.1	2.4	4.5	5.6	7.1	6.1	123.2	140.7
Newark and Jersey City .....	2.7	4.7	1.6	3.1	5.9	6.3	6.2	117.5	134.8
New York .....	3.0	3.1	1.4	4.1	3.9	5.8	5.0	120.9	134.5
Philadelphia .....	1.2	2.3	2.4	2.4	5.2	6.4	7.5	123.2	140.5
Pittsburgh .....	.6	1.2	1.6	4.4	3.3	4.5	8.2	113.1	135.1
Portland (Oreg.—Wash.) .....	2.9	3.1	3.7	2.4	6.8	5.7	6.1	120.0	137.0
St. Louis .....	3.1	2.3	2.9	3.2	7.5	5.7	5.4	121.0	136.2
San Francisco—Oakland .....	3.0	2.7	5.3	3.9	6.5	6.7	7.5	122.2	143.6
Worcester .....	3.7	2.1	3.0	4.6	4.9	6.4	5.4	120.3	135.2
<b>Occupations</b>									
Laborers, material handling .....	2.9	3.3	1.8	3.0	5.6	7.3	7.1	123.9	143.7
Tool and die makers (other than jobbing) .....	2.4	3.3	2.5	4.1	7.2	5.5	5.9	121.1	137.0

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> Because the intervals between the four surveys conducted since 1965 were over 1 year, all percents of change have been adjusted to an annual basis. The compound effect of wage changes was considered in computing the annual percentages for periods covering more than 12 months.

<sup>3</sup> For methods used to construct indexes, see appendix A.

NOTE: To determine the percent change for all areas combined, material handling laborers, and tool and diemakers (other than jobbing), the payroll references used for the 1968 and 1970-71 surveys, which referred to more than a single month, were October and December, respectively.

The Bureau's wage-rate index for all production workers in the nonelectrical machinery industries stood at 136.1 (1966-68=100) at the time of the 1973 survey. The corresponding indexes were 143.7 for material handling laborers and 137.0 for tool and diemakers (other than jobbing).

#### Occupational earnings

A number of occupations were selected to represent wage levels of production workers in nonelectrical

machinery manufacturing. (See table 1.) Among these occupations, which constituted 46 percent of the work force, tool and diemakers usually had the highest average hourly earnings. In 8 of the 13 areas where comparisons could be made, men producing tools and dies for sale (jobbing) had higher average hourly earnings than their counterparts producing or manufacturing tools and dies for use within the establishment (other than jobbing). The differential was most pronounced in Chicago where the jobbing shop advantage averaged 15 percent (\$6.39 compared with \$5.57).

**Text table 2. Comparisons of percent increases between average hourly earnings<sup>1</sup> in selected skilled and unskilled occupations in nonelectrical machinery manufacturing and all manufacturing industries prorated on an annual basis, 1970 to 1973**

Area	Nonelectrical machinery manufacturing			All manufacturing industries <sup>3</sup>		
	Skilled and unskilled plant workers <sup>2</sup>	Material handling laborers	Tool and diemakers (other than jobbing)	Skilled and unskilled plant workers <sup>2</sup>	Material handling laborers	Tool and diemakers (other than jobbing)
Baltimore .....	6.4	2.2	5.0	10.8	6.0	8.7
Boston .....	5.5	5.5	5.8	8.4	3.3	6.2
Buffalo .....	6.5	7.3	5.7	10.4	5.5	8.3
Chicago .....	5.7	8.6	5.3	9.7	6.5	7.5
Cleveland .....	6.3	6.6	8.4	10.8	8.3	5.8
Dallas .....	4.7	2.6	5.7	8.7	4.8	5.4
Denver .....	4.5	.2	5.5	10.3	7.4	5.3
Detroit .....	6.0	5.2	5.1	10.3	6.0	5.1
Houston .....	6.8	7.9	5.3	9.0	6.8	6.3
Los Angeles—Long Beach and Anaheim— Santa Ana—Garden Grove .....	5.2	.5	3.9	10.7	6.1	5.7
Milwaukee .....	7.0	7.9	5.7	9.0	5.7	5.5
Minneapolis—St. Paul .....	6.1	6.7	5.6	11.0	7.7	6.7
Newark and Jersey City .....	5.0	4.8	6.8	8.7	5.2	6.8
New York .....	6.2	10.2	4.9	10.0	7.4	5.4
Philadelphia .....	7.5	6.3	6.6	8.7	8.4	8.0
Pittsburgh .....	8.2	8.7	7.2	11.0	9.1	6.5
Portland (Oreg.—Wash.) .....	6.1	5.8	7.1	12.2	10.6	6.3
St. Louis .....	5.4	7.2	6.5	10.4	8.3	7.0
San Francisco—Oakland .....	7.5	8.8	8.4	8.3	8.7	7.7
Worcester .....	5.4	11.3	6.9	9.4	9.5	4.8

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> Includes data for jobs in addition to those shown separately.

<sup>3</sup> Based on percent increases of straight-time average hourly earnings reported in the Bureau's area wage survey program for men in skilled maintenance trades and in unskilled plant jobs.

The percent changes for these two groups in manufacturing plants were combined to produce the all manufacturing increases presented in this table.

In some areas the payroll reference period for the area wage survey did not correspond exactly with the one used in the machinery study. To minimize these differences, the increases for the 1970-73 period were prorated on an annual basis.

Machine-tool operators on production were the largest occupational group studied. For wage study purposes, conventional operators were classified into three skill groups. Operators who set up their own machines and perform a variety of machining operations to close tolerances (class A) averaged from \$6.01 in San Francisco-Oakland to \$3.83 in Atlanta; the corresponding range for the intermediate group of operators (class B) was \$4.74 in Milwaukee and \$4.73 in San Francisco to \$3.29 in Dallas. Averages for operators who perform routine repetitive operations but do not set up the machines (class C) were highest in San Francisco (\$4.59) and lowest in Dallas (\$2.72). Operators on numerically controlled (N/C) machines as a group averaged more than \$4 an hour in most areas; highest hourly averages were recorded in Detroit (\$5.57) and St. Louis (\$5.43). In 14 of the 21 areas permitting

comparison, average earnings of operators working on N/C machines fell between the pay levels for class A and B conventional operators.

In 10 areas where data warranted comparison, N/C operators who set up and operate their machines held a median wage advantage of 27 percent over those who only operate machines. When the average earnings of the former are compared with class A conventional machine operators, the N/C machine workers had the higher earnings in 7 of the 10 areas.

Janitors, among the lowest paid of the occupations studied, typically averaged between \$3 and \$4 an hour. Highest averages were recorded in San Francisco (\$3.96) and Detroit (\$3.94); the lowest were in Dallas (\$2.64) and Atlanta (\$2.71).

Based on 10 occupational classifications common to all areas, San Francisco-Oakland had, by far, the highest

average and Atlanta, the lowest. The relative pay levels using Chicago as base=100, are presented in text table 3.

**Text table 3. Relative pay levels, nonelectrical machinery manufacturing, 23 areas, February 1973**

(Chicago=100)

Area	1973 pay level <sup>1</sup>
San Francisco—Oakland	115
Detroit	107
Milwaukee	104
Portland	104
St. Louis	104
Chicago	100
Cleveland	97
Pittsburgh	97
Buffalo	93
Minneapolis—St. Paul	93
Newark and Jersey City	93
Philadelphia	92
Boston	91
Denver	91
Hartford	91
Houston	90
Los Angeles—Long Beach and Anaheim— Santa Ana—Garden Grove	90
New York	90
Baltimore	89
Worcester	88
Tulsa	81
Dallas	79
Atlanta	78

<sup>1</sup> Average hourly earnings for men in 10 occupational classifications were used in computing the relative pay levels. The jobs are: Assemblers, classes A and B; inspectors, class A; janitors, porters, and cleaners; laborers, material handling; machine-tool operators, production, classes A, B, and C; tool and diemakers (other than jobbing); and welders, hand, class A. To minimize interarea differences in occupational composition, weights expressing constant employment relationships based on total 1973 employment in the respective jobs in the 23 areas were used. Aggregates were computed for each area by multiplying the average straight-time earnings for the jobs by these weights and totaling. The ratio of these aggregates formed the basis for the relatives.

The interarea spread in average straight-time hourly earnings varied by occupation. Class A radial drill-press operators in Denver, for example, averaged 42 percent more than their counterparts in Tulsa. The corresponding spread for tool and diemakers (other than jobbing) was 27 percent, and for class A assemblers, 11 percent.<sup>7</sup>

Where comparisons were possible, workers paid under incentive wage systems usually had higher average earnings than time-rated workers in the same occupation and area. (See table 2.) Differences in averages between time and incentive workers, however, varied substantially by occupation and area. For example, class B and C assemblers paid under incentive wage systems in Chicago averaged 16 and 51 percent, respectively, more than their time-rated counterparts. The corresponding differences in Cleveland were 9 and 20 percent. The preceding discussion of occupational earnings related to men in the jobs selected for separate study. Where possible, tables 4 through 26 provide occupational earnings data for women.

Earnings of individuals, determined largely under systems providing ranges of rates for specified occupations, varied considerably within the same job and area. (See tables 4 through 26.) In the same job and area, earnings of the highest paid workers frequently exceeded those of the lowest paid workers by \$1 an hour or more. Thus, some workers in comparatively low-paid jobs earned more than some workers in jobs for which significantly higher averages were recorded. For example, the tabulation indicates a considerable overlapping of earnings for men class A inspectors and material handling laborers in Cleveland, despite an 87-cent difference in the hourly averages of the two jobs.

Earnings	Class A Inspectors	Material handling laborers
Under \$4.00	2	120
\$4.00 and under \$4.20	20	80
\$4.20 and under \$4.40	14	14
\$4.40 and under \$4.60	31	43
\$4.60 and under \$4.80	141	21
\$4.80 and under \$5.00	30	5
\$5.00 and under \$5.20	76	20
\$5.20 and under \$5.40	63	5
\$5.40 and over	27	
Total workers	404	308
Average hourly earnings	\$4.89	\$4.02

<sup>7</sup> In a special study on the results of the Bureau's Winter 1970-71 survey, regression analysis was used to isolate the individual effect of several variables, e.g., unionization, size of establishment, and size of community, on earnings differences by occupational class. See Albert E. Schwenk, "Earnings differences in machinery manufacturing," *Monthly Labor Review*, July 1974, pp. 38-47

## **Establishment practices and supplementary wage provisions**

Information was obtained on shift differential provisions and practices for production workers. Data on work schedules and selected supplementary benefits, including paid holidays, paid vacations, and health, insurance, and retirement plans, were obtained for both plant and office employees.

*Scheduled weekly hours.* Work schedules of 40 hours a week were in effect in establishments employing three-fourths or more of the production workers in a majority of the areas. (See table 28.)

Most of the remaining production workers had weekly work schedules of more than 40 hours. Office workers also were typically scheduled for 40 hours a week, except in New York where schedules of fewer than 40 hours applied to a majority of the workers. (See table 29.)

Between the 1970 and 1973 surveys, the proportions of plant workers on schedules exceeding 40 hours a week increased in 18 areas, a reversal of the downward pattern recorded during the preceding 2 years (1968-70). The incidence of longer work schedules was up most dramatically in Cleveland, Detroit, Hartford, Milwaukee, Newark and Jersey City, and Worcester. Some of these were the same areas where large declines were recorded between 1968 and 1970.

*Shift differential provisions and practices.* In nearly all areas surveyed, establishments employing 80 percent or more of the production workers had provisions for late shift operations, with extra pay above day shift rates. (See table 30.) The proportions of workers actually employed on second shifts, however, ranged from 5 and 6 percent in Atlanta and New York to 22 and 23 percent in Baltimore and Milwaukee. (See table 31.) Third shift employment made up 9 percent in Baltimore, 8 percent in Pittsburgh, 7 percent in Houston, and 6 percent or less in the remaining areas. Shift differentials usually paid on a cents-per-hour basis or as a percentage of day shift rates varied widely among and within areas.

*Paid holidays.* Virtually all plant and office workers were provided paid holidays. (See tables 32 and 33.) In a majority of areas, most plantworkers received at least 9 days annually. In the remaining areas, provisions for 8 or 9 days typically applied. With some exceptions,

paid holiday provisions for office workers were generally similar to those for plantworkers within the same area.

*Paid vacations.* Paid vacations were provided to plantworkers and office workers by virtually all of the establishments in the study. (See tables 34 and 35.) Typical provisions for production workers in most areas were 1 week's pay after 1 year of service, 2 weeks' pay after 2 or 3 years, 3 weeks' after 10 years, and 4 weeks' after 20 years. Office worker provisions generally were similar to those for plantworkers, except the office staff usually received 2 weeks' pay after 1 year of service.

*Health, insurance, and retirement plans.* Nine-tenths or more of the plant and office workers in virtually all areas were in establishments providing life, hospitalization, surgical, and medical insurance. (See tables 36 and 37.) At least seven-tenths of the plantworkers and office workers in most areas were covered by accidental, death and dismemberment insurance, major medical insurance, and sickness and accident insurance, or sick leave plans, or both. Plans providing normal dental services were rare except for plantworkers in New York and both plant and office workers in Los Angeles, Portland, and San Francisco. Employers usually paid the entire cost of the previously mentioned benefits.

Retirement pension plans (other than social security) were available to three-fourths or more of the production and office workers in nearly all of the areas and typically were financed entirely by the employers. Retirement severance pay plans were not common.

*Apprenticeship or training programs.* Formal apprenticeship or training programs were found in all areas except Tulsa. For survey purposes, apprenticeship programs were limited to those registered with either the Federal or State Government. These programs are primarily designed to train young workers, under the supervision of skilled journeymen, to become proficient in skilled crafts or trades. Most apprenticeship programs outline a 4-year curriculum of on-the-job experience and related instruction. Training programs, on the other hand, refer to company operated plans that involve both classroom instruction and workplace experience and may require at least 1 year for the trainee to complete. As shown, the percent of production workers in establishments operating formal apprenticeship or training programs varied substantially by area.

**Text table 4. Percent of production workers in establishments with formal apprenticeship or training programs**

Area	Formal apprenticeship program	Formal training program	Both types of programs
Atlanta .....	16	(1)	(1)
Baltimore .....	54	(1)	31
Boston .....	(1)	5	(1)
Buffalo .....	21	(1)	6
Chicago .....	27	5	(1)
Cleveland .....	20	13	(1)
Dallas .....	6	5	(1)
Denver .....	25	32	(1)
Detroit .....	23	11	11
Hartford .....	9	(1)	44
Houston .....	48	6	(1)
Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove .....	(1)	8	(1)
Milwaukee .....	25	9	18
Minneapolis-St. Paul .....	13	9	(1)
Newark & Jersey City .....	22	8	15
New York .....	18	5	(1)
Philadelphia .....	26	6	(1)
Pittsburgh .....	26	15	14
Portland (Oregon-Washington) .....	18	(1)	20
St. Louis .....	32	(1)	23
San Francisco-Oakland .....	40	6	14
Tulsa .....	(1)	(1)	(1)
Worcester .....	(1)	(1)	(1)

<sup>1</sup> Estimates from 0 to 4 percent.

**Table 1. Occupational averages in 23 areas: Men**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	Northeast															
	Boston		Buffalo		Hartford-New Britain-Bristol		Newark and Jersey City		New York		Philadelphia		Pittsburgh		Worcester	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A -----	688	\$4.77	276	\$4.56	361	\$4.40	829	\$4.50	630	\$4.57	1,372	\$4.46	565	\$4.69	259	\$4.44
Assemblers, class B -----	381	3.75	-	-	175	3.95	480	3.90	702	3.76	650	3.59	293	3.89	187	3.86
Assemblers, class C -----	211	3.28	42	3.59	282	4.08	194	3.64	702	2.74	712	3.78	92	3.31	51	3.58
Carpenters, maintenance -----	15	4.33	-	-	-	-	23	4.36	17	4.38	22	4.79	17	4.68	6	4.15
Electricians, maintenance -----	39	4.69	57	4.85	121	5.04	100	5.43	55	4.75	120	4.79	88	4.86	25	4.56
Inspectors, class A -----	199	4.29	125	4.65	136	4.21	189	4.49	129	4.40	288	4.38	211	4.93	98	4.30
Inspectors, class B -----	149	3.60	59	4.31	61	3.95	177	4.44	144	4.30	347	4.29	82	4.43	59	3.76
Inspectors, class C -----	51	2.89	14	3.71	-	-	-	-	-	-	26	4.33	69	4.17	-	-
Janitors, porters, and cleaners -----	161	3.21	148	3.48	156	3.35	168	3.05	226	2.97	376	3.48	120	3.49	76	3.17
Laborers, material handling -----	122	3.46	55	3.63	100	3.75	178	3.32	246	3.18	263	3.58	106	3.53	68	3.48
Machine-tool operators, production, class A <sup>2</sup> -----	1,358	4.58	767	4.44	1,586	4.21	1,589	4.58	1,356	4.60	2,497	4.53	1,731	4.60	839	4.26
Automatic-lathe operators -----	41	4.99	32	4.56	22	4.43	44	4.68	57	4.94	57	4.23	-	-	24	4.13
Drill-press operators, radial -----	75	4.92	55	4.31	76	4.09	116	4.57	55	4.61	226	4.36	119	4.45	47	4.10
Drill-press operators, single- or multiple-spindle -----	59	4.35	17	4.15	14	4.02	70	4.03	107	4.29	100	4.22	41	4.23	-	-
Engine-lathe operators -----	181	4.50	121	4.46	213	4.28	245	4.66	203	4.62	364	4.83	257	4.78	66	4.33
Grinding-machine operators -----	238	4.44	84	4.53	477	4.19	145	4.55	139	4.77	476	4.07	291	4.86	183	4.12
Milling-machine operators -----	156	4.76	71	4.59	241	4.12	223	4.54	252	4.58	177	4.58	240	4.56	115	4.38
Screw-machine operators, automatic -----	60	4.64	-	-	12	4.46	59	4.86	8	5.04	77	4.72	13	4.49	30	4.44
Turret-lathe operators, hand (including hand screw machine) -----	198	4.77	151	4.32	187	4.37	302	4.57	125	4.53	247	4.54	157	4.50	120	4.26
Machine-tool operators, production, class B <sup>2</sup> -----	714	3.76	273	4.09	1,472	4.33	1,160	4.51	1,027	3.74	1,534	4.24	569	4.54	409	3.78
Automatic-lathe operators -----	28	3.83	-	-	-	-	-	-	42	3.81	138	4.07	-	-	15	3.77
Drill-press operators, radial -----	26	4.18	15	4.23	21	3.87	53	4.15	13	3.90	101	4.19	-	-	17	3.82
Drill-press operators, single- or multiple-spindle -----	57	3.49	-	-	39	3.89	129	3.56	107	3.44	95	3.51	-	-	85	3.72
Engine-lathe operators -----	59	3.82	-	-	75	4.15	65	3.85	88	4.05	149	4.06	113	4.66	20	3.94
Grinding-machine operators -----	172	3.59	54	4.15	874	4.34	-	-	217	3.76	-	-	206	4.84	102	3.69
Milling-machine operators -----	51	4.12	16	4.38	53	3.57	65	4.08	214	3.72	253	4.32	56	3.87	78	3.82
Screw-machine operators, automatic -----	19	3.77	-	-	318	4.64	-	-	21	3.54	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machines) -----	60	3.90	23	4.30	43	3.93	42	4.09	36	3.79	170	4.48	-	-	17	3.74
Machine-tool operators, production, class C <sup>2</sup> -----	265	3.27	211	3.29	211	3.38	223	3.33	608	3.11	515	3.39	193	4.08	71	3.48
Automatic-lathe operators -----	-	-	-	-	-	-	-	-	-	-	82	3.77	-	-	-	-
Drill-press operators, radial -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	17	2.89	19	3.31	45	3.34	39	3.20	104	3.21	23	3.26	-	-	-	-
Engine-lathe operators -----	-	-	-	-	-	-	-	-	12	3.63	26	3.41	-	-	-	-
Grinding-machine operators -----	53	3.10	34	3.39	134	3.46	43	3.42	40	3.32	64	3.74	95	4.39	-	-
Milling-machine operators -----	21	3.41	-	-	15	3.05	37	3.28	62	3.19	80	3.30	-	-	-	-
Screw-machine operators, automatic -----	-	-	-	-	-	-	-	-	16	3.22	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machines) -----	20	3.22	-	-	-	-	21	3.43	-	-	27	3.38	-	-	-	-
Machine-tool operators, production, numerically controlled <sup>2</sup> -----	121	4.43	79	4.85	209	3.98	72	4.39	119	4.46	540	4.67	116	4.51	65	4.22
Automatic-lathe operators -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial -----	-	-	-	-	-	-	13	3.81	-	-	17	4.49	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	-	-	13	4.39	-	-	-	-	19	3.86	63	4.64	-	-	37	4.37
Engine-lathe operators -----	9	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators -----	-	-	-	-	-	-	22	4.19	38	4.34	-	-	22	5.09	16	4.07
Turret-lathe operators, hand (including hand screw machines) -----	-	-	-	-	10	4.34	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) <sup>2</sup> -----	151	4.57	116	4.75	302	4.65	432	5.02	59	4.59	142	4.48	46	4.64	188	3.97
Drill-press operators, radial -----	19	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators -----	30	4.64	-	-	-	-	79	4.48	-	-	-	-	-	-	18	3.80
Grinding-machine operators -----	38	4.71	82	4.71	158	4.93	168	5.43	-	-	12	4.27	34	4.52	21	4.26
Milling-machine operators -----	31	4.55	-	-	-	-	-	-	26	4.72	-	-	-	-	-	-

See footnotes at end of table.

**Table 1. Occupational averages in 23 areas: Men—Continued**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	South										North Central					
	Atlanta		Baltimore		Dallas		Houston		Tulsa		Chicago		Cleveland		Detroit	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A -----	171	\$3.61	216	\$4.47	197	\$4.01	466	\$4.34	267	\$3.88	3,390	\$4.85	1,321	\$4.75	929	\$5.46
Assemblers, class B -----	-	-	116	3.67	402	3.09	691	3.64	228	3.45	1,992	4.26	943	4.29	1,835	4.60
Assemblers, class C -----	89	2.90	108	3.11	372	2.38	70	3.39	-	-	684	3.30	326	3.52	678	4.42
Carpenters, maintenance -----	-	-	-	-	-	-	8	4.57	-	-	49	5.06	29	4.85	27	6.16
Electricians, maintenance -----	10	4.18	40	4.61	27	4.19	124	5.00	19	4.33	407	5.45	181	5.15	164	5.81
Inspectors, class A -----	16	4.80	80	4.69	131	4.08	374	4.76	78	4.08	911	4.76	404	4.89	369	5.13
Inspectors, class B -----	-	-	41	4.12	191	3.25	183	4.20	21	3.79	746	4.37	245	4.52	487	5.40
Inspectors, class C -----	-	-	14	3.65	33	3.11	-	-	-	-	291	4.18	41	4.45	80	4.51
Janitors, porters, and cleaners -----	32	2.71	59	2.86	235	2.64	337	3.06	99	2.76	863	3.57	373	3.51	821	3.94
Laborers, material handling -----	79	2.81	104	3.12	158	2.76	255	3.42	110	2.97	1,243	3.92	308	4.02	507	4.17
Machine-tool operators, production, class A <sup>2</sup> -----	144	3.83	791	4.48	767	4.06	2,082	4.47	473	3.96	6,294	4.98	3,315	4.81	4,243	5.37
Automatic-lathe operators -----	-	-	14	4.40	67	3.91	130	4.31	54	4.12	355	5.05	112	4.82	53	5.47
Drill-press operators, radial -----	-	-	27	4.23	41	3.86	131	4.35	30	3.72	553	5.02	287	4.71	155	4.99
Drill-press operators, single- or multiple-spindle -----	-	-	-	-	-	-	61	4.21	-	-	342	4.67	102	5.02	42	4.84
Engine-lathe operators -----	32	4.13	106	4.54	125	4.20	239	4.52	69	4.03	707	4.94	275	4.64	335	5.39
Grinding-machine operators -----	12	3.57	97	4.46	52	4.03	136	4.34	37	3.95	882	4.91	697	4.97	1,985	5.37
Milling-machine operators -----	-	-	117	4.40	99	4.00	317	4.45	22	3.90	652	4.89	390	4.86	488	5.46
Screw-machine operators, automatic-turret-lathe operators, hand (including hand screw machine) -----	-	-	-	-	49	4.17	-	-	-	-	323	5.26	189	4.90	154	5.04
Machine-tool operators, production, class B <sup>2</sup> -----	125	3.31	332	3.81	526	3.29	1,178	4.06	228	3.55	3,228	4.35	1,129	4.17	3,426	4.57
Automatic-lathe operators -----	-	-	-	-	97	3.06	50	4.29	16	3.66	94	4.28	-	-	-	-
Drill-press operators, radial -----	-	-	12	3.61	24	3.15	40	3.93	16	3.12	263	4.52	64	3.81	-	-
Drill-press operators, single- or multiple-spindle -----	9	2.98	31	3.37	46	3.34	73	4.03	-	-	480	4.06	131	4.74	-	-
Engine-lathe operators -----	-	-	-	-	41	3.22	88	3.91	-	-	228	4.28	73	4.37	97	4.66
Grinding-machine operators -----	-	-	-	-	22	3.74	188	4.26	10	3.31	649	4.34	268	4.26	991	4.64
Milling-machine operators -----	-	-	52	3.77	86	3.33	115	4.00	-	-	447	4.50	134	4.21	403	4.64
Screw-machine operators, automatic-turret-lathe operators, hand (including hand screw machine) -----	-	-	-	-	21	2.97	-	-	-	-	67	4.77	34	4.17	91	4.77
Machine-tool operators, production, class C <sup>2</sup> -----	74	2.80	157	3.27	371	2.72	202	3.08	113	3.22	1,703	3.66	542	3.12	1,142	3.78
Automatic-lathe operators -----	-	-	-	-	-	-	-	-	-	-	115	3.95	-	-	55	4.11
Drill-press operators, radial -----	-	-	-	-	-	-	12	3.37	-	-	47	3.62	10	2.98	-	-
Drill-press operators, single- or multiple-spindle -----	-	-	-	-	29	2.34	-	-	-	-	297	3.82	19	2.93	223	3.70
Engine-lathe operators -----	-	-	-	-	-	-	-	-	-	-	47	3.43	-	-	88	3.92
Grinding-machine operators -----	-	-	-	-	-	-	22	3.68	-	-	303	3.68	232	3.05	384	3.61
Milling-machine operators -----	-	-	-	-	23	2.84	41	3.22	-	-	259	3.63	43	3.23	129	4.05
Screw-machine operators, automatic-turret-lathe operators, hand (including hand screw machine) -----	-	-	-	-	-	-	-	-	-	-	34	4.14	-	-	-	-
Machine-tool operators, production, numerically controlled <sup>2</sup> -----	-	-	62	4.11	215	3.99	403	4.47	61	3.93	587	4.72	289	4.60	194	5.57
Automatic-lathe operators -----	-	-	-	-	-	-	173	4.61	17	4.08	96	4.36	15	4.70	-	-
Drill-press operators, radial -----	-	-	-	-	-	-	-	-	-	-	36	5.15	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	-	-	-	-	22	3.16	25	4.38	9	3.66	-	-	62	4.80	-	-
Engine-lathe operators -----	-	-	-	-	-	-	52	4.25	-	-	-	-	-	-	-	-
Milling-machine operators -----	-	-	21	3.85	28	4.05	32	4.34	-	-	-	-	74	4.30	-	-
Turret-lathe operators, hand (including hand screw machine) -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	5.70
Machine-tool operators, toolroom (operate 1 type of machine) <sup>2</sup> -----	-	-	-	-	-	-	90	4.49	-	-	1,004	5.76	701	4.74	3,470	5.76
Drill-press operators, radial -----	-	-	-	-	-	-	-	-	-	-	35	4.98	18	4.66	166	5.68
Engine-lathe operators -----	-	-	-	-	-	-	-	-	-	-	186	5.60	107	4.80	397	5.54
Grinding-machine operators -----	-	-	-	-	-	-	74	4.48	-	-	376	5.80	233	4.82	1,025	5.67
Milling-machine operators -----	-	-	-	-	-	-	-	-	-	-	78	5.73	72	4.97	922	5.78

See footnotes at end of table.



**Table 1. Occupational averages in 23 areas: Men—Continued**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	North Central—Continued						West							
	Milwaukee		Minneapolis— St. Paul		St. Louis		Denver		Los Angeles—Long Beach and Anaheim— Santa Ana—Garden Grove		Portland		San Francisco— Oakland	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A -----	1,315	\$4.78	1,355	\$4.40	392	\$5.20	226	\$4.31	1,180	\$4.38	361	\$5.15	241	\$5.17
Assemblers, class B -----	1,342	4.72	707	3.72	502	4.12	219	3.50	1,035	3.34	156	4.30	310	4.55
Assemblers, class C -----	743	4.48	283	3.58	598	3.71	41	2.96	369	2.96	50	3.68	-	-
Carpenters, maintenance -----	28	4.96	-	-	11	5.04	-	-	28	4.65	-	-	-	-
Electricians, maintenance -----	229	5.26	39	6.75	60	5.13	14	4.70	102	4.95	13	5.17	26	6.28
Inspectors, class A -----	473	4.82	374	4.55	137	5.35	79	4.44	540	4.45	56	5.12	135	5.66
Inspectors, class B -----	311	4.60	140	4.18	130	4.20	64	3.88	355	3.63	-	-	28	4.91
Inspectors, class C -----	121	4.15	33	3.85	35	3.80	7	3.45	90	3.28	-	-	-	-
Janitors, porters, and cleaners -----	370	3.82	393	3.45	205	3.32	57	3.03	546	2.86	44	3.84	82	3.96
Laborers, material handling -----	984	3.91	334	3.83	413	3.67	76	2.95	368	3.19	75	4.25	51	4.55
Machine-tool operators, production, class A <sup>2</sup> -----	3,301	5.03	2,383	4.73	1,073	5.47	562	4.72	3,452	4.64	682	5.11	773	6.01
Automatic-lathe operators -----	244	5.51	372	4.92	82	5.28	41	5.23	102	4.75	31	5.09	-	-
Drill-press operators, radial -----	224	4.82	118	4.55	41	5.22	16	5.27	118	4.29	74	5.08	-	-
Drill-press operators, single- or multiple-spindle -----	166	5.21	88	4.38	-	-	-	-	181	4.20	-	-	-	-
Engine-lathe operators -----	259	4.78	324	4.74	-	-	76	4.68	428	4.87	231	5.13	179	6.02
Grinding-machine operators -----	318	5.52	237	4.66	61	5.47	60	5.07	378	4.42	7	5.03	-	-
Milling-machine operators -----	250	4.84	265	4.68	140	5.69	77	4.91	564	4.49	92	5.12	-	-
Screw-machine operators, automatic Turret-lathe operators, hand (including hand screw machines) ---	85	5.15	-	-	162	4.83	-	-	71	4.41	-	-	53	5.87
Machine-tool operators, production, class B <sup>2</sup> -----	637	4.89	235	4.69	140	5.22	40	4.65	390	4.43	141	5.09	27	5.84
Automatic-lathe operators -----	2,174	4.74	855	3.94	621	4.19	289	4.02	1,707	3.88	189	4.42	317	4.73
Drill-press operators, radial -----	153	5.00	32	4.40	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	267	4.51	64	4.09	40	5.07	22	4.26	46	4.04	62	4.66	42	4.81
Engine-lathe operators -----	305	4.68	119	3.85	123	4.03	26	3.71	242	3.62	26	4.00	-	-
Grinding-machine operators -----	95	4.68	60	4.13	97	3.97	33	4.35	358	3.94	-	-	-	-
Milling-machine operators -----	206	4.92	146	3.83	82	4.10	38	4.22	181	3.75	11	4.51	-	-
Screw-machine operators, automatic Turret-lathe operators, hand (including hand screw machine) ---	259	4.78	51	4.34	63	4.21	22	4.34	215	3.98	-	-	24	4.70
Machine-tool operators, production, class C <sup>2</sup> -----	-	-	-	-	66	-	-	-	29	3.51	-	-	-	-
Automatic-lathe operators -----	215	4.57	43	4.14	33	4.32	17	3.88	119	3.98	17	4.43	-	-
Drill-press operators, radial -----	469	4.45	860	3.76	190	3.64	97	3.18	492	3.13	-	-	331	4.59
Drill-press operators, single- or multiple-spindle -----	35	4.75	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators -----	46	3.89	-	-	-	-	-	-	75	3.20	-	-	42	4.65
Grinding-machine operators -----	149	5.05	98	3.18	37	3.70	54	3.05	40	3.16	-	-	-	-
Milling-machine operators -----	-	-	-	-	-	-	-	-	18	3.39	-	-	-	-
Screw-machine operators, automatic Turret-lathe operators, hand (including hand screw machine) ---	61	4.74	-	-	-	-	-	-	53	3.19	-	-	-	-
Machine-tool operators, production, numerically controlled <sup>2</sup> -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Automatic-lathe operators -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial -----	217	4.98	373	4.48	161	5.43	33	4.68	311	4.51	-	-	94	5.11
Drill-press operators, single- or multiple-spindle -----	-	-	-	-	13	5.81	-	-	29	4.79	-	-	-	-
Engine-lathe operators -----	-	-	-	-	-	-	-	-	11	4.30	-	-	-	-
Milling-machine operators -----	12	5.12	10	4.65	-	-	-	-	53	4.37	-	-	-	-
Screw-machine operators, automatic Turret-lathe operators, hand (including hand screw machine) ---	-	-	-	-	-	-	-	-	33	4.79	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) <sup>2</sup> -----	-	-	-	-	-	-	-	-	124	4.43	-	-	-	-
Drill-press operators, radial -----	287	5.04	46	4.93	-	-	7	4.80	727	5.24	-	-	-	-
Engine-lathe operators -----	11	4.80	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators -----	24	5.41	-	-	-	-	-	-	201	5.09	-	-	-	-
Milling-machine operators -----	143	4.71	46	4.93	-	-	7	4.80	384	5.27	-	-	-	-
	20	5.28	-	-	-	-	-	-	90	5.44	-	-	-	-

See footnotes at end of table.

**Table 1. Occupational averages in 23 areas: Men—Continued**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	Northeast—Continued															
	Boston		Buffalo		Hartford—New Britain—Bristol		Newark and Jersey City		New York		Philadelphia		Pittsburgh		Worcester	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Machinists, maintenance	48	\$4.29	93	\$4.73	222	\$4.47	191	\$4.68	49	\$4.25	150	\$4.68	125	\$5.08	22	\$3.84
Machinists, production	51	4.71	26	4.74	206	5.35	-	-	70	5.02	110	4.83	-	-	16	4.50
Mechanics, maintenance	355	4.68	-	-	-	-	162	4.20	80	4.54	644	4.56	221	4.85	158	4.46
Polishers and buffers, metal	37	4.62	68	4.77	-	-	39	4.37	61	4.15	-	-	155	4.73	38	4.38
Polishing and buffing machine operators	155	4.13	-	-	-	-	35	4.26	97	3.61	44	4.15	-	-	-	-
Punch-press operators, class A	26	4.10	-	-	-	-	36	3.93	-	-	52	4.17	33	3.59	-	-
Punch-press operators, class B	75	3.03	-	-	55	4.06	124	3.93	51	4.52	44	4.38	39	4.40	10	4.13
Setup men, machine tools, conventional	54	4.32	-	-	480	4.47	-	-	69	4.29	69	4.63	-	-	-	-
Tool and diemakers (jobbing)	81	5.16	127	4.90	255	4.77	439	5.19	111	4.85	385	5.28	-	-	-	-
Tool and diemakers (other than jobbing)	136	4.89	40	4.82	267	5.11	263	5.06	176	5.11	229	5.29	72	4.89	79	4.63
Tool clerks	72	3.80	27	3.83	101	3.77	83	3.91	63	3.73	161	3.94	68	3.94	23	3.62
Welders, hand, class A	139	4.27	285	4.84	64	4.52	193	4.37	168	4.58	951	4.52	302	4.81	30	4.40
Welders, hand, class B	76	3.88	53	4.00	35	3.74	57	3.96	119	3.61	537	4.00	155	4.04	-	-
Welders, machine, class A	-	-	-	-	18	3.97	-	-	79	4.59	-	-	-	-	8	4.08
Welders, machine, class B	-	-	-	-	19	3.55	122	3.59	99	3.40	-	-	-	-	-	-
	South—Continued															
	Atlanta		Baltimore		Dallas		Houston		Tulsa		Chicago		Cleveland		Detroit	
Machinists, maintenance	46	\$3.77	40	\$4.41	182	\$4.26	165	\$4.62	22	\$4.14	928	\$5.37	201	\$4.71	797	\$5.53
Machinists, production	13	3.82	48	4.81	-	-	99	4.71	-	-	171	5.13	28	5.13	251	5.39
Mechanics, maintenance	100	3.81	266	4.81	36	4.09	745	4.77	202	4.46	232	5.08	-	-	175	5.55
Polishers and buffers, metal	15	3.66	46	4.22	87	4.11	251	4.92	37	4.18	406	5.06	198	4.96	282	5.77
Polishing and buffing machine operators	-	-	62	3.98	-	-	-	-	-	-	207	5.05	72	4.76	31	4.71
Punch-press operators, class A	20	2.92	-	-	155	3.44	-	-	33	3.79	174	3.73	113	4.17	-	-
Punch-press operators, class B	32	2.91	90	3.55	179	2.56	-	-	-	-	243	4.43	148	4.29	27	5.76
Setup men, machine tools, conventional	38	4.26	117	4.49	23	3.27	-	-	-	-	567	3.80	171	3.54	276	3.68
Tool and diemakers (jobbing)	-	-	-	-	-	-	-	-	-	-	581	4.71	101	4.21	514	4.93
Tool and diemakers (other than jobbing)	17	4.48	107	4.77	78	4.70	120	4.95	31	4.48	1,569	6.39	1,078	5.19	2,350	5.91
Tool clerks	23	3.02	26	3.56	50	3.46	119	3.86	28	3.51	594	5.57	128	5.30	262	5.92
Welders, hand, class A	128	4.04	108	4.47	296	3.90	567	4.65	277	4.04	324	4.27	187	4.24	187	4.61
Welders, hand, class B	103	3.30	64	4.33	242	3.22	456	3.96	90	3.56	2,146	4.94	763	4.70	541	5.03
Welders, machine, class A	41	3.93	22	3.99	-	-	-	-	-	-	873	4.64	257	3.85	497	4.60
Welders, machine, class B	32	3.08	-	-	85	2.58	27	3.49	-	-	213	4.53	-	-	-	-
											147	4.32	-	-	44	4.35

See footnotes at end of table.

**Table 1. Occupational averages in 23 areas: Men—Continued**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	North Central—Continued						West—Continued							
	Milwaukee		Minneapolis— St. Paul		St. Louis		Denver		Los Angeles—Long Beach and Anaheim— Santa Ana—Garden Grove		Portland		San Francisco— Oakland	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Machine-tool operators, toolroom (operate more than 1 type of machine)-----	269	\$ 5.11	69	\$ 4.80	411	\$ 6.24	61	\$ 4.31	506	\$ 4.65	27	\$ 5.25	-	-
Machinists, maintenance-----	62	4.78	30	4.99	62	5.66	18	4.84	51	4.84	-	-	48	\$ 6.09
Machinists, production-----	73	5.06	28	4.71	428	5.86	-	-	596	4.96	162	5.13	345	5.59
Mechanics, maintenance-----	258	5.12	76	4.73	94	5.22	34	4.34	115	4.57	13	5.07	-	-
Polishers and buffers, metal operators-----	-	-	-	-	52	4.45	-	-	-	-	-	-	-	-
Polishing and buffing machine operators-----	11	5.08	-	-	42	4.00	-	-	72	3.34	-	-	-	-
Punch-press operators, class A-----	251	4.78	94	4.43	250	4.37	32	3.75	83	3.79	23	4.99	56	5.38
Punch-press operators, class B-----	125	4.35	230	4.02	258	3.63	55	3.30	101	2.85	22	3.86	-	-
Setup men, machine tools, conventional-----	-	-	32	4.46	106	4.71	8	3.91	25	4.83	-	-	-	-
Tool and diemakers (jobbing)-----	672	5.71	556	5.41	343	6.73	-	-	764	5.77	-	-	-	-
Tool and diemakers (other than jobbing)-----	377	5.65	140	5.27	263	6.02	122	5.68	320	5.09	15	5.49	109	6.76
Tool clerks-----	121	4.20	52	4.26	37	3.96	42	3.94	197	3.50	12	4.50	28	4.72
Welders, hand, class A-----	654	4.93	879	4.65	214	5.34	145	4.56	1,282	4.76	536	5.14	332	5.61
Welders, hand, class B-----	1,093	4.65	222	4.19	130	3.96	40	3.75	-	-	12	4.24	-	-
Welders, machine, class A-----	267	4.91	170	4.21	-	-	-	-	105	4.69	-	-	-	-
Welders, machine, class B-----	155	4.00	50	3.74	80	3.69	-	-	-	-	-	-	-	-

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>2</sup> Includes data for operators of other machine tools in addition to those shown separately.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

**Table 2. Occupational averages in 8 areas: By method of wage payment**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in machinery manufacturing establishments, February 1973)

Occupation	Northeast										North Central					
	Boston		Hartford-New Britain-Bristol		Newark and Jersey City		New York		Philadelphia		Chicago		Cleveland		Milwaukee	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A:																
Timeworkers-----	565	\$ 4.56	235	\$ 4.40	698	\$ 4.53	617	\$ 4.56	1,275	\$ 4.41	2,744	\$ 4.74	953	\$ 4.54	854	\$ 4.50
Incentive workers-----	123	5.77	126	4.39	131	4.32	13	5.25	97	5.05	646	5.32	368	5.28	461	5.31
Assemblers, class B:																
Timeworkers-----	364	3.69	98	3.90	319	3.75	663	3.69	568	3.50	1,214	4.01	816	4.24	854	4.38
Incentive workers-----	17	5.08	77	4.02	161	4.21	-	-	-	-	778	4.65	127	4.62	488	5.31
Assemblers, class C:																
Timeworkers-----	203	3.28	245	4.03	84	3.21	545	2.74	-	-	600	3.10	270	3.41	286	3.83
Incentive workers-----	-	-	-	-	110	3.98	-	-	-	-	84	4.68	56	4.08	457	4.90
Machine-tool operators, production, class A:																
Timeworkers-----	1,070	4.29	1,300	4.22	1,234	4.58	1,198	4.55	2,082	4.41	4,540	4.87	2,465	4.56	1,701	4.70
Incentive workers-----	288	5.65	-	-	355	4.60	-	-	415	5.13	1,754	5.27	850	5.54	1,600	5.37
Machine-tool operators, production, class B:																
Timeworkers-----	683	3.70	849	4.45	1,038	4.54	901	3.72	1,256	4.06	2,263	4.13	925	3.96	1,064	4.49
Incentive workers-----	31	5.05	-	-	122	4.22	126	3.88	-	-	965	4.89	204	5.11	1,110	4.99
Machine-tool operators, production, class C:																
Timeworkers-----	247	3.26	171	3.28	157	3.30	400	3.19	465	3.33	1,349	3.51	530	3.10	99	3.74
Incentive workers-----	-	-	-	-	66	3.40	-	-	50	4.03	354	4.23	12	4.19	370	4.64

<sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

**Table 3. Occupational averages in 10 areas: By selected industries**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in establishments primarily manufacturing selected products, February 1973)

Occupation	Chicago				Cleveland		Detroit				Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove		Milwaukee			
	Special dies and tools <sup>2</sup>		Machine-tool accessories <sup>3</sup>		Construction machinery equipment <sup>4</sup>		Special dies and tools <sup>2</sup>		Special dies and tools <sup>2</sup>		Machine-tool accessories <sup>3</sup>		Oil-field machinery <sup>5</sup>		Special dies and tools <sup>2</sup>	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A	-	-	-	-	841	\$4.80	-	-	-	-	-	-	77	\$4.35	-	-
Assemblers, class B	-	-	84	\$3.95	284	4.68	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance	-	-	10	5.00	133	5.70	15	\$4.54	-	-	-	-	20	4.88	-	-
Inspectors, class A	9	\$5.71	-	-	295	5.06	10	5.27	-	-	95	\$5.08	75	4.53	-	-
Inspectors, class B	-	-	24	4.40	-	-	12	4.01	13	\$4.25	47	4.65	21	4.16	-	-
Janitors, porters, and cleaners	37	3.68	45	3.21	91	4.36	53	3.00	193	3.53	101	3.49	56	3.29	12	\$3.41
Laborers, material handling	-	-	24	3.42	248	4.55	-	-	121	4.25	-	-	68	3.71	-	-
Machine-tool operators, production, class A <sup>6</sup>	-	-	405	4.93	1,200	5.04	-	-	-	-	2,246	5.28	431	4.51	-	-
Automatic-lathe operators	-	-	-	-	160	5.22	-	-	-	-	-	-	33	4.95	-	-
Drill-press operators, radial	-	-	-	-	258	5.10	-	-	-	-	38	4.59	43	4.29	-	-
Drill-press operators, single- or multiple-spindle	-	-	-	-	111	5.02	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators	-	-	79	5.13	44	5.04	-	-	-	-	166	5.53	33	4.57	-	-
Grinding-machine operators	-	-	190	4.93	86	5.15	-	-	-	-	1,500	5.30	109	4.50	-	-
Milling-machine operators	-	-	45	4.80	97	5.14	-	-	-	-	237	5.29	38	4.36	-	-
Screw-machine operators, automatic	-	-	20	4.93	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	-	-	31	4.37	78	4.97	-	-	-	-	37	4.71	-	-	-	-
Machine-tool operators, production, class B <sup>6</sup>	-	-	446	4.29	548	4.71	-	-	-	-	1,161	4.68	161	4.12	-	-
Drill-press operators, single- or multiple-spindle	-	-	17	4.88	64	4.15	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators	-	-	40	4.72	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators	-	-	216	4.11	-	-	-	-	-	-	651	4.66	-	-	-	-
Milling-machine operators	-	-	74	4.33	-	-	-	-	-	-	311	4.70	13	4.00	-	-
Turret-lathe operators, hand (including hand screw machine)	-	-	40	4.56	26	4.84	-	-	-	-	-	-	43	4.12	-	-
Machine-tool operators, production, class C <sup>6</sup>	-	-	297	3.26	-	-	-	-	-	-	399	4.05	51	3.47	-	-
Drill-press operators, single or multiple spindle	-	-	47	3.97	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators	-	-	64	3.33	-	-	-	-	-	-	183	3.93	-	-	-	-
Milling-machine operators	-	-	18	3.35	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	-	-	-	-	-	-	-	-	-	-	69	3.71	-	-	-	-
Machine-tool operators, production, numerically controlled	-	-	-	-	19	4.71	-	-	-	-	6	5.40	28	4.88	-	-
Machine-tool operators, tool room (operate 1 type of machine) <sup>6</sup>	599	5.98	-	-	222	5.54	447	4.72	2,507	5.79	-	-	-	-	172	5.30
Drill-press operators, radial	-	-	-	-	-	-	-	-	162	5.68	-	-	-	-	11	4.80
Engine-lathe operators	108	5.61	-	-	-	-	61	4.87	247	5.42	-	-	-	21	5.47	
Grinding-machine operators	217	6.18	-	-	75	5.33	158	4.88	641	5.73	-	-	-	34	4.95	
Milling-machine operators	31	6.01	-	-	-	-	44	4.80	711	5.83	-	-	-	20	5.28	
Machine-tool operators, tool room (operate more than 1 type of machine)	639	5.44	20	5.47	-	-	96	4.46	681	5.52	60	5.47	16	4.61	71	5.14
Machinists, maintenance	-	-	32	4.84	-	-	-	-	-	-	-	-	28	4.86	-	-
Machinists, production	-	-	-	-	-	-	-	-	-	-	-	-	225	4.84	-	-
Mechanics, maintenance	14	5.47	-	-	90	5.59	11	4.86	-	-	76	5.42	13	4.97	-	-
Polishers and buffers, metal	63	5.81	-	-	-	-	-	-	-	-	10	4.25	-	-	-	-
Punch-press operators, class A	33	4.64	-	-	61	4.89	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class B	67	2.88	7	3.92	56	4.10	65	2.92	-	-	-	-	-	-	-	-
Tool and die makers (jobbing)	1,393	6.46	-	-	-	-	922	5.22	2,226	5.89	-	-	-	-	477	5.73
Tool and die makers (other than jobbing)	-	-	15	5.67	117	5.91	-	-	-	-	23	5.63	24	4.95	-	-
Tool clerks	32	4.60	-	-	87	4.61	19	3.58	31	4.63	12	4.58	13	3.94	6	4.45
Welders, hand, class A	-	-	-	-	1,312	5.07	-	-	38	5.49	-	-	125	4.57	7	4.87

See footnotes at end of table.

**Table 3. Occupational averages in 10 areas: By selected industries—Continued**

(Number and average straight-time hourly earnings<sup>1</sup> of men in selected occupations in establishments primarily manufacturing selected products, February 1973)

Occupation	New York		Philadelphia		Boston		Hartford—New Britain—Bristol		Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove		Newark and Jersey City		New York	
	Paper and printing trades machinery <sup>5</sup>		Textile machinery <sup>8</sup>		Special dies and tools and machine-tool accessories <sup>9</sup>									
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A-----	114	\$4.58	78	\$4.04	-	-	9	\$4.40	-	-	23	\$5.02	-	-
Assemblers, class B-----	122	4.01	37	3.59	-	-	-	-	-	-	-	-	-	
Electricians, maintenance-----	22	4.39	10	4.28	-	-	7	4.58	-	-	-	-	-	
Inspectors, class A-----	17	4.39	15	3.83	16	\$4.44	32	4.13	-	-	-	-	9	\$4.15
Inspectors, class B-----	-	-	-	-	6	3.74	23	3.74	-	-	-	-	20	3.71
Janitors, porters, and cleaners-----	38	2.83	16	3.36	-	-	17	2.88	75	\$2.79	47	2.68	13	3.27
Laborers, material handling-----	47	3.21	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>6</sup> -----	180	4.55	138	4.34	49	4.35	418	4.11	167	4.11	-	-	-	-
Automatic-lathe operators-----	-	-	-	-	-	-	14	4.51	-	-	-	-	-	-
Drill-press operators, radial-----	10	4.37	17	4.09	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	44	4.67	23	4.57	-	-	29	4.26	-	-	-	-	-	-
Grinding-machine operators-----	27	4.57	24	4.41	28	4.40	234	4.07	-	-	-	-	-	-
Milling-machine operators-----	36	4.72	18	4.19	-	-	75	3.97	-	-	-	-	-	-
Screw-machine operators, automatic-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	-	-	23	4.42	-	-	27	4.23	44	4.18	-	-	-	-
Machine-tool operators, production, class B <sup>6</sup> -----	144	3.92	59	3.64	47	3.55	215	3.70	235	3.67	-	-	251	3.69
Drill-press operators, single- or multiple-spindle-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	30	4.07	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators-----	-	-	-	-	9	3.30	145	3.91	68	3.52	-	-	-	-
Milling-machine operators-----	29	4.07	-	-	-	-	29	3.16	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	-	-	11	3.99	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>6</sup> -----	52	2.99	-	-	24	3.15	102	3.19	58	3.18	-	-	26	3.26
Drill-press operators, single- or multiple-spindle-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators-----	-	-	-	-	-	-	87	3.22	-	-	-	-	-	-
Milling-machine operators-----	-	-	-	-	-	-	15	3.05	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled-----	40	4.37	20	4.22	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) <sup>6</sup> -----	-	-	-	-	137	4.57	252	4.41	691	5.29	326	4.75	-	-
Drill-press operators, radial-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	-	-	-	-	30	4.64	-	-	196	5.13	79	4.48	-	-
Grinding-machine operators-----	-	-	-	-	38	4.71	111	4.50	356	5.32	74	4.70	-	-
Milling-machine operators-----	-	-	-	-	31	4.55	-	-	90	5.44	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)-----	-	-	-	-	38	4.28	51	3.95	451	4.65	131	4.28	30	4.12
Machinists, maintenance-----	13	4.52	12	4.04	-	-	-	-	10	4.33	-	-	20	5.01
Machinists, production-----	-	-	20	4.29	38	4.19	-	-	-	-	-	-	-	-
Mechanics, maintenance-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polishers and buffers, metal-----	-	-	-	-	-	-	-	-	-	-	27	4.38	-	-
Punch-press operators, class A-----	-	-	-	-	-	-	-	-	41	3.47	-	-	-	-
Punch-press operators, class B-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tool and die makers (jobbing)-----	-	-	-	-	77	5.16	219	4.79	760	5.77	415	5.21	56	4.81
Tool and die makers (other than jobbing)-----	-	-	34	4.80	-	-	-	-	-	-	-	-	-	-
Tool clerks-----	16	3.62	-	-	-	-	-	-	38	3.52	-	-	-	-
Welders, hand, class A-----	10	4.58	45	4.05	-	-	-	-	53	4.61	-	-	-	-

See footnotes on following page.

## Footnotes—

- <sup>1</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
- <sup>2</sup> Includes data for establishments classified in SIC. 3544.
- <sup>3</sup> Includes data for establishments classified in SIC. 3545.
- <sup>4</sup> Includes data for establishments classified in SIC. 3531.
- <sup>5</sup> Includes data for establishments classified in SIC. 3533.
- <sup>6</sup> Includes data for operators of machine tools in addition to those shown separately.

- <sup>7</sup> Includes data for establishments classified in SIC. 3554 and 3555.
- <sup>8</sup> Includes data for establishments classified in SIC. 3552.
- <sup>9</sup> Includes data for establishments classified in SIC. 3544 and 3545.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

**Table 4. Occupational earnings: Atlanta, Ga.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.30 and under	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80 and over
			\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	over
<b>Men</b>																												
Assemblers, class A.....	171	\$3.61	-	-	-	-	2	-	-	6	26	7	2	52	2	-	6	34	4	4	4	18	2	-	2	-	-	-
Assemblers, class C.....	89	2.90	-	-	10	29	3	4	8	6	10	9	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance.....	10	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	2	-	-	3	-	-	-
Inspectors, class A.....	16	4.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	3	-	5
Janitors, porters, and cleaners.....	32	2.71	4	-	4	3	14	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling.....	79	2.81	-	8	-	15	23	6	-	18	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>4</sup> .....	144	3.83	-	-	-	-	-	-	-	14	14	2	4	4	26	4	19	-	2	10	3	-	6	-	30	-	-	6
Engine-lathe operators.....	32	4.13	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	-	-	4	-	-	3	-	12	-	-	-
Grinding-machine operators.....	12	3.57	-	-	-	-	-	-	-	4	-	2	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B <sup>4</sup> .....	125	3.31	-	-	-	10	-	4	8	7	5	10	31	6	12	11	16	5	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle.....	9	2.98	-	-	-	-	-	4	-	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C.....	74	2.80	-	-	8	4	20	19	13	7	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine).....	46	3.77	-	-	2	-	-	8	-	4	-	-	-	-	-	-	-	-	8	2	-	18	-	-	4	-	-	-
Machinists, maintenance.....	13	3.82	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	6	-	-	-	-	-	-	-	1	1	-
Machinists, production.....	100	3.81	-	-	-	-	-	-	-	-	2	3	2	4	-	4	47	8	2	16	4	8	-	-	-	-	-	-
Mechanics, maintenance.....	15	3.66	-	-	-	-	-	-	-	-	2	-	-	8	-	-	-	-	1	-	2	-	2	-	-	-	-	-
Punch-press operators, class A.....	20	2.92	-	-	-	-	14	-	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class B.....	32	2.91	-	-	-	-	14	-	2	-	4	1	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Set-up men, machine tools.....	38	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	2	2	-	-	4	-	18	-	2
Tool and/or die makers (other than jobbing).....	17	4.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	2	-	-	-	2	2	7
Tool clerks.....	23	3.02	-	-	-	-	4	-	-	16	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A.....	128	4.04	-	-	-	-	-	-	-	-	-	4	-	12	2	4	10	-	-	18	14	50	2	10	2	-	-	-
Welders, hand, class B.....	103	3.30	-	-	-	-	-	-	2	18	14	15	18	6	15	9	6	-	-	-	-	-	-	-	-	-	-	-
Welders, machine, class A.....	41	3.93	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	16	-	10	-	5	3	-	-	-	-
Welders, machine, class B.....	32	3.08	-	-	-	2	-	3	6	1	10	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Women</b>																												
Assemblers, class A.....	7	3.24	-	-	-	-	-	-	2	-	-	2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C.....	34	2.53	2	10	16	4	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Atlanta Standard Metropolitan Statistical Area consists of Clayton, Cobb, DeKalb, Fulton, and Gwinnett Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. All workers were paid on a time basis.

<sup>3</sup> Workers were distributed as follows: 2 at \$5 to \$5.10; and 3 at \$5.90 to \$6.

<sup>4</sup> Includes data for workers in classification in addition to those shown separately.

<sup>5</sup> Workers were distributed as follows: 2 at \$4.80 to \$4.90; and 2 at \$5.20 to \$5.30.



**Table 5. Occupational earnings: Baltimore, Md.**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME EARNINGS OF—																				
			\$1.80 and under	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80
			\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	
<b>Men</b>																							
Assemblers, class A	216	\$4.47	-	-	-	-	-	-	-	-	3	7	40	31	48	3	12	17	11	33	10	1	
Time	204	4.46	-	-	-	-	-	-	-	-	3	7	38	31	48	3	6	17	7	33	10	1	
Assemblers, class B	116	3.67	-	-	-	-	3	-	4	14	30	11	41	1	-	9	1	2	-	-	-	-	
Time	87	3.59	-	-	-	-	3	-	4	9	30	11	26	1	-	1	2	-	-	-	-	-	
Assemblers, class C	108	3.11	-	-	-	-	-	51	17	24	9	3	4	-	-	-	-	-	-	-	-	-	
Time	89	3.10	-	-	-	-	-	39	17	24	9	-	-	-	-	-	-	-	-	-	-	-	
Electricians, maintenance (all timeworkers)	40	4.61	-	-	-	-	-	-	-	-	-	-	1	2	3	7	19	3	5	-	-	-	
Inspectors, class A (all timeworkers)	80	4.69	-	-	-	-	-	-	-	-	1	-	1	16	7	24	3	3	5	-	-	-	
Inspectors, class B	41	4.12	-	-	-	-	-	-	-	2	4	7	2	8	10	1	1	6	-	-	-	-	
Time	34	3.96	-	-	-	-	-	-	-	2	4	7	2	8	10	1	-	-	-	-	-	-	
Inspectors, class C <sup>3</sup>	14	3.65	-	-	-	-	-	-	3	1	1	2	2	5	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)	59	2.86	9	4	6	3	-	5	10	3	11	8	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling (all timeworkers)	104	3.12	-	-	-	4	4	26	44	4	13	9	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>4</sup>	791	4.48	-	-	-	-	-	-	-	-	5	31	34	144	148	107	149	66	15	79	13	-	
Time	730	4.45	-	-	-	-	-	-	-	-	5	31	34	140	142	91	137	66	11	60	13	-	
Automatic-lathe operators (all timeworkers)	14	4.40	-	-	-	-	-	-	-	-	-	1	-	6	3	-	1	-	-	3	-	-	
Drill-press operators, radial (all timeworkers)	27	4.23	-	-	-	-	-	-	-	-	5	1	5	5	-	2	5	1	1	2	-	-	
Engine-lathe operators	106	4.54	-	-	-	-	-	-	-	-	5	21	5	21	30	11	11	1	5	22	-	-	
Time	81	4.33	-	-	-	-	-	-	-	-	-	5	21	30	11	9	1	1	3	-	-	-	
Grinding-machine operators (all timeworkers)	97	4.46	-	-	-	-	-	-	-	-	-	5	16	29	9	26	1	3	8	-	-	-	
Milling-machine operators (all timeworkers)	117	4.40	-	-	-	-	-	-	-	-	-	1	2	43	25	15	11	2	2	16	-	-	
Turret-lathe operators, hand (including hand screw machine)	92	4.45	-	-	-	-	-	-	-	-	3	4	16	19	16	22	5	2	5	-	-	-	
Time	72	4.42	-	-	-	-	-	-	-	-	3	4	15	16	10	12	5	2	5	-	-	-	
Machine-tool operators, production, class B <sup>4</sup>	332	3.81	-	-	-	9	3	4	20	19	43	41	35	90	56	8	-	4	-	-	-	-	
Time	234	3.67	-	-	-	9	3	4	20	19	43	39	24	42	19	8	-	4	-	-	-	-	
Drill-press operators, radial (all timeworkers)	12	3.61	-	-	-	-	-	-	-	3	2	2	5	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle <sup>3</sup>	31	3.37	-	-	-	9	3	-	6	-	-	1	2	4	1	1	-	4	-	-	-	-	
Milling-machine operators	52	3.77	-	-	-	-	-	-	3	3	-	24	8	9	4	1	-	-	-	-	-	-	
Time	43	3.69	-	-	-	-	-	-	3	3	-	24	7	5	-	1	-	-	-	-	-	-	
Machine-tool operators, production, class C	157	3.27	-	-	31	-	4	6	2	42	12	43	11	6	-	-	-	-	-	-	-	-	
Time	99	3.01	-	-	31	-	4	6	2	42	3	4	1	6	-	-	-	-	-	-	-	-	
Machine-tool operators, production, numerically controlled machines (all timeworkers) <sup>4</sup>	62	4.11	-	-	-	-	-	-	3	-	3	9	5	6	25	8	-	2	-	1	-	-	
Milling-machine operators	21	3.85	-	-	-	-	-	-	3	-	3	6	-	2	4	3	-	-	-	-	-	-	
Machine-tool operators, tool room (operate more than 1 type of machine) <sup>3</sup>	40	4.41	-	-	-	-	-	-	1	-	-	1	-	5	19	5	3	1	-	1	4	-	

See footnotes at end of table.

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**Table 5. Occupational earnings: Baltimore, Md.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME EARNINGS OF—																			
			\$1.80 and under	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60
			\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80
<u>Men—Continued</u>																						
Machinists, maintenance (all timeworkers)	48	\$ 4.81	-	-	-	-	-	-	-	-	-	-	-	1	5	17	9	16	-	-	-	-
Machinists, production (all timeworkers)	266	4.81	-	-	-	-	-	-	-	-	-	6	-	21	6	10	24	138	34	20	7	-
Mechanics, maintenance (all timeworkers)	46	4.22	-	-	-	-	-	-	-	-	-	5	3	15	10	5	6	-	-	2	-	-
Polishers and buffers, metal (all timeworkers)	62	3.98	-	-	-	-	-	-	-	3	27	-	9	3	6	-	3	11	-	-	-	-
Punch-press operators, class B <sup>3</sup>	90	3.55	-	-	-	-	-	7	-	35	7	4	25	12	-	-	-	-	-	-	-	-
Set-up men, machine tools	117	4.49	-	-	-	-	-	-	-	1	2	6	13	4	11	28	20	27	5	-	-	-
Time	73	4.45	-	-	-	-	-	-	-	1	2	6	13	3	2	4	10	27	5	-	-	-
Tool and/or die makers (other than jobbing) (all timeworkers)	107	4.77	-	-	-	-	-	-	-	-	-	3	-	-	-	52	6	17	5	6	4	14
Tool clerks (all timeworkers)	26	3.56	-	-	-	-	-	1	1	9	4	1	6	4	-	-	-	-	-	-	-	-
Welders, hand, class A <sup>3</sup>	108	4.47	-	-	-	-	-	-	-	-	-	1	9	11	31	24	4	4	12	12	-	-
Welders, hand, class B <sup>3</sup>	64	4.33	-	-	-	-	-	-	-	-	-	4	20	4	5	8	2	19	2	-	-	-
Welders, machine, class A (all timeworkers)	22	3.99	-	-	-	-	-	-	-	-	-	4	4	13	1	-	-	-	-	-	-	-
<u>Women</u>																						
Machine-tool operators, production, class C	103	3.31	-	-	13	8	4	4	1	15	9	40	3	6	-	-	-	-	-	-	-	-
Time	60	3.05	-	-	13	8	4	4	1	15	2	4	3	6	-	-	-	-	-	-	-	-
Polishing and buffing machine operators (all timeworkers)	18	3.20	-	-	-	-	8	-	-	3	-	5	1	1	-	-	-	-	-	-	-	-

<sup>1</sup> The Baltimore Standard Metropolitan Statistical Area consists of Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 6. Occupational earnings: Boston, Mass.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																										
			Under \$2.50	\$2.50 and under	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	and over
<b>Men</b>																													
Assemblers, class A-----	688	\$4.77	-	-	-	-	3	-	12	3	18	4	22	-	35	11	9	6	150	53	61	93	1	11	4	12	13	167	
Time-----	565	4.56	-	-	-	-	3	-	12	3	18	4	22	-	35	11	9	6	147	47	47	91	-	-	-	-	10	100	
Incentive-----	123	5.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	6	14	2	1	11	4	12	3	67	
Assemblers, class B-----	381	3.75	-	-	24	18	-	6	7	29	31	14	16	2	28	10	70	10	57	10	21	-	1	1	20	2	-	4	
Time-----	364	3.69	-	-	24	18	-	6	7	29	31	14	16	2	27	10	68	8	54	9	21	-	-	-	20	-	-	4	
Incentive-----	17	5.08	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	2	3	1	-	-	1	1	-	2	-	4	
Assemblers, class C-----	211	3.28	19	28	9	15	1	1	4	11	2	7	5	5	30	22	28	22	-	-	1	1	-	-	-	-	-	-	-
Time-----	203	3.28	18	26	9	14	1	-	4	11	2	7	5	4	30	22	28	22	-	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance <sup>4</sup> -----	15	4.33	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	2	-	4	3	3	-	-	-	-	-	-
Electricians, maintenance <sup>4</sup> -----	39	4.69	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	3	-	2	22	-	4	1	4	-	-	-
Inspectors, class A-----	199	4.29	-	-	-	-	-	-	12	-	-	-	-	-	10	7	4	6	58	24	21	6	28	22	1	-	-	-	-
Time-----	190	4.27	-	-	-	-	-	-	12	-	-	-	-	-	10	7	4	6	58	23	16	3	28	22	1	-	-	-	-
Inspectors, class B <sup>5</sup> -----	149	3.60	-	-	3	2	25	9	1	2	6	10	10	9	6	25	5	15	21	-	-	-	-	-	-	-	-	-	-
Inspectors, class C <sup>4</sup> -----	51	2.89	-	6	25	3	3	3	-	1	1	-	2	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners-----	161	3.21	-	4	2	21	8	13	19	10	23	11	11	14	3	11	10	-	1	-	-	-	-	-	-	-	-	-	-
Time-----	147	3.18	-	4	2	21	8	13	19	10	23	3	11	13	3	9	8	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling <sup>6</sup> -----	122	3.46	8	1	1	8	-	12	6	6	8	-	-	10	14	17	5	-	8	12	6	-	-	-	-	-	-	-	-
<b>Machine-tool operators, production,</b>																													
class A <sup>8</sup> -----	1,358	4.58	-	-	-	-	-	-	2	8	5	2	8	22	46	48	85	225	280	219	104	56	52	21	20	38	117	-	-
Time-----	1,070	4.29	-	-	-	-	-	-	2	8	4	8	19	44	43	82	217	267	206	95	42	9	6	-	-	18	-	-	-
Incentive-----	288	5.65	-	-	-	-	-	-	-	-	1	2	3	2	5	3	8	13	13	9	14	43	15	20	20	7	11	1	-
Automatic-lathe operators <sup>9</sup> -----	41	4.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	2	4	-	-	-	-	-	19	1	-	-
Drill-press operators, radial-----	75	4.92	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	8	8	8	-	-	10	-	-	4	-	-	-
Time-----	40	3.97	-	-	-	-	-	-	-	-	-	-	-	-	16	-	8	8	8	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	59	4.35	-	-	-	-	-	-	-	-	-	-	-	4	-	5	4	12	13	12	1	2	1	2	1	1	1	1	-
Time-----	40	4.18	-	-	-	-	-	-	-	-	-	-	-	3	-	4	4	11	8	10	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	181	4.50	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	54	26	78	3	3	2	-	-	1	1	11	-
Time-----	158	4.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	25	78	1	-	-	-	-	-	-	-	-
Incentive-----	23	5.98	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	54	25	78	2	3	2	-	-	1	1	9	11
Grinding-machine operators-----	238	4.44	-	-	-	-	-	-	2	-	-	-	-	4	12	26	29	17	60	26	20	13	5	1	5	1	17	-	-
Time-----	207	4.22	-	-	-	-	-	-	2	-	-	-	-	4	12	26	29	17	59	25	19	13	-	-	-	-	-	-	-
Incentive-----	31	5.93	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	39	15	40	16	4	10	1	3	1	18	-
Milling-machine operators-----	156	4.76	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	37	14	37	13	-	1	-	-	5	1	10	17
Time-----	106	4.32	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	37	14	37	13	-	1	-	-	3	1	18	-
Incentive-----	50	5.69	-	-	-	-	-	-	-	-	-	-	-	1	2	1	2	1	3	3	4	9	1	3	1	3	1	11	18
Screw-machine operators, automatic-----	60	4.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	20	3	10	14	-	2	-	1	3	-	-
Time-----	53	4.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	20	2	10	14	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)---	198	4.77	-	-	-	-	-	-	-	-	1	1	-	3	4	-	2	21	60	25	12	9	15	2	10	9	24	-	-
Time-----	119	4.34	-	-	-	-	-	-	-	-	-	-	-	2	4	-	19	56	22	10	6	-	-	-	-	-	-	-	-
Incentive-----	79	5.43	-	-	-	-	-	-	-	-	-	1	1	-	1	-	2	2	4	3	2	3	15	2	10	9	12	24	-
<b>Machine-tool operators, production,</b>																													
class B <sup>8</sup> -----	714	3.76	-	-	-	19	6	11	10	49	51	22	51	114	39	69	140	94	8	10	-	1	4	6	-	1	9	-	-
Time-----	683	3.70	-	-	-	19	5	11	9	48	51	20	51	114	39	69	139	94	7	7	-	-	-	-	-	-	-	-	-
Incentive-----	31	5.05	-	-	-	1	-	1	1	-	1	-	2	-	-	-	1	-	1	3	-	1	4	6	-	1	9	-	-
Automatic-lathe operators <sup>9</sup> -----	28	3.83	-	-	-	-	-	-	-	-	1	-	-	6	6	1	14	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial-----	26	4.18	-	-	-	-	-	-	-	-	-	-	4	9	4	-	-	-	-	-	-	-	-	3	6	-	-	-	-
Time-----	17	3.61	-	-	-	-	-	-	-	-	-	-	4	9	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	57	3.49	-	-	-	10	4	6	-	1	7	1	10	-	-	-	-	13	3	-	-	-	-	-	-	1	1	-	-
Time-----	53	3.41	-	-	-	10	3	6	-	1	7	1	10	-	-	-	-	13	3	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 6. Occupational earnings: Boston, Mass.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																															
			Under \$2.50	\$2.50 and under	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	and over					
<b>Men—Continued</b>																																		
Machine-tool operators, production, class B <sup>6</sup> —Continued																																		
Engine-lathe operators <sup>4</sup> -----	59	\$3.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Grinding-machine operators <sup>5</sup> -----	172	3.59	-	-	-	5	-	4	2	9	33	7	6	62	9	10	2	12	6	1	5	-	-	-	-	-	-	-	-	-				
Milling-machine operators-----	51	4.12	-	-	-	-	-	-	1	6	-	1	-	1	-	6	15	14	1	-	-	-	1	-	-	-	-	-	-	5				
Time-----	41	3.91	-	-	-	-	-	-	-	5	-	-	-	1	-	6	15	14	-	-	-	-	-	-	-	-	-	-	-	-				
Screw-machine operators, automatic <sup>7</sup> -----	19	3.77	-	-	-	-	-	-	-	5	-	1	1	-	-	-	-	8	4	-	-	-	-	-	-	-	-	-	-	-				
Turret-lathe operators, hand (including hand screw machine)-----	60	3.90	-	-	-	-	-	-	-	2	5	-	4	16	-	10	4	14	-	2	-	-	1	-	-	-	-	-	-	2				
Time-----	55	3.77	-	-	-	-	-	-	-	2	5	-	4	16	-	10	4	14	-	-	-	-	-	-	-	-	-	-	-	-				
Machine-tool operators, production, class C <sup>6</sup> -----	265	3.27	2	8	14	31	12	10	14	4	68	13	12	13	28	13	1	10	-	-	3	9	-	-	-	-	-	-	-	-				
Time-----	247	3.26	2	8	14	30	12	3	13	3	68	13	12	10	27	13	-	10	-	-	-	9	-	-	-	-	-	-	-	-	-			
Drill-press operators, single- or multiple-spindle-----	17	2.89	-	5	2	4	-	1	-	-	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Grinding-machine operators-----	53	3.10	-	9	5	5	1	4	1	16	2	-	3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Time-----	47	3.08	-	9	5	5	-	3	-	16	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Milling-machine operators-----	21	3.41	-	-	-	1	-	6	-	-	-	3	-	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Time-----	14	3.65	-	-	-	-	-	-	-	-	-	3	-	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Turret-lathe operators, hand (including hand screw machine) <sup>4</sup> -----	20	3.22	-	-	-	10	-	-	-	-	-	-	-	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, numerically controlled machines <sup>6</sup> -----	121	4.43	-	-	-	-	-	-	-	-	-	-	-	3	4	4	7	5	21	6	17	32	15	1	2	1	1	2	-	-				
Time-----	105	4.34	-	-	-	-	-	-	-	-	-	-	-	3	4	4	7	5	20	6	13	30	13	-	-	-	-	-	-	-	-	-		
Engine-lathe operators <sup>5</sup> -----	9	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	3	-	-	1	-	-	1	-	-	-	-	-			
Machine-tool operators, toolroom (operate 1 type of machine) <sup>4,6</sup> -----	151	4.57	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	12	42	20	28	13	20	3	5	2	1	-	-	-			
Drill-press operators, radial-----	19	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1	5	-	8	1	-	-	-	-	-	-	-		
Engine-lathe operators-----	30	4.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	5	1	6	2	-	-	-	-	-	-	-		
Grinding-machine operators-----	38	4.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	7	10	3	4	-	-	-	-	-	-	-	-		
Milling-machine operators-----	31	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	3	6	4	5	5	1	-	-	-	-	-	-	-		
Machine-tool operators, toolroom (operate more than 1 type of machine) <sup>4</sup> -----	48	4.29	-	-	-	-	-	3	-	8	-	-	-	-	-	6	-	-	6	1	6	-	3	10	-	5	-	-	-	-	-	-		
Machinists, maintenance <sup>4</sup> -----	51	4.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	15	18	7	-	-	3	3	-	-	-	-	-		
Machinists, production-----	355	4.68	-	-	-	-	-	-	-	-	-	-	-	10	3	11	1	6	15	30	34	43	165	23	6	1	1	6	-	-	-	-	-	
Time-----	339	4.63	-	-	-	-	-	-	-	-	-	-	-	10	3	11	1	6	15	29	33	41	163	21	6	-	-	-	-	-	-	-	-	
Mechanics, maintenance-----	37	4.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11	1	12	5	-	2	2	-	-	-	-	-	-	
Time-----	33	4.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11	1	12	5	-	-	-	-	-	-	-	-	-	
Polishers and buffers, metal <sup>5</sup> -----	155	4.13	-	-	3	-	-	-	-	18	10	9	16	3	12	14	8	-	2	-	-	-	-	60	-	-	-	-	-	-	-	-	-	
Punch-press operators, class A <sup>4</sup> -----	26	4.10	-	-	-	-	-	-	-	-	-	3	-	-	2	-	6	10	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B-----	75	3.03	8	6	1	13	-	17	3	4	11	2	3	2	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	67	3.05	6	5	11	-	17	3	4	11	2	3	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools <sup>4</sup> -----	54	4.32	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	2	19	10	14	4	-	-	-	-	-	-	-	-	-	-	-	
Tool and/or die makers (jobbing) <sup>4</sup> -----	81	5.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	8	13	15	14	17	3	5	-	-	-	-	-	
Tool and/or die makers (other than jobbing) <sup>4</sup> -----	136	4.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	13	23	16	10	25	11	28	-	-	-	-	-	-	-	
Tool clerks-----	72	3.80	-	-	13	-	-	3	-	7	1	5	-	6	6	3	-	4	24	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	69	3.79	-	-	13	-	-	3	-	1	5	-	6	6	4	3	-	4	24	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 6. Occupational earnings: Boston, Mass.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.50	\$2.50 and under \$2.60	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80 and over	
<b>Men—Continued</b>																													
Welders, hand, class A <sup>4</sup> -----	139	\$4.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	45	67	22	-	2	1	-	-	-
Welders, hand, class B <sup>4</sup> -----	76	3.88	-	-	-	-	-	-	3	-	-	-	-	-	2	20	10	15	26	-	-	-	-	-	-	-	-	-	-
<b>Women<sup>4</sup></b>																													
Assemblers, class A-----	85	3.48	-	-	-	-	-	15	18	15	4	-	2	-	-	-	-	-	6	1	21	-	3	-	-	-	-	-	-
Inspectors, class B-----	22	3.71	-	-	-	-	-	1	-	-	-	3	3	-	-	3	-	12	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class C-----	33	3.27	-	-	3	-	6	2	-	-	3	-	7	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C-----	23	3.13	-	6	-	1	1	2	2	-	-	3	-	3	4	-	-	1	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Boston Standard Metropolitan Statistical Area consists of Suffolk County, 15 communities in Essex County, 30 in Middlesex County, 20 in Norfolk County, and 9 in Plymouth County.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Workers were distributed as follows: 8 at \$5.80 to \$6; 13 at \$6 to \$6.20; 33 at \$6.20 to \$6.40; 94 at \$6.40 to \$6.60; 9 at \$6.60 to \$6.80; and 10 at \$6.80 and over.

<sup>4</sup> All workers were paid on a time basis.

<sup>5</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>6</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>7</sup> Workers were distributed as follows: 15 at \$5.80 to \$6; 7 at \$6 to \$6.20; 37 at \$6.20 to \$6.40; 14 at \$6.40 to \$6.60; 11 at \$6.60 to \$6.80; 4 at \$6.80 to \$7; and 29 at \$7 and over.

<sup>8</sup> Workers were distributed as follows: 3 at \$5.80 to \$6; 13 at \$6.20 to \$6.40; and 5 at \$7 and over.

<sup>9</sup> Workers were distributed as follows: 1 at \$5.80 to \$6; 4 at \$6.40 to \$6.60; and 6 at \$7 and over.

<sup>10</sup> Workers were distributed as follows: 2 at \$5.80 to \$6; 1 at \$6 to \$6.20; 4 at \$6.20 to \$6.40; 3 at \$6.40 to \$6.60; 4 at \$6.60 to \$6.80; and 3 at \$7 and over.

<sup>11</sup> Workers were distributed as follows: 2 at \$5.80 to \$6; 3 at \$6.20 to \$6.40; 4 at \$6.40 to \$6.60; 3 at \$6.60 to \$6.80; and 6 at \$6.80 and over.

<sup>12</sup> Workers were distributed as follows: 4 at \$5.80 to \$6; 4 at \$6 to \$6.20; 12 at \$6.20 to \$6.40; and 4 at \$6.40 and over.

<sup>13</sup> Workers were distributed as follows: 3 at \$5.80 to \$6; 1 at \$6 to \$6.20; 4 at \$6.20 to \$6.40; and 1 at \$6.40 and over.

**Table 7. Occupational earnings: Buffalo, N.Y.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																													
			Under \$2.80	\$2.80 and under \$2.90	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	and over			
Assemblers, class A-----	276	\$4.56	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	1	7	44	42	27	35	1	6	18	38	38	2	2	
Time-----	227	4.49	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	1	7	44	42	27	34	-	2	8	14	29	2	2	
Assemblers, class C (all timeworkers)-	42	3.59	8	4	-	-	4	-	-	-	-	-	-	-	-	-	10	-	6	4	-	6	-	-	-	-	-	-	-	-	-	
Electricians, maintenance (all timeworkers)-----	57	4.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	7	7	-	-	-	-	-	-	-	-	
Inspectors, class A (all timeworkers)	125	4.65	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	3	7	1	11	-	-	36	26	14	-	18	2	1	
Inspectors, class B (all timeworkers)	59	4.31	-	-	-	-	-	-	-	7	-	-	-	5	-	7	-	-	7	-	6	-	12	-	20	-	2	-	-	-	-	
Inspectors, class C (all timeworkers)	14	3.71	-	-	-	-	-	-	-	-	-	-	-	5	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)-----	148	3.48	10	2	2	-	-	18	12	7	45	12	31	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling (all timeworkers)-----	55	3.63	-	-	-	-	-	3	3	25	-	-	-	6	6	10	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production class A <sup>5</sup> -----	767	4.44	-	-	-	-	-	-	-	-	-	-	-	1	2	2	17	48	53	145	133	128	36	49	37	37	37	19	44	12	4	
Time-----	609	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	35	32	129	120	109	24	40	36	30	13	30	-	-	-	
Automatic-lathe operators-----	32	4.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	19	-	6	4	-	1	-	-	-	-	
Time-----	26	4.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	6	4	-	-	-	-	-	-	-	
Drill-press operators, radial-----	55	4.31	-	-	-	-	-	-	-	-	-	-	-	10	1	6	14	7	10	1	-	-	1	-	1	2	1	2	-	-	-	
Time-----	31	4.26	-	-	-	-	-	-	-	-	-	-	-	10	-	2	8	2	8	7	6	-	-	-	-	1	2	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	17	4.15	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	7	-	9	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	121	4.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	48	4	13	10	13	8	5	1	10	-	-	-	
Time-----	101	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	48	-	10	8	8	8	5	1	6	-	-	
Grinding-machine operators-----	84	4.53	-	-	-	-	-	-	-	-	-	-	-	6	5	4	10	17	9	2	16	3	12	1	12	-	-	-	-	-	-	
Time-----	73	4.55	-	-	-	-	-	-	-	-	-	-	-	5	2	2	9	17	7	2	16	1	16	1	16	1	1	3	2	3	-	
Milling-machine operators-----	71	4.59	-	-	-	-	-	-	-	-	-	-	-	1	8	7	3	15	8	10	-	-	10	-	16	1	3	2	3	-	-	
Time-----	51	4.47	-	-	-	-	-	-	-	-	-	-	-	1	6	7	3	14	5	7	-	-	7	-	8	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	151	4.32	-	-	-	-	-	-	-	-	-	-	2	2	7	6	12	47	18	35	6	4	6	4	6	2	-	3	1	-	-	
Time-----	106	4.35	-	-	-	-	-	-	-	-	-	-	-	1	1	3	41	16	29	3	3	3	3	6	2	2	1	1	-	-	-	
Machine-tool operators, production, class B <sup>5</sup> -----	273	4.09	-	-	-	-	-	1	-	20	11	8	4	34	16	57	18	40	7	18	3	23	1	3	5	3	1	-	-	-	-	
Time-----	251	4.05	-	-	-	-	1	-	20	11	8	3	34	14	56	17	39	6	18	-	22	-	2	2	-	-	-	-	-	-	-	-
Drill-press operators, radial <sup>6</sup> -----	15	4.23	-	-	-	-	-	-	3	-	-	-	-	-	5	6	-	-	1	-	1	-	1	-	2	-	-	-	-	-	-	
Grinding-machine operators <sup>6</sup> -----	54	4.15	-	-	-	-	-	3	-	4	3	-	1	8	2	18	-	-	12	1	1	-	1	-	1	-	-	-	-	-	-	
Milling-machine operators-----	16	4.38	-	-	-	-	-	-	-	-	-	-	1	1	-	5	2	1	-	-	-	-	-	-	-	-	3	1	1	-	-	
Time-----	9	4.01	-	-	-	-	-	-	-	-	-	-	1	1	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) <sup>6</sup> -----	23	4.30	-	-	-	-	-	-	-	-	-	-	-	3	8	-	-	-	-	-	4	4	-	-	-	-	2	2	-	-	-	
Machine-tool operators, production, class C <sup>5,6</sup> -----	211	3.29	13	17	20	5	24	20	17	-	66	15	7	2	1	-	2	-	-	-	-	-	1	-	1	-	1	-	-	-	-	
Drill-press operators, single- or multiple-spindle <sup>4</sup> -----	19	3.31	-	8	-	-	-	-	-	-	7	3	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
Grinding-machine operators (all timeworkers)-----	34	3.39	2	1	-	1	4	4	-	-	17	-	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, numerically controlled machine <sup>5</sup> -----	79	4.85	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	8	2	7	9	4	12	3	7	17	4	-	-	-	-	
Time-----	40	4.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	1	6	-	9	-	1	16	-	-	
Drill-press operators, single- or multiple-spindle <sup>4</sup> -----	13	4.39	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	8	-	1	-	1	-	1	1	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) (all timeworkers) <sup>5</sup> -----	116	4.75	-	-	-	-	-	-	-	-	-	-	-	3	-	1	-	5	3	16	17	7	8	12	14	14	14	16	-	-	-	
Grinding-machine operators-----	82	4.71	-	-	-	-	-	-	-	-	-	-	-	3	-	1	-	5	3	16	16	7	-	2	-	13	16	-	-	-	-	

See footnotes at end of table.

**Table 7. Occupational earnings: Buffalo, N.Y.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly <sup>2</sup> earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.80	\$2.80 and under \$2.90	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	and over
Machine-tool operators, toolroom (operate more than 1 type of machine) (all timeworkers)-----	93	\$4.73	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	-	-	12	9	15	1	1	10	34	-	-	
Machinists, maintenance (all timeworkers)-----	26	4.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	18	-	-	-	-	
Mechanics, maintenance (all timeworkers)-----	68	4.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	10	-	-	1	3	2	3	34	-	2.	
Tool and/or die makers (jobbing) (all timeworkers)-----	127	4.90	-	-	-	-	-	-	-	-	-	-	-	-	-	4	6	4	6	-	9	7	-	16	7	27	39	2	
Tool and/or die makers (other than jobbing) (all timeworkers)-----	40	4.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	6	5	4	-	5	8	-	
Tool clerks (all timeworkers)-----	27	3.83	-	-	-	-	3	-	-	-	-	-	14	-	2	4	2	-	2	-	-	-	-	-	-	-	-	-	
Welders, hand, class A-----	285	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	6	22	16	38	8	16	1	14	6	146	2	10		
Welders, hand, class B (all timeworkers)-----	272	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	6	22	16	38	8	13	-	11	1	145	2	10		
Welders, hand, class B (all timeworkers)-----	53	4.00	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	8	18	-	-	-	1	-	-	-	2	-	

<sup>1</sup> The Buffalo Standard Metropolitan Statistical Area consists of Erie and Niagara Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Data limited to men workers.

<sup>4</sup> Workers were distributed as follows: 4 at \$2.60 to \$2.70; and 4 at \$2.70 to \$2.80.

<sup>5</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>6</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

**Table 8. Occupational earnings: Chicago, Ill.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																										
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Men</b>																													
Assemblers, class A -----	3,390	\$4.85	-	-	-	5	9	26	19	53	95	301	359	254	210	448	722	701	40	17	11	14	24	8	6	12	56		
Time -----	2,744	4.74	-	-	-	9	3	11	47	82	263	331	222	194	431	570	565	16	-	-	-	-	-	-	-	-	-	-	
Incentive -----	646	5.32	-	-	-	5	-	23	8	6	13	38	28	32	16	17	152	136	24	17	11	14	24	8	6	12	56		
Assemblers, class B -----	1,992	4.26	-	-	6	5	155	52	105	255	240	248	172	152	149	75	80	72	93	123	6	2	-	-	-	-	2		
Time -----	1,214	4.01	-	-	-	1	-	106	28	76	184	201	198	124	118	117	34	27	-	-	-	-	-	-	-	-	-		
Incentive -----	778	4.65	-	-	5	5	49	24	29	71	39	50	48	34	32	41	53	72	93	123	6	2	-	-	-	-	2		
Assemblers, class C -----	684	3.30	-	14	96	72	61	171	64	64	7	35	31	1	9	6	7	6	22	1	14	3	-	-	-	-	-		
Time -----	600	3.10	-	14	96	72	58	158	64	61	7	30	29	-	7	4	-	-	-	-	-	-	-	-	-	-	-		
Incentive -----	84	4.68	-	-	-	-	3	13	-	3	-	5	2	1	2	2	7	6	22	1	14	3	-	-	-	-	-		
Carpenters, maintenance (all timeworkers) -----	49	5.06	-	-	-	-	-	-	-	-	-	-	-	10	1	-	15	4	7	1	10	-	-	-	-	-	-		
Time -----	407	5.45	-	-	-	-	-	-	-	-	-	-	8	2	41	31	40	55	30	45	6	30	102	1	2	3	11		
Electricians, maintenance -----	399	5.45	-	-	-	-	-	-	-	-	-	-	8	2	41	31	40	55	30	39	6	30	102	1	-	3	11		
Time -----	911	4.76	-	-	-	-	-	-	-	1	66	43	141	88	99	176	76	157	55	1	8	-	-	-	-	-	-	-	
Inspectors, class A -----	849	4.75	-	-	-	-	-	-	-	1	66	43	139	86	97	138	58	157	55	1	8	-	-	-	-	-	-	-	
Time -----	746	4.37	-	-	-	-	13	6	14	25	81	161	70	42	147	164	23	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class B -----	677	4.39	-	-	-	-	6	6	9	25	66	141	57	42	147	164	12	-	-	-	-	-	-	-	-	-	-	-	
Time -----	69	4.15	-	-	-	-	-	5	-	15	20	13	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	291	4.18	-	-	-	-	20	25	9	20	39	13	8	39	3	69	7	4	6	6	22	-	-	1	-	-	-	-	
Inspectors, class C -----	238	3.93	-	-	-	-	20	25	9	20	39	13	5	39	3	65	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	863	3.57	-	-	19	22	33	126	103	189	66	169	47	1	82	-	6	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	830	3.55	-	-	19	22	33	126	103	185	66	167	20	1	82	-	6	-	-	-	-	-	-	-	-	-	-	-	
Time -----	33	4.02	-	-	-	-	-	-	-	4	-	2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	1,243	3.92	-	-	8	36	65	136	82	116	85	67	142	36	209	224	17	20	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling -----	1,135	3.90	-	-	8	36	65	136	82	86	83	67	139	4	195	216	-	18	-	-	-	-	-	-	-	-	-	-	
Time -----	108	4.19	-	-	-	-	-	-	-	30	2	-	3	32	14	8	17	2	-	-	-	-	-	-	-	-	-	-	
Incentive -----																													
Machine-tool operators, production class A <sup>3</sup> -----	6,294	4.98	-	-	-	-	2	4	72	88	141	236	487	550	592	681	1099	1139	444	270	215	84	105	19	15	11	40		
Time -----	4,540	4.87	-	-	-	-	2	4	69	45	101	205	427	429	490	544	923	961	78	41	86	51	84	6	6	1	7		
Incentive -----	1,754	5.27	-	-	-	-	-	-	3	43	40	31	60	121	102	137	176	198	366	229	129	33	21	13	9	10	33		
Automatic-lathe operators -----	355	5.05	-	-	-	-	-	-	-	-	3	11	51	10	17	67	22	76	60	17	15	1	3	1	-	-	-	-	
Time -----	227	4.83	-	-	-	-	-	-	-	-	3	11	46	6	10	65	15	54	17	-	-	-	-	-	-	-	-	-	
Incentive -----	128	5.44	-	-	-	-	-	-	-	-	-	-	5	4	7	2	7	22	43	17	15	1	3	1	1	-	-	-	
Drill-press operators, radial -----	553	5.02	-	-	-	-	-	-	2	11	26	30	45	59	148	80	29	50	35	6	9	3	-	-	-	2	4	14	
Time -----	331	4.72	-	-	-	-	-	-	1	8	26	24	35	47	127	57	5	1	-	-	-	-	-	-	-	-	-	-	
Incentive -----	222	5.48	-	-	-	-	-	-	1	3	-	6	10	12	21	23	24	49	35	6	9	3	-	-	-	2	4	14	
Drill-press operators, single- or multiple-spindle -----	342	4.67	-	-	-	-	2	2	29	12	12	1	29	31	79	24	73	20	21	6	-	1	-	-	-	-	-	-	
Time -----	219	4.51	-	-	-	-	2	2	29	4	11	-	20	17	69	13	52	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	123	4.95	-	-	-	-	-	-	8	1	1	9	14	10	11	21	20	21	6	-	-	1	-	-	-	-	-	-	
Engine-lathe operators -----	707	4.94	-	-	-	-	-	-	10	2	16	14	58	47	100	126	176	63	29	13	6	35	-	-	-	2	8		
Time -----	597	4.87	-	-	-	-	-	-	10	-	14	14	56	29	92	121	154	56	19	-	1	31	-	-	-	-	-	-	
Incentive -----	110	5.34	-	-	-	-	-	-	2	2	-	2	18	8	5	22	7	10	13	5	4	-	-	-	-	2	8		
Grinding-machine operators -----	882	4.91	-	-	-	-	2	18	45	31	67	47	74	83	86	130	100	76	42	25	13	10	13	6	5	9	7		
Time -----	559	4.78	-	-	-	-	2	18	14	21	57	39	50	76	67	108	48	7	13	5	5	9	6	6	1	7			
Incentive -----	323	5.13	-	-	-	-	-	-	31	10	10	8	24	7	19	22	52	69	29	20	8	1	7	-	-	4	2		
Milling-machine operators -----	652	4.89	-	-	-	-	-	1	15	24	19	80	61	86	44	77	162	35	27	13	2	2	-	-	-	2	2		
Time -----	488	4.82	-	-	-	-	-	-	15	6	13	72	52	79	30	58	150	3	-	10	-	-	-	-	-	-	-	-	
Incentive -----	164	5.10	-	-	-	-	-	-	1	-	18	6	8	9	7	14	19	12	32	27	3	2	2	-	-	2	2		
Screw-machine operators, automatic -----	323	5.26	-	-	-	-	-	-	2	-	9	-	-	21	10	42	61	58	15	7	94	-	-	-	3	1	-	-	
Time -----	244	5.21	-	-	-	-	-	-	-	-	8	-	-	10	8	42	58	49	-	2	67	-	-	-	-	-	-	-	
Incentive -----	79	5.42	-	-	-	-	-	-	2	-	1	-	-	11	2	-	3	9	15	5	27	-	-	-	3	1	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	619	4.74	-	-	-	-	-	-	6	11	9	72	97	99	33	57	103	87	13	15	8	2	4	-	-	-	3		
Time -----	451	4.62	-	-	-	-	-	-	6	10	9	62	85	77	17	30	84	71	-	-	-	-	-	-	-	-	-	-	
Incentive -----	168	5.05	-	-	-	-	-	-	-	1	-	10	-	22	16	27	19	16	13	15	8	2	4	-	-	-	-	3	

See footnotes at end of table.



**Table 8. Occupational earnings: Chicago, Ill.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery in manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over
<b>Men—Continued</b>																												
Machine-tool operators, production, class B <sup>3</sup>	3,228	\$4.35	-	-	-	33	74	84	42	180	230	316	514	223	285	520	196	132	172	92	79	9	15	16	4	2	2	8
Time	2,263	4.13	-	-	-	30	74	79	39	179	186	235	441	166	230	446	106	15	23	3	7	1	1	-	1	-	1	-
Incentive	965	4.89	-	-	-	3	-	5	3	1	44	81	73	57	55	74	90	117	149	89	72	8	14	16	3	2	1	8
Automatic-lathe operators	94	4.28	-	-	-	-	-	-	-	-	10	25	34	1	3	3	-	-	14	2	1	-	-	-	1	-	-	-
Time	63	3.98	-	-	-	-	-	-	-	-	10	25	23	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Incentive	31	4.89	-	-	-	-	-	-	-	-	-	11	1	1	-	-	-	-	14	2	1	-	-	-	1	-	-	-
Drill-press operators, radial	263	4.52	-	-	-	-	3	-	10	7	22	38	-	28	126	14	3	6	6	2	-	-	-	-	-	-	-	-
Time	232	4.45	-	-	-	-	3	-	10	7	22	38	-	28	124	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive	31	5.09	-	-	-	-	-	-	-	-	-	-	-	-	2	14	3	6	6	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle	480	4.06	-	-	-	30	64	40	3	44	35	38	22	17	14	43	20	32	34	20	15	4	-	5	-	-	-	-
Time	303	3.48	-	-	-	30	64	40	3	44	29	36	15	5	1	34	2	-	-	-	-	-	-	-	-	-	-	-
Incentive	177	5.04	-	-	-	-	-	-	-	-	6	2	7	12	13	9	18	32	34	20	15	4	-	5	-	-	-	-
Engine-lathe operators	228	4.28	-	-	-	-	-	10	-	-	15	31	72	28	7	39	8	3	5	-	4	1	4	-	-	-	-	-
Time	158	4.23	-	-	-	-	-	5	-	-	10	12	63	23	4	36	2	1	-	-	2	1	4	-	-	-	-	-
Incentive	70	4.41	-	-	-	-	-	5	-	-	5	19	9	5	3	3	6	2	5	-	2	1	4	-	-	-	-	-
Grinding-machine operators	649	4.34	-	-	-	8	22	14	30	34	54	123	65	107	28	80	14	39	7	17	1	1	3	2	-	-	-	-
Time	537	4.21	-	-	-	8	22	14	30	33	53	100	63	98	21	73	-	22	-	-	-	-	-	-	-	-	-	-
Incentive	112	5.00	-	-	-	-	-	-	-	-	1	23	2	9	7	7	14	17	7	17	1	1	3	2	-	-	-	-
Milling-machine operators	447	4.50	-	-	-	3	1	6	5	32	50	37	21	26	52	93	17	21	35	21	15	-	4	6	-	-	-	-
Time	258	4.23	-	-	-	1	6	2	32	34	25	13	17	42	82	-	-	1	1	1	1	1	-	-	-	-	-	-
Incentive	189	4.88	-	-	-	3	-	-	3	-	16	12	8	9	10	11	17	21	34	20	14	-	3	6	-	-	-	-
Screw-machine operators, automatic	67	4.77	-	-	-	-	-	-	-	-	-	-	9	-	5	35	11	-	2	2	3	-	-	-	-	-	-	-
Time	27	4.55	-	-	-	-	-	-	-	-	-	-	9	-	4	4	10	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	329	4.34	-	-	-	-	-	3	2	35	22	55	22	48	13	73	12	17	12	4	5	-	4	-	-	-	-	-
Time	176	4.19	-	-	-	-	-	3	2	35	6	13	11	28	6	71	1	-	-	-	-	-	-	-	-	-	-	-
Incentive	153	4.50	-	-	-	-	-	-	-	-	16	42	11	20	7	2	11	17	12	4	5	-	4	-	-	-	-	-
Machine-tool operators, production, class C <sup>3</sup>	1,703	3.66	25	9	77	55	64	227	219	188	220	85	40	65	257	75	38	27	21	4	-	2	-	4	-	-	-	-
Time	1,349	3.51	25	9	77	55	63	225	200	134	163	56	22	31	236	36	15	1	1	-	-	-	-	-	-	-	-	-
Incentive	354	4.23	-	-	-	-	1	2	19	54	57	29	18	34	21	39	23	26	20	4	-	2	-	4	-	-	-	-
Automatic-lathe operators	115	3.95	-	-	-	-	-	24	-	24	18	-	-	-	8	27	14	-	-	-	-	-	-	-	-	-	-	-
Time	95	4.06	-	-	-	-	-	24	-	4	18	-	-	-	8	27	14	-	-	-	-	-	-	-	-	-	-	-
Incentive	47	3.62	-	-	-	-	-	9	-	16	11	9	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial <sup>4</sup>	297	3.82	-	-	15	21	4	32	58	11	40	6	4	11	13	26	15	21	18	2	-	-	-	-	-	-	-	-
Time	140	3.21	-	-	15	21	4	30	40	-	17	-	-	-	5	8	-	-	-	-	-	-	-	-	-	-	-	-
Incentive	157	4.36	-	-	-	-	-	2	18	11	23	6	4	11	8	18	15	21	18	2	-	-	-	-	-	-	-	-
Engine-lathe operators (all timeworkers)	47	3.43	-	-	-	-	-	18	1	15	6	5	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators	303	3.68	-	-	4	10	24	50	50	11	30	36	7	7	48	13	2	2	2	2	-	1	-	4	-	-	-	-
Time	257	3.51	-	-	4	10	23	50	50	11	30	29	2	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive	46	4.65	-	-	-	-	1	-	-	-	7	5	7	-	13	2	2	2	2	2	-	1	-	4	-	-	-	-
Milling-machine operators	259	3.63	-	-	-	4	1	37	14	82	67	5	-	4	36	5	4	-	-	-	-	-	-	-	-	-	-	-
Time	225	3.56	-	-	-	4	1	37	14	79	57	-	-	32	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive	34	4.11	-	-	-	-	-	-	-	3	10	5	-	4	4	4	4	-	-	-	-	-	-	-	-	-	-	-
Screw-machine operators, automatic	34	4.14	-	-	-	-	-	-	-	8	6	7	10	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-
Time	25	3.95	-	-	-	-	-	-	-	8	6	7	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	164	4.03	-	-	-	-	-	11	16	4	26	4	16	11	76	-	-	-	-	-	-	-	-	-	-	-	-	-
Time	124	4.04	-	-	-	-	-	11	16	-	14	-	9	6	68	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 8. Occupational earnings: Chicago, Ill.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	and over
			\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	and over	
<b>Men—Continued</b>																													
Machine-tool operators, production, numerically controlled machines <sup>3</sup> -----	587	\$4.72	-	-	-	18	-	18	1	18	27	62	26	11	44	54	27	83	146	5	-	23	-	2	4	8	-	10	
Time -----	499	4.61	-	-	-	18	-	18	1	18	27	60	21	4	20	47	26	70	145	3	-	21	-	2	4	-	-		
Incentive -----	88	5.31	-	-	-	-	-	-	-	-	2	5	7	24	7	1	13	1	2	-	-	2	-	2	4	8	-		
Automatic-lathe operators (all timeworkers) -----	96	4.36	-	-	-	-	-	-	-	-	18	29	4	-	-	30	-	-	15	-	-	-	-	-	-	-	-		
Drill-press operators, radial <sup>4</sup> -----	36	5.15	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	8	23	1	-	-	-	-	-	-	-		
Machine-tool operators, toolroom (operate 1 type of machine) <sup>3</sup> -----	1,004	5.76	-	-	-	-	-	-	-	-	-	4	4	24	6	74	19	75	69	170	66	158	56	49	62	45	49	74	
Drill-press operators, radial -----	35	4.98	-	-	-	-	-	-	-	-	-	-	-	-	-	10	3	21	8	-	1	-	-	-	-	-	-		
Engine-lathe operators -----	186	5.60	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	26	8	72	11	31	4	17	5	4	-		
Grinding-machine operators -----	376	5.80	-	-	-	-	-	-	-	-	4	4	4	24	6	46	13	16	11	24	39	46	2	8	15	16	38		
Milling-machine operators -----	78	5.73	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	15	23	1	21	8	3	2	2	2	64		
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	928	5.37	-	-	-	-	5	-	-	-	8	6	70	46	33	54	88	93	196	84	83	89	50	6	8	9	-		
Time -----	896	5.36	-	-	-	-	5	-	-	-	8	6	70	46	33	54	76	93	196	84	63	89	50	6	8	9	-		
Machinists, maintenance (all timeworkers) -----	171	5.13	-	-	-	-	-	-	-	-	1	5	4	2	18	12	57	25	15	2	3	4	13	-	-	-	-		
Machinists, production -----	232	5.08	-	-	-	-	-	-	5	3	-	-	15	6	41	3	60	54	9	9	22	1	3	-	-	-	1		
Time -----	162	5.20	-	-	-	-	-	-	-	-	-	-	-	3	22	1	49	54	9	7	14	1	3	-	-	-	-		
Incentive -----	70	4.78	-	-	-	-	-	-	5	3	-	-	15	3	19	2	11	-	-	2	8	1	-	-	-	-	1		
Mechanics, maintenance -----	406	5.06	-	-	-	-	-	6	9	4	13	20	25	44	37	78	19	83	3	65	-	-	-	-	-	-	-		
Time -----	368	5.05	-	-	-	-	-	6	9	4	13	20	25	44	37	48	19	75	3	65	-	-	-	-	-	-	-		
Polishers and buffers, metal -----	207	5.05	-	-	-	-	1	-	7	5	38	12	1	5	1	9	8	7	42	26	31	8	-	-	-	5	1		
Time -----	121	4.90	-	-	-	-	-	2	5	37	11	-	3	-	-	-	-	5	-	18	31	8	-	-	-	1	-		
Incentive -----	86	5.27	-	-	-	-	1	-	5	-	1	1	2	1	9	8	2	42	8	-	-	-	-	-	-	-	5		
Polishing- and buffing-machine operators -----	174	3.73	-	-	5	30	10	28	17	6	5	53	-	6	3	1	-	1	1	-	-	6	-	-	-	-	2		
Time -----	148	3.66	-	-	5	30	6	24	17	2	1	48	-	6	3	-	-	-	-	-	6	-	-	-	-	-	-		
Incentive -----	26	4.14	-	-	-	4	4	-	4	4	5	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	2		
Punch-press operators, class A -----	243	4.43	-	-	-	-	6	5	13	18	56	16	21	34	42	26	1	3	1	-	1	-	1	-	-	-	-		
Time -----	171	4.38	-	-	-	-	5	11	11	46	15	14	24	31	13	1	-	-	-	-	-	-	-	-	-	-	-		
Incentive -----	72	4.55	-	-	-	-	6	-	7	10	1	7	10	11	13	-	3	1	-	-	1	-	1	-	-	-	-		
Punch-press operators, class B -----	567	3.80	-	-	15	23	69	34	51	87	70	47	32	36	13	18	8	5	20	15	12	1	-	-	-	-	-		
Time -----	202	3.35	-	-	15	17	47	11	1	32	30	20	19	7	-	3	-	-	-	-	-	-	-	-	-	-	-		
Incentive -----	365	4.05	-	-	6	22	23	50	55	40	27	13	29	13	15	8	5	20	15	12	1	-	-	-	-	-	-		
Set-up men, machine tools -----	581	4.71	-	-	-	-	1	-	12	4	17	44	51	130	106	68	19	90	26	9	-	-	-	-	4	-	-		
Time -----	445	4.74	-	-	-	-	-	-	11	3	3	25	37	98	96	45	15	86	14	8	-	-	-	-	4	-	-		
Incentive -----	136	4.58	-	-	-	-	1	-	1	1	14	19	14	32	10	23	4	4	12	1	-	-	-	-	-	-	-		
Tool and/or diemakers (jobbing) (all timeworkers) -----	1,569	6.39	-	-	-	-	-	-	-	-	-	-	-	-	15	-	55	16	77	18	48	144	245	328	279	199	145		
Tool and/or diemakers (other than jobbing) -----	594	5.57	-	-	-	-	-	-	-	-	-	-	-	3	22	17	85	51	40	59	92	59	52	100	6	5	3		
Time -----	570	5.58	-	-	-	-	-	-	-	-	-	-	-	3	22	17	85	51	38	43	86	59	52	100	6	5	3		
Tool clerks -----	324	4.27	-	-	-	-	5	10	20	19	39	59	41	22	63	32	6	-	-	-	8	-	-	-	-	-	-		
Time -----	274	4.29	-	-	-	-	5	10	20	15	23	55	33	4	63	32	6	-	-	-	8	-	-	-	-	-	-		
Welders, hand, class A -----	2,146	4.94	-	-	-	-	-	-	-	54	70	105	373	176	140	738	174	39	196	44	9	-	-	-	-	-	16	12	
Time -----	1,946	4.89	-	-	-	-	-	-	-	44	60	101	346	161	130	735	157	32	180	-	-	-	-	-	-	-	-		
Incentive -----	200	5.41	-	-	-	-	-	-	-	10	10	4	27	15	10	3	17	7	16	44	9	-	-	-	-	-	16		
Welders, hand, class B -----	873	4.64	-	-	-	4	14	10	39	90	108	87	78	72	62	99	18	10	15	49	49	-	-	10	20	9	30		
Time -----	283	4.18	-	-	-	-	10	2	39	22	34	60	31	-	9	70	2	-	-	4	-	-	-	-	-	-	-		
Incentive -----	590	4.86	-	-	-	-	4	4	8	68	74	27	47	72	53	29	16	10	15	49	45	-	-	10	20	9	30		

See footnotes at end of table.

**Table 8. Occupational earnings: Chicago, Ill.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly <sup>2</sup> earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over
<b>Men—Continued</b>																												
Welders, machine, class A -----	213	\$4.53	-	-	-	-	-	-	1	-	2	10	52	42	-	25	65	8	1	1	1	3	-	2	-	-	-	-
Time -----	175	4.52	-	-	-	-	-	-	1	-	2	1	47	35	-	16	65	8	-	-	-	-	-	-	-	-	-	-
Incentive -----	38	4.60	-	-	-	-	-	-	-	-	-	9	5	7	-	9	-	-	1	1	1	3	-	2	-	-	-	-
Welders, machine, class B -----	147	4.32	-	-	-	-	-	1	10	12	10	49	5	5	22	5	-	-	2	3	7	6	10	-	-	-	-	-
Time -----	31	4.00	-	-	-	-	-	1	1	3	1	16	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	116	4.40	-	-	-	-	-	-	9	9	9	33	5	5	13	5	-	-	2	3	7	6	10	-	-	-	-	-
<b>Women</b>																												
Assemblers, class A -----	146	3.62	-	-	-	-	5	42	3	9	25	31	1	27	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	127	3.67	-	-	-	-	-	32	3	9	25	31	1	24	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class B -----	564	3.28	-	15	45	55	30	69	90	172	41	25	2	4	1	1	5	7	1	-	-	-	-	-	-	-	-	-
Time -----	453	3.20	-	15	45	50	30	29	80	147	41	15	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-
Incentive -----	111	3.61	-	-	-	5	-	40	10	25	-	10	2	4	-	1	-	-	5	7	1	-	-	-	-	-	-	-
Assemblers, class C -----	1,941	2.80	16	235	335	647	299	188	65	78	13	15	6	7	13	6	8	6	4	-	-	-	-	-	-	-	-	-
Time -----	1,562	2.69	16	235	335	627	154	76	45	66	7	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	379	3.25	-	-	-	20	145	112	20	12	6	15	6	7	12	6	8	6	4	-	-	-	-	-	-	-	-	-
Inspectors, class A (all timeworkers) -----	28	4.30	-	-	-	-	-	-	-	-	1	7	3	5	8	-	4	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class B -----	115	3.92	-	-	-	-	-	23	1	9	9	29	15	2	12	2	11	1	-	1	-	-	-	-	-	-	-	-
Inspectors, class C -----	273	3.59	-	-	-	18	35	68	37	18	2	19	2	-	-	70	-	3	1	-	-	-	-	-	-	-	-	-
Time -----	234	3.64	-	-	-	18	35	33	37	18	2	19	2	-	-	70	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners (all timeworkers) -----	73	3.74	-	-	2	-	4	3	22	5	-	13	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>3</sup> -----	51	4.28	-	-	-	-	-	-	2	3	11	11	11	7	3	5	6	-	2	1	-	-	-	-	-	-	-	-
Time -----	34	4.21	-	-	-	-	-	-	1	1	11	11	-	1	3	6	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	17	4.43	-	-	-	-	-	-	-	1	2	-	-	7	2	2	-	-	2	1	-	-	-	-	-	-	-	-
Grinding-machine operators -----	33	4.21	-	-	-	-	-	-	1	-	9	10	7	2	1	-	-	-	2	1	-	-	-	-	-	-	-	-
Time -----	20	3.97	-	-	-	-	-	-	1	-	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	13	4.58	-	-	-	-	-	-	-	-	-	-	-	7	2	1	-	-	2	1	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B <sup>3</sup> -----	130	3.93	-	-	-	-	5	3	21	26	14	1	17	7	8	14	8	3	3	-	-	-	-	-	-	-	-	-
Time -----	103	3.72	-	-	-	-	5	3	21	26	14	1	14	4	3	11	1	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	27	4.71	-	-	-	-	-	-	-	-	-	-	3	3	5	3	7	3	3	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	25	3.78	-	-	-	-	5	1	7	4	-	-	-	1	-	-	4	2	1	-	-	-	-	-	-	-	-	-
Time -----	8	4.99	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4	2	1	-	-	-	-	-	-	-	-	-
Incentive -----	8	4.99	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4	2	1	-	-	-	-	-	-	-	-	-
Grinding-machine operators (all timeworkers) -----	37	3.90	-	-	-	-	-	2	3	1	14	-	10	4	-	2	1	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators -----	16	4.62	-	-	-	-	-	-	-	-	-	-	1	-	2	5	5	-	1	2	-	-	-	-	-	-	-	-
Incentive -----	11	4.68	-	-	-	-	-	-	-	-	-	-	-	2	3	3	-	1	2	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>3</sup> -----	749	3.10	16	112	15	64	41	232	68	120	9	24	12	4	12	3	3	10	4	-	-	-	-	-	-	-	-	-
Time -----	654	3.00	16	112	15	58	38	211	59	104	4	20	8	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	95	3.79	-	-	-	6	3	21	9	16	5	4	4	4	3	3	3	10	4	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	112	3.25	-	16	11	6	13	36	3	3	-	-	3	-	3	3	2	9	4	-	-	-	-	-	-	-	-	-
Time -----	60	2.65	-	16	11	6	10	15	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	52	3.96	-	-	-	-	3	21	1	3	-	-	3	-	3	3	2	9	4	-	-	-	-	-	-	-	-	-
Engine-lathe operators -----	49	3.33	-	-	-	10	-	14	5	4	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	40	3.31	-	-	-	10	-	14	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	40	3.31	-	-	-	10	-	14	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators <sup>4</sup> -----	106	3.39	-	-	-	14	5	-	26	52	-	8	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	21	3.16	-	-	4	2	-	-	-	7	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 8. Occupational earnings: Chicago, Ill.<sup>1</sup>—Continued**(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over	
			\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	and over	
<b>Women—Continued</b>																													
Polishing- and buffing-machine operators (all timeworkers) -----	13	\$4.31	-	-	-	-	-	-	-	-	2	-	4	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class B -----	188	3.15	-	-	16	42	22	45	15	22	5	-	10	6	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-
Time -----	118	2.90	-	-	16	39	12	31	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	70	3.56	-	-	-	3	10	14	5	12	5	-	10	6	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-
Tool clerks (all timeworkers) -----	37	3.97	-	-	-	-	-	-	-	8	12	-	8	-	-	8	1	-	-	-	-	-	-	-	-	-	-	-	-
Welders, machine, class B <sup>4</sup> -----	29	3.68	-	-	-	-	2	3	6	10	-	3	-	-	-	-	-	4	1	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Chicago Standard Metropolitan Statistical Area consists of Cook, Dupage, Kane, Lake, McHenry, and Will Counties.<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.<sup>3</sup> Includes data for operators of other machine tools in addition to those shown separately.<sup>4</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.<sup>5</sup> Workers were distributed as follows: 4 at \$7 to \$7.20; 2 at \$7.40 to \$7.60; 2 at \$7.80 to \$8; and 2 at \$8.20 to \$8.40.<sup>6</sup> Workers were distributed as follows: 56 at \$7 to \$7.20; and 8 at \$7.20 to \$7.40.

**Table 9. Occupational earnings: Cleveland, Ohio<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.20	\$2.20 and under \$2.40	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over	
<b>Men</b>																													
Assemblers, class A -----	1,321	\$4.75	-	-	-	-	-	-	-	17	37	45	118	128	127	229	215	210	17	22	91	57	5	3	-	-	-	-	-
Time -----	953	4.54	-	-	-	-	-	-	-	17	37	45	114	122	98	179	159	182	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	368	5.28	-	-	-	-	-	-	-	-	-	-	4	6	29	50	56	28	17	22	91	57	5	3	-	-	-	-	-
Assemblers, class B -----	943	4.29	-	-	16	5	15	19	23	62	141	123	61	34	365	41	17	10	8	2	1	-	-	-	-	-	-	-	-
Time -----	816	4.24	-	-	16	5	15	19	23	61	135	102	43	13	341	34	9	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	127	4.62	-	-	-	-	-	-	-	1	6	21	18	21	24	7	8	10	8	2	1	-	-	-	-	-	-	-	-
Assemblers, class C -----	326	3.52	4	-	4	30	19	102	53	29	31	11	23	10	2	2	2	2	1	3	-	-	-	-	-	-	-	-	-
Time -----	270	3.41	4	-	4	27	16	99	44	22	29	9	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	56	4.08	-	-	-	3	3	3	9	7	2	2	7	10	2	2	2	2	-	1	3	-	-	-	-	-	-	-	-
Carpenters, maintenance <sup>3</sup> -----	29	4.85	-	-	-	-	-	-	-	-	-	-	-	2	14	1	10	5	37	19	4	-	-	-	-	-	-	-	-
Electricians, maintenance -----	181	5.15	-	-	-	-	-	-	-	-	-	-	8	14	10	18	7	46	13	5	37	19	4	-	-	-	-	-	-
Time -----	164	5.11	-	-	-	-	-	-	-	-	-	-	8	14	10	17	3	46	13	5	37	7	4	-	-	-	-	-	-
Inspectors, class A -----	404	4.89	-	-	-	-	-	-	-	-	-	-	2	20	14	31	141	30	76	63	10	10	1	2	2	2	2	2	2
Time -----	378	4.86	-	-	-	-	-	-	-	-	-	-	2	20	14	26	141	29	76	59	1	4	-	2	2	2	2	2	2
Incentive -----	26	5.32	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	4	9	6	1	-	-	-	-	-	-	-
Inspectors, class B -----	245	4.52	-	-	-	-	-	-	-	-	-	3	24	31	7	105	-	35	16	2	7	4	-	-	2	1	1	1	1
Time -----	218	4.43	-	-	-	-	-	-	-	-	-	3	24	31	7	105	-	33	15	2	7	4	-	-	2	1	1	1	1
Incentive -----	27	5.25	-	-	-	-	-	-	-	5	-	-	11	-	2	4	12	1	4	-	3	2	1	-	-	-	-	-	-
Inspectors, class C -----	41	4.45	-	-	-	-	-	-	-	-	-	-	2	4	11	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	31	4.18	-	-	-	-	-	-	-	-	-	-	2	4	11	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners -----	373	3.51	22	6	-	20	37	46	33	43	41	29	12	32	27	4	20	1	-	-	-	-	-	-	-	-	-	-	-
Time -----	350	3.42	22	6	-	20	37	46	33	43	41	29	12	31	25	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	308	4.02	15	-	-	5	10	4	10	41	35	80	14	43	21	5	20	5	-	-	-	-	-	-	-	-	-	-	-
Time -----	253	4.03	15	-	-	5	10	4	10	41	33	76	8	41	20	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	55	3.97	4 <sup>15</sup>	-	-	-	-	-	-	-	-	2	4	6	2	1	-	20	5	-	-	-	-	-	-	-	-	-	-
<b>Machine-tool operators, production,</b>																													
class A <sup>5</sup> -----	3,315	4.81	-	-	-	-	-	-	3	6	35	98	460	287	494	387	589	294	115	60	103	179	113	48	17	9	11	7	7
Time -----	2,465	4.56	-	-	-	-	-	-	2	6	34	86	453	267	453	328	529	239	60	-	8	-	-	-	-	-	-	-	-
Incentive -----	850	5.54	-	-	-	-	-	-	1	-	1	12	7	20	41	59	60	55	55	60	95	179	113	48	17	9	11	7	7
Automatic-lathe operators <sup>3</sup> -----	112	4.82	-	-	-	-	-	-	-	-	-	-	15	11	6	3	43	19	7	-	5	1	-	-	-	-	-	-	-
Drill-press operators, radial -----	287	4.71	-	-	-	-	-	-	-	24	27	13	23	60	40	34	18	3	3	11	16	6	2	3	1	2	1	1	1
Time -----	220	4.44	-	-	-	-	-	-	-	24	25	12	21	59	37	27	15	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	67	5.60	-	-	-	-	-	-	-	-	-	2	1	2	1	3	7	3	3	3	3	11	16	6	2	3	1	2	1
Drill-press operators, single- or multiple-spindle -----	102	5.02	-	-	-	-	-	-	1	1	1	8	-	3	3	14	24	12	5	5	7	12	6	-	-	-	-	-	-
Time -----	36	4.54	-	-	-	-	-	-	1	1	7	-	3	-	4	17	3	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators -----	275	4.64	-	-	-	-	-	-	2	-	-	22	78	29	21	28	20	35	2	4	6	11	12	5	-	-	-	-	-
Time -----	220	4.39	-	-	-	-	-	-	2	-	-	22	78	28	19	28	18	25	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	55	5.64	-	-	-	-	-	-	-	-	-	-	-	1	2	-	2	10	2	4	6	11	12	5	-	-	-	-	-
Grinding-machine operators -----	697	4.97	-	-	-	-	-	-	2	8	72	39	87	93	146	64	20	18	27	41	38	27	8	2	2	2	3	3	3
Time -----	492	4.62	-	-	-	-	-	-	2	8	72	39	86	90	133	53	9	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	205	5.83	-	-	-	-	-	-	-	-	-	-	-	1	3	13	11	11	18	27	41	38	27	8	2	2	3	3	3
Milling-machine operators -----	390	4.86	-	-	-	-	-	-	1	8	31	36	86	71	34	29	10	19	20	18	21	4	2	-	-	-	-	-	-
Time -----	232	4.56	-	-	-	-	-	-	-	4	29	27	70	60	21	21	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	158	5.30	-	-	-	-	-	-	1	4	2	9	16	11	13	8	10	19	20	18	21	4	2	-	-	-	-	-	-
Screw-machine operators, automatic -----	189	4.90	-	-	-	-	-	-	-	3	1	8	41	1	8	11	8	20	9	-	3	14	-	-	-	-	-	-	-
Time -----	169	4.78	-	-	-	-	-	-	-	3	1	8	41	-	8	11	8	20	8	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine) -----	517	4.76	-	-	-	-	-	-	-	-	-	16	109	44	96	66	53	20	29	5	13	44	6	4	1	5	3	3	3
Time -----	365	4.47	-	-	-	-	-	-	-	-	-	12	105	38	84	56	46	12	12	-	-	-	-	-	-	-	-	-	-
Incentive -----	152	5.45	-	-	-	-	-	-	-	-	-	4	4	6	12	10	7	8	17	5	13	44	6	4	1	5	3	3	3

See footnotes at end of table.

**Table 9. Occupational earnings: Cleveland, Ohio<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			Under \$2.20	\$2.20 and under \$2.40	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over
<b>Men—Continued</b>																												
Machine-tool operators, production, class B <sup>3</sup> -----	1,129	\$4.17	-	-	5	-	33	21	61	67	155	136	164	91	158	108	27	14	23	19	16	13	9	2	3	1	-	3
Time-----	925	3.96	-	5	-	33	21	61	67	154	129	156	82	136	81	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive-----	204	5.11	-	-	-	-	-	-	-	1	7	8	9	22	27	27	14	23	19	16	13	9	2	3	1	-	3	
Drill-press operators, radial-----	64	3.81	-	-	-	5	-	10	22	-	8	6	5	-	1	2	-	3	-	-	-	-	-	-	-	-	-	
Time-----	51	3.58	-	-	-	5	-	10	22	-	3	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	131	4.74	-	-	-	5	-	-	7	2	1	6	13	26	19	12	7	8	9	4	2	5	1	3	1	-	-	
Time-----	41	4.07	-	-	-	5	-	-	7	2	-	-	10	14	3	-	-	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	73	4.37	-	-	-	-	3	8	8	-	12	14	14	1	1	3	2	2	4	-	-	1	-	-	-	-	-	
Time-----	58	4.07	-	-	-	-	3	8	8	-	11	14	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators-----	268	4.26	-	-	-	3	3	13	13	39	23	29	22	50	44	8	1	4	3	5	5	3	-	-	-	-	-	
Time-----	231	4.10	-	-	-	3	3	13	13	39	23	29	21	48	39	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	37	5.26	-	-	-	-	-	-	-	-	-	-	1	2	5	8	1	4	3	5	5	3	-	-	-	-	-	
Milling-machine operators-----	134	4.21	-	-	-	5	11	-	6	9	14	38	11	23	-	2	3	4	3	1	1	-	-	-	-	-	3	
Time-----	114	3.95	-	-	-	5	11	-	6	9	14	38	10	21	-	-	-	-	-	-	-	-	-	-	-	-	-	
Screw-machine operators, automatic <sup>3</sup> -----	34	4.17	-	-	-	-	-	-	1	2	-	13	15	-	1	-	2	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	185	4.02	-	-	-	15	2	20	-	25	24	31	3	42	19	3	-	-	-	1	-	-	-	-	-	-	-	
Time-----	170	3.97	-	-	-	15	2	20	-	25	24	30	-	36	18	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C <sup>2</sup> -----	542	3.12	-	27	97	109	29	86	54	35	22	8	-	71	-	3	-	-	-	-	-	-	-	1	-	-	-	
Time-----	530	3.10	-	27	97	109	29	86	49	35	22	8	-	68	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	12	4.19	-	-	-	-	-	-	5	-	-	-	-	3	-	3	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial, (all timeworkers)-----	10	2.98	-	-	5	-	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle (all timeworkers)-----	19	2.93	-	-	8	-	4	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators <sup>3</sup> -----	232	3.05	-	27	6	70	14	40	37	9	5	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	43	3.23	-	-	3	8	6	14	5	-	-	-	-	3	-	-	3	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators-----	36	2.91	-	-	3	8	6	14	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	36	2.91	-	-	3	8	6	14	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) (all timeworkers)-----	25	2.98	-	-	-	10	5	5	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, numerically controlled machines <sup>2</sup> -----	289	4.60	-	-	-	-	7	-	9	-	7	15	16	36	119	50	25	4	-	-	1	-	-	-	-	-	-	
Time-----	273	4.58	-	-	-	-	7	-	9	-	7	15	14	35	115	48	20	3	-	-	-	-	-	-	-	-	-	
Incentive-----	16	4.88	-	-	-	-	-	-	-	-	-	-	-	2	1	4	2	5	1	-	-	1	-	-	-	-	-	
Automatic-lathe operators <sup>3</sup> -----	15	4.70	-	-	-	-	-	-	-	-	-	-	4	1	5	4	1	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	62	4.80	-	-	-	-	-	-	-	-	-	1	2	-	41	2	13	3	-	-	-	-	-	-	-	-	-	
Time-----	54	4.80	-	-	-	-	-	-	-	-	-	1	-	-	39	2	9	3	-	-	-	-	-	-	-	-	-	
Milling-machine operators (all timeworkers)-----	74	4.30	-	-	-	-	7	-	4	-	7	11	7	4	31	3	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) <sup>5</sup> -----	701	4.74	-	-	-	-	9	-	3	25	7	79	108	44	100	99	93	51	24	6	9	17	21	6	-	-	-	
Time-----	626	4.61	-	-	-	-	9	-	3	25	7	79	108	44	96	95	89	40	23	6	2	-	-	-	-	-	-	
Incentive-----	18	4.66	-	-	-	-	-	-	-	-	-	-	6	4	1	5	-	1	-	-	1	-	-	-	-	-	-	
Drill-press operators, radial <sup>3</sup> -----	107	4.80	-	-	-	-	-	-	-	-	4	22	4	-	18	41	3	1	-	2	2	3	7	-	-	-	-	
Time-----	94	4.62	-	-	-	-	-	-	-	-	4	22	4	-	18	41	3	-	-	2	-	-	-	-	-	-	-	
Grinding-machine operators-----	233	4.82	-	-	-	-	-	-	-	-	-	32	31	15	32	24	51	9	18	3	2	5	6	5	-	-	-	
Time-----	213	4.71	-	-	-	-	-	-	-	-	-	32	31	15	31	23	50	8	18	3	2	-	-	-	-	-	-	
Milling-machine operators-----	72	4.97	-	-	-	-	-	-	-	-	4	10	2	22	5	6	7	4	1	1	8	2	-	-	-	-	-	
Time-----	55	4.72	-	-	-	-	-	-	-	-	4	10	2	21	5	4	4	4	1	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 9. Occupational earnings: Cleveland, Ohio<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			Under \$2.20	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over
<b>Men—Continued</b>																												
Machine-tool operators, toolroom (operate more than 1 type of machine)	201	\$4.71	-	-	-	-	-	-	-	-	8	8	27	10	53	13	18	25	13	14	-	4	1	6	-	1	-	-
Time	189	4.62	-	-	-	-	-	-	-	-	8	8	27	10	53	13	18	25	13	13	-	1	-	-	-	-	-	
Machinists, maintenance (all timeworkers)	28	5.13	-	-	-	-	-	-	-	-	-	-	-	-	6	5	-	-	7	10	-	-	-	-	-	-	-	
Mechanics, maintenance	198	4.96	-	-	-	-	-	-	-	-	10	-	16	33	12	6	11	32	4	15	33	26	-	-	-	-	-	
Time	179	4.91	-	-	-	-	-	-	-	-	10	-	16	33	11	5	8	30	4	15	31	16	-	-	-	-	-	
Polishers and buffers, metal	72	4.76	-	-	-	-	-	-	-	-	-	-	-	12	14	17	2	4	7	2	-	6	1	7	-	-	-	
Time	59	4.69	-	-	-	-	-	-	-	-	-	-	-	11	14	16	-	3	3	-	-	6	1	7	-	-	-	
Polishing and buffing-machine operators	113	4.17	-	-	-	-	-	-	8	-	25	44	24	-	-	1	1	1	-	6	2	1	-	-	-	-	-	
Time	87	4.00	-	-	-	-	-	-	8	-	20	34	24	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Incentive	26	4.72	-	-	-	-	-	-	-	-	5	10	-	-	-	-	1	1	-	6	2	1	-	-	-	-	-	
Punch-press operators, class A <sup>3</sup>	148	4.29	-	-	-	-	-	12	17	4	31	14	-	-	13	32	24	-	-	-	-	1	-	-	-	-	-	
Punch-press operators, class B	171	3.54	-	-	41	6	6	3	24	38	23	2	12	12	3	1	-	-	-	-	-	-	-	-	-	-	-	
Time	129	3.43	-	-	41	6	6	3	17	24	11	-	9	9	3	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive	42	3.87	-	-	-	-	-	-	7	14	12	2	3	3	-	1	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools (all timeworkers)	101	4.21	-	-	-	-	-	5	5	-	10	-	5	40	32	2	-	2	-	-	-	-	-	-	-	-	-	
Tool and/or diemakers (jobbing) (all timeworkers)	1,078	5.19	-	-	-	-	-	-	-	-	-	-	-	12	144	96	95	177	196	165	63	82	4	44	-	-	-	
Tool and/or diemakers (other than jobbing)	128	5.30	-	-	-	-	-	-	-	-	-	-	-	-	3	11	26	24	29	1	8	9	10	1	5	1	-	
Time	105	5.18	-	-	-	-	-	-	-	-	-	-	-	-	3	11	24	22	29	-	8	8	-	-	-	-	-	
Tool clerks	187	4.24	-	-	-	-	-	13	13	20	17	20	32	23	18	7	20	4	-	-	-	-	-	-	-	-	-	
Time	145	4.10	-	-	-	-	-	13	13	18	17	15	27	21	9	3	9	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class A	763	4.70	-	-	-	-	-	-	-	9	119	63	221	18	77	16	46	84	6	7	47	8	8	3	2	5	24	
Time	604	4.41	-	-	-	-	-	-	-	4	114	63	221	18	52	13	34	80	5	-	-	-	-	-	-	-	-	
Incentive	159	5.81	-	-	-	-	-	-	-	5	5	-	-	-	25	3	12	4	1	7	47	8	8	3	2	5	24	
Welders, hand, class B	257	3.85	-	-	-	-	-	11	7	48	39	39	78	10	18	6	-	1	-	-	-	-	-	-	-	-	-	
<b>Women</b>																												
Assemblers, class C (all timeworkers)	72	3.75	-	-	-	5	-	25	-	-	-	-	-	42	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class A (all timeworkers)	7	4.31	-	-	-	-	-	-	-	-	-	2	-	3	-	2	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class B (all timeworkers)	18	3.93	-	-	-	-	-	-	-	-	9	5	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class C	170	4.00	-	-	5	19	9	6	7	-	2	5	101	1	2	4	2	4	3	-	-	-	-	-	-	-	-	
Time	149	3.87	-	-	5	19	9	6	7	-	4	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners	41	3.04	7	13	4	-	2	-	2	5	9	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B (all timeworkers)	91	3.83	-	-	-	-	-	1	15	40	5	20	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C (all timeworkers) <sup>5</sup>	135	3.47	-	3	-	3	12	25	6	60	5	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators	18	3.06	-	-	-	5	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> The Cleveland Standard Metropolitan Statistical Area consists of Cuyahoga, Geauga, Lake, and Medina Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Workers were distributed as follows: 5 at \$1.60 to \$1.80; 5 at \$1.80 to \$2; and 5 at \$2 to \$2.20.

<sup>5</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>6</sup> Workers were distributed as follows: 8 at \$7 to \$7.20; 4 at \$7.20 to \$7.40; 5 at \$7.40 to \$7.60; 3 at \$7.60 to \$7.80; and 4 at \$7.80 and over.

<sup>7</sup> Workers were distributed as follows: 5 at \$1.80 to \$2; and 8 at \$2 to \$2.20.

**Table 10. Occupational earnings: Dallas, Tex.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, January 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			\$1.80 and under	\$1.90	\$2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20 and over	
			\$1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	over	
<b>Men</b>																													
Assemblers, class A	197	\$ 4.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	18	22	9	10	27	89	16	-	-	-	-	-
Assemblers, class B	402	3.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C	372	2.38	20	25	20	-	-	10	39	65	9	15	11	17	30	46	47	2	17	60	20	14	-	-	-	-	-	-	-
Electricians, maintenance	27	4.19	-	-	-	7	35	63	81	40	42	10	14	10	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class A	131	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2	8	2	-	-	-	
Inspectors, class B	191	3.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	7	19	55	23	14	2	-	
Inspectors, class C	33	3.11	-	1	-	-	-	-	-	3	-	48	22	19	7	7	16	6	10	30	7	7	12	-	-	-	-	-	-
Janitors, porters, and cleaners	235	2.64	-	3	4	8	16	33	22	27	37	13	11	27	7	5	18	4	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling	158	2.76	3	1	13	4	13	3	6	15	16	9	11	3	3	40	2	-	12	4	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>4</sup>	767	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	50	33	150	307	151	16	48	6	-
Automatic-lathe operators	67	3.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10	19	25	7	1	1	-	-	-	-
Drill-press operators, radial	41	3.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	4	15	5	6	-	-	-	-	-
Engine-lathe operators	125	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	11	54	31	4	21	-	-	
Grinding-machine operators	52	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	32	-	8	-	-	
Milling-machine operators	99	4.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	23	48	16	-	-	
Screw-machine operators, automatic	49	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	5	34	4	-	-	
Turrent-lathe operators, hand (including hand screw machine)	184	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	17	8	33	87	18	6	14	-	
Machine-tool operators, production, class B <sup>4</sup>	526	3.29	-	-	-	16	8	4	7	-	2	27	21	47	55	89	45	83	72	27	23	-	-	-	-	-	-	-	-
Automatic-lathe operators	97	3.06	-	-	-	8	-	-	-	-	-	17	3	12	18	23	11	-	5	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial	24	3.15	-	-	-	-	-	-	4	-	-	-	2	3	4	2	-	-	7	2	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle	46	3.34	-	-	-	-	-	-	-	-	-	-	-	1	3	11	8	4	9	10	-	-	-	-	-	-	-	-	-
Engine-lathe operators	41	3.22	-	-	-	-	-	-	-	-	-	-	4	-	8	5	8	4	8	4	-	-	-	-	-	-	-	-	-
Grinding-machine operators	22	3.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	17	-	3	-	-	-	-	-	-
Milling-machine operators	86	3.33	-	-	-	4	8	-	-	-	-	-	-	-	14	3	5	9	13	15	1	14	-	-	-	-	-	-	-
Screw-machine operators	21	2.97	-	-	-	4	-	4	-	-	-	-	-	2	-	2	6	1	-	-	-	-	-	-	-	-	-	-	-
Turrent-lathe operators, hand (including hand screw machine)	93	3.34	-	-	-	-	-	-	3	-	2	4	4	7	9	16	13	10	17	5	3	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>4</sup>	371	2.72	-	19	11	6	15	13	3	17	40	97	39	46	22	30	5	1	4	1	2	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle	29	2.34	-	8	7	1	-	2	-	3	-	6	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
Milling-machine operators	23	2.84	-	-	-	-	-	-	-	3	10	3	3	1	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Turrent-lathe operators, hand (including hand screw machine)	39	2.57	-	8	2	3	-	1	1	6	-	9	-	5	-	-	-	1	1	-	2	-	-	-	-	-	-	-	-
Machine-tool operators, numerically controlled machines <sup>5</sup>	215	3.99	-	-	-	-	4	-	4	-	4	-	-	2	2	3	2	7	37	20	61	16	16	37	-	-	-	-	-
Drill-press operators, single- or multiple-spindle	22	3.16	-	-	-	-	4	-	4	-	4	-	-	-	-	-	-	-	3	-	7	-	-	-	-	-	-	-	
Milling-machine operators	28	4.05	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	3	-	3	6	3	1	8	-	-	-	-

See footnotes at end of table.



**Table 10. Occupational earnings: Dallas, Tex.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, January 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.80 and under	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over	
<b>Men—Continued</b>																												
Machine-tool operators, toolroom (operate more than 1 type of machine).....	182	\$4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	15	14	24	75	29	9	8	2	-
Machinists, production.....	36	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	4	-	76	14	-	1	1	-
Mechanics, maintenance.....	87	4.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	9	6	14	11	23	3	1	4	-
Punch-press operators, class A.....	155	3.44	-	-	-	-	-	-	-	3	11	6	6	14	14	3	2	12	38	46	-	-	-	-	-	-	-	-
Punch-press operators, class B.....	179	2.56	-	-	12	27	19	18	43	5	5	5	16	20	-	6	3	-	-	-	-	-	-	-	-	-	-	-
Set-up men, machine tools.....	23	3.27	-	-	-	4	-	4	-	-	-	-	-	3	3	-	-	-	-	-	1	3	5	-	-	-	-	-
Tool and/or die makers (other than jobbing).....	78	4.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	5	5	4	4	15	18	15	9	
Tool clerks.....	50	3.46	-	-	-	-	-	-	-	-	-	2	1	3	6	2	6	6	21	3	-	-	-	-	-	-	-	-
Welders, hand, class A.....	296	3.90	-	-	-	-	-	-	-	-	3	6	3	3	8	28	52	19	15	52	61	42	4	-	-	-	-	-
Welders, hand, class B.....	242	3.22	-	-	-	-	-	-	10	21	10	2	41	30	56	22	20	1	28	1	-	-	-	-	-	-	-	-
Welders, machine, class B.....	85	2.58	-	-	30	-	20	3	3	4	4	4	-	-	8	-	-	6	3	-	-	-	-	-	-	-	-	-
<b>Women</b>																												
Assemblers, class B.....	140	2.68	-	-	-	-	-	30	61	10	2	6	2	7	10	7	2	-	3	-	-	-	-	-	-	-	-	-
Assemblers, class C.....	477	2.14	136	32	80	2	32	75	68	14	33	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class B.....	16	3.27	-	-	-	-	-	-	-	-	-	-	-	3	2	4	3	4	-	-	-	-	-	-	-	-	-	-
Inspectors, class C.....	45	2.88	-	-	-	-	-	2	-	5	6	16	4	4	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners.....	13	2.60	-	-	4	-	-	-	1	-	2	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Dallas Standard Metropolitan Statistical Area consists of Collin, Denton, Ellis, Kaufman, and Rockwall Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. All workers were paid on a time basis.

<sup>3</sup> Workers were distributed as follows: 1 at \$5.20 to \$5.40; and 2 at \$5.40 to \$5.60.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>5</sup> Workers were distributed as follows: 6 at \$5.20 to \$5.40; and 3 at \$5.40 to \$5.60.

**Table 11. Occupational earnings: Denver, Colo.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																								
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80
			2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
<b>Men</b>																											
Assemblers, class A-----	226	\$4.31	-	-	-	-	-	4	3	7	4	17	24	74	50	37	5	1	-	-	-	-	-	-	-	-	-
Assemblers, class B-----	219	3.50	-	-	-	-	40	50	23	19	22	6	40	11	4	1	-	-	-	-	-	-	-	3	-	-	-
Assemblers, class C-----	41	2.96	1	-	-	3	23	8	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance-----	14	4.70	-	-	-	-	-	-	-	-	-	-	-	3	2	4	-	5	-	-	-	-	-	-	-	-	-
Inspectors, class A-----	79	4.44	-	-	-	-	-	-	-	1	6	8	5	50	9	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class B-----	64	3.88	-	-	-	-	5	2	16	7	7	-	12	15	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class C-----	7	3.45	-	-	-	1	1	1	1	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners-----	57	3.03	-	-	2	4	19	20	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling-----	76	2.95	10	-	6	5	28	3	3	18	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>3</sup> -----																											
Automatic-lathe operators-----	562	4.72	-	-	-	-	-	-	-	1	6	10	40	96	140	104	28	51	2	2	44	21	17	-	-	-	-
Drill-press operators, radial-----	41	5.23	-	-	-	-	-	-	-	-	-	-	-	2	5	3	12	-	-	12	7	-	-	-	-	-	-
Engine-lathe operators-----	16	5.27	-	-	-	-	-	-	-	-	-	-	-	2	3	-	1	-	-	10	-	-	-	-	-	-	-
Grinding-machine operators-----	76	4.68	-	-	-	-	-	-	-	-	-	-	-	14	26	16	1	15	1	-	3	-	-	-	-	-	-
Milling-machine operators-----	60	5.07	-	-	-	-	-	-	-	-	-	-	-	4	5	21	9	4	1	-	-	16	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	77	4.91	-	-	-	-	-	-	-	-	2	-	5	20	17	4	13	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B <sup>3</sup> -----																											
Drill-press operators, radial-----	289	4.02	-	-	-	-	11	25	38	29	26	53	50	38	4	-	1	-	7	3	4	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	22	4.26	-	-	-	-	-	-	2	2	1	13	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
Engine-lathe operators-----	26	3.71	-	-	-	-	-	1	13	10	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators-----	33	4.35	-	-	-	-	-	-	-	1	-	8	6	15	3	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators-----	38	4.22	-	-	-	-	-	-	-	7	3	20	-	4	-	-	-	-	-	-	4	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	22	4.34	-	-	-	-	-	-	-	4	6	-	-	9	-	-	-	-	-	3	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>3</sup> -----																											
Drill-press operators, single- or multiple-spindle-----	97	3.18	-	2	6	25	31	12	4	10	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled machines-----																											
Machine-tool operators, toolroom (operate 1 type of machine):-----	33	4.68	-	-	-	-	-	-	-	1	-	4	6	3	4	9	2	2	2	-	-	-	-	-	-	-	-
Grinding-machine operators-----	7	4.80	-	-	-	-	-	-	-	-	-	-	1	-	2	2	2	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)-----	61	4.31	-	-	-	-	-	-	-	2	2	23	5	16	12	1	-	-	-	-	-	-	-	-	-	-	-
Machinists, maintenance-----	18	4.84	-	-	-	-	-	-	-	-	1	2	-	2	-	3	10	-	-	-	-	-	-	-	-	-	-
Mechanics, maintenance-----	34	4.34	-	-	-	-	-	2	-	-	-	1	17	10	1	3	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class A-----	32	3.75	-	-	-	8	-	-	2	4	1	14	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class B-----	55	3.30	-	-	-	3	14	14	22	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Set-up men, machine tools-----	8	3.91	-	-	-	-	-	3	-	-	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Tool and/or die makers (other than jobbing)-----	122	5.68	-	-	-	-	-	-	-	-	-	-	-	4	8	11	4	3	14	17	33	7	11	3	3	4	
Tool clerks-----	42	3.94	-	-	-	-	-	1	4	10	4	14	5	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A-----	145	4.56	-	-	-	-	-	-	-	-	14	3	73	15	18	4	4	-	-	-	9	-	5	-	-	-	-
Welders, hand, class B-----	40	3.75	-	-	-	-	5	1	6	10	7	8	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 11. Occupational earnings: Denver, Colo.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup> and under	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																								
			\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80
			\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00
<u>Women</u>																											
Assemblers, class B-----	118	\$3.49	-	-	-	10	26	18	6	5	1	14	19	15	4	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C-----	470	2.53	60	117	75	139	35	12	20	9	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class C: Drill-press operators, single- or multiple-spindle-----	10	2.85	-	-	2	2	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

<sup>1</sup> The Denver Standard Metropolitan Statistical Area consists of Adams, Arapahoe, Boulder, Denver, and Jefferson Counties.  
<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

Approximately 97 percent of the workers studied were paid on a time basis.  
<sup>3</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 12. Occupational earnings: Detroit, Mich.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup> and under	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			\$2.00 and under 2.20	2.20-2.40	2.40-2.60	2.60-2.80	2.80-3.00	3.00-3.20	3.20-3.40	3.40-3.60	3.60-3.80	3.80-4.00	4.00-4.20	4.20-4.40	4.40-4.60	4.60-4.80	4.80-5.00	5.00-5.20	5.20-5.40	5.40-5.60	5.60-5.80	5.80-6.00	6.00-6.20	6.20-6.40	6.40-6.60	6.60-7.00	7.00-7.40	7.40 and over	
<b>Men</b>																													
Assemblers, class A -----	929	\$5.46	-	-	-	-	-	-	-	-	-	-	-	36	16	248	87	1	70	106	-	70	26	31	220	18	-	-	
Assemblers, class B -----	1,835	4.60	-	-	-	-	-	-	-	-	102	54	36	9	12	540	54	935	87	6	-	-	-	-	-	-	-	-	
Time -----	1,826	4.59	-	-	-	-	-	-	-	-	102	54	36	9	12	540	54	926	87	6	-	-	-	-	-	-	-	-	
Assemblers, class C -----	678	4.42	-	-	-	-	-	11	-	-	-	-	-	110	-	137	18	28	374	-	-	-	-	-	-	-	-	-	
Carpenters, maintenance -----	27	6.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	-	-	-	-	-	-	-	
Electricians, maintenance -----	164	5.81	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	10	2	33	32	9	71	4	-	-	-	-	
Inspectors, class A -----	369	5.13	31	-	-	-	-	-	-	-	-	-	-	6	17	32	63	38	91	31	20	13	10	3	11	33	-	-	
Inspectors, class B -----	487	5.40	-	-	-	-	-	5	-	-	-	-	14	7	14	34	33	65	-	9	-	-	-	-	-	-	-	-	
Inspectors, class C -----	80	4.51	-	-	-	-	-	-	1	8	-	-	12	9	-	7	1	34	-	2	1	5	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	821	3.94	24	-	32	11	9	55	62	67	49	58	41	91	279	24	3	1	-	-	-	10	-	-	5	-	-	-	
Laborers, material handling -----	507	4.17	-	-	-	-	-	-	27	17	18	90	156	34	83	17	45	20	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, class A<sup>4</sup></b>																													
Time -----	4,243	5.37	-	-	-	-	-	-	-	-	-	1	19	84	109	239	435	515	975	328	175	212	94	129	188	559	166	-	15
Automatic-lathe operators -----	53	5.38	-	-	-	-	-	-	-	-	-	-	10	83	104	231	429	502	962	320	167	205	93	129	188	558	166	-	15
Time -----	152	5.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	-	2	-	-	-	-	6	10	-	-	
Drill-press operators, radial -----	155	4.99	-	-	-	-	-	-	-	-	-	-	10	-	-	60	24	-	17	4	9	-	9	18	4	-	-	-	
Time -----	155	4.99	-	-	-	-	-	-	-	-	-	-	10	-	-	60	24	-	17	4	9	-	9	18	4	-	-	-	
Drill-press operators, single- or multiple-spindle -----	42	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	16	14	12	-	-	-	-	-	-	-	-	-	-	
Time -----	335	5.39	-	-	-	-	-	-	-	-	-	-	5	2	-	-	16	14	12	-	-	-	-	-	-	-	-	-	
Engine-lathe operators -----	335	5.39	-	-	-	-	-	-	-	-	-	-	5	2	-	-	16	14	12	-	-	-	-	-	-	-	-	-	
Grinding-machine operators -----	1,985	5.37	-	-	-	-	-	-	-	-	4	70	56	77	128	202	612	146	71	113	27	1	21	340	117	-	-	-	
Time -----	1,947	5.38	-	-	-	-	-	-	-	-	-	-	70	54	72	126	199	607	142	64	108	26	1	21	340	117	-	-	
Milling-machine operators -----	488	5.46	-	-	-	-	-	-	-	1	3	1	5	29	22	93	85	50	17	21	21	30	42	63	-	-	-	5	
Time -----	458	5.50	-	-	-	-	-	-	-	-	-	-	4	28	19	85	81	46	16	19	21	30	42	62	-	-	-	5	
Screw-machine operators, automatic -----	154	5.04	-	-	-	-	-	-	-	-	2	-	-	9	4	4	19	104	-	-	-	2	10	-	-	-	-	-	
Time -----	147	5.06	-	-	-	-	-	-	-	-	-	-	-	9	3	3	19	101	-	-	-	2	10	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	328	5.16	-	-	-	-	-	-	-	-	-	-	-	29	26	79	87	16	9	14	12	10	15	21	-	-	-	10	
<b>Machine-tool operators, production, class B<sup>4</sup></b>																													
Time -----	3,426	4.57	-	-	-	-	110	-	10	105	274	146	189	486	563	1340	158	45	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators -----	3,372	4.56	-	-	-	-	110	-	10	105	274	146	189	486	563	1286	158	45	-	-	-	-	-	-	-	-	-	-	
Time -----	97	4.66	-	-	-	-	-	-	-	-	-	14	3	4	4	72	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators -----	991	4.61	-	-	-	-	20	-	10	49	30	61	43	117	148	462	51	-	-	-	-	-	-	-	-	-	-	-	
Time -----	983	4.61	-	-	-	-	20	-	10	49	30	61	43	117	148	454	51	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators -----	403	4.64	-	-	-	-	-	-	-	19	31	-	29	81	62	124	57	-	-	-	-	-	-	-	-	-	-	-	
Time -----	393	4.63	-	-	-	-	-	-	-	19	31	-	29	81	62	114	57	-	-	-	-	-	-	-	-	-	-	-	
Screw-machine operators, automatic -----	91	4.77	-	-	-	-	-	-	-	10	10	-	-	9	-	12	50	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	252	4.36	-	-	-	-	-	-	-	-	100	-	7	50	9	86	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	233	4.32	-	-	-	-	-	-	-	-	100	-	7	50	9	67	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, class C<sup>4</sup></b>																													
Automatic-lathe operators -----	1,142	3.78	-	-	10	40	55	92	408	40	138	99	75	15	45	85	40	-	-	-	-	-	-	-	-	-	-	-	
Time -----	55	4.11	-	-	-	-	-	-	30	-	-	-	-	-	18	7	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle -----	223	3.70	-	-	-	-	-	-	130	11	53	-	-	3	-	26	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	88	3.92	-	-	-	-	-	-	40	-	-	-	-	46	-	2	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators -----	384	3.61	-	-	10	40	55	54	65	10	34	57	26	-	9	24	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	129	4.05	-	-	-	-	-	5	50	-	1	28	3	3	18	21	-	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators -----	129	4.05	-	-	-	-	-	5	50	-	1	28	3	3	18	21	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	74	3.74	-	-	-	-	-	-	42	9	-	14	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	74	3.74	-	-	-	-	-	-	42	9	-	14	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, numerically controlled machines<sup>4</sup></b>																													
Time -----	194	5.57	-	-	-	-	-	-	-	-	-	-	15	-	6	8	-	78	10	9	7	-	6	28	12	5	-	10	

See footnotes at end of table.

**Table 12. Occupational earnings: Detroit, Mich.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$7.00	\$7.40	and over	
<b>Men—Continued</b>																														
Machine-tool operators, production, numerically controlled machines <sup>4</sup> —Continued																														
Turret-lathe operators, hand (including hand screw machine) -----	9	\$5.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	4	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) <sup>4</sup> -----	3,470	5.76	-	-	-	-	-	-	-	-	-	-	94	60	63	64	78	305	231	270	446	410	671	338	139	259	37	5		
Drill-press operators, radial -----	166	5.68	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	10	29	38	52	21	-	-	-	-	-	-		
Engine-lathe operators -----	397	5.54	-	-	-	-	-	-	-	-	-	4	4	8	14	20	71	10	67	59	56	77	7	-	-	-	-	-		
Grinding-machine operators -----	1,025	5.67	-	-	-	-	-	-	-	-	-	28	32	43	28	18	90	10	95	174	108	243	61	56	39	-	-	-		
Milling-machine operators -----	922	5.78	-	-	-	-	-	-	-	-	-	8	12	12	22	-	107	148	35	80	102	192	74	16	114	-	-	-		
Machine-tool operators, toolroom (operate more than 1 type of machine)	797	5.53	-	-	-	-	-	-	-	-	-	-	-	4	10	31	176	24	215	123	39	150	21	-	-	-	-	-		
Machinists, maintenance -----	251	5.39	-	-	-	-	-	-	-	-	-	-	12	-	8	20	92	-	6	44	5	57	7	-	-	-	-	-		
Machinists, production -----	175	5.55	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	20	10	90	3	12	12	4	-	-	-	-		
Mechanics, maintenance -----	282	5.77	-	-	-	-	-	-	-	-	-	-	-	4	8	12	11	29	28	52	43	40	32	18	-	-	-	-		
Polishers and buffers, metal -----	31	4.71	-	-	-	-	-	-	-	-	3	-	4	-	5	-	19	-	-	-	-	-	-	-	-	-	-	-		
Time -----	15	4.36	-	-	-	-	-	-	-	-	3	-	4	-	5	-	3	-	-	-	-	-	-	-	-	-	-	-		
Punch-press operators, class A -----	27	5.76	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	9	-	-	-	-	3	12	-	-	-	-		
Punch-press operators, class B -----	276	3.68	-	23	-	46	-	-	-	15	10	118	7	4	19	-	34	-	-	-	-	-	-	-	-	-	-	-		
Time -----	254	3.57	-	23	-	46	-	-	-	15	10	118	7	4	19	-	12	-	-	-	-	-	-	-	-	-	-	-		
Set-up men, machine tools -----	520	4.93	-	-	-	-	-	-	-	-	-	-	17	17	40	21	99	307	9	-	-	10	-	-	-	-	-	-		
Tool and/or die makers (jobbing) -----	2,350	5.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	179	287	291	227	619	537	122	10	-	-		
Tool and/or die makers (other than jobbing) -----	262	5.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	17	23	25	68	2	106	6	-	-	-		
Tool clerks -----	187	4.61	-	-	-	-	-	-	-	5	-	4	11	24	32	15	92	3	1	-	-	-	-	-	-	-	-	-		
Welders, hand, class A -----	541	5.03	-	-	-	-	-	-	-	-	-	-	42	-	-	43	178	171	10	29	4	3	39	22	-	-	-	-		
Welders, hand, class B -----	497	4.60	-	-	-	-	-	-	-	27	72	9	28	156	30	1	165	9	-	-	-	-	-	-	-	-	-	-		
Welders, machine, class B -----	44	4.35	-	-	-	-	-	-	-	-	-	22	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-		
<b>Women</b>																														
Assemblers, class B -----	226	4.05	-	-	-	-	-	-	-	-	-	174	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-		
Assemblers, class C -----	1,001	4.11	-	-	-	-	-	27	3	271	20	36	348	-	-	296	-	-	-	-	-	-	-	-	-	-	-	-		
Inspectors, class A -----	11	4.87	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	5	-	-	-	-	-	-	-	-	-	-		
Inspectors, class B -----	103	4.13	-	-	-	-	-	-	-	50	-	-	10	-	20	9	8	-	-	-	-	6	-	-	-	-	-	-		
Inspectors, class C -----	213	3.97	-	-	-	-	4	1	63	21	10	74	6	12	-	22	-	-	-	-	-	-	-	-	-	-	-	-		
Janitors, porters, and cleaners -----	57	3.13	24	-	-	-	-	-	-	3	14	5	3	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class B <sup>4</sup> -----	381	4.15	-	-	-	-	-	110	-	-	-	70	-	-	4	55	136	6	-	-	-	-	-	-	-	-	-	-		
Drill-press operators, single- or multiple-spindle -----	66	4.40	-	-	-	-	-	-	-	-	-	25	-	-	-	40	1	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class C <sup>4</sup> -----	425	3.88	10	-	10	-	120	-	5	4	41	-	32	32	32	24	114	-	1	-	-	-	-	-	-	-	-	-		
Time -----	400	3.83	10	-	10	-	120	-	5	4	41	-	32	32	15	24	107	-	-	-	-	-	-	-	-	-	-	-		
Grinding-machine operators -----	267	3.71	-	-	10	-	120	-	-	-	-	-	20	24	12	6	75	-	-	-	-	-	-	-	-	-	-	-		
Punch-press operators, class B-----	614	2.60	38	92	276	23	140	5	-	-	-	15	22	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-		
Tool clerks -----	17	4.00	-	-	-	-	-	-	-	-	10	-	3	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-		

<sup>1</sup> The Detroit Standard Metropolitan Statistical Area consists of Macomb, Oakland, and Wayne Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Virtually all workers were paid on a time basis.

<sup>3</sup> Workers at \$1.80 to \$2.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 13. Occupational earnings: Hartford—New Britain—Bristol, Conn.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																											
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.40	\$5.80	\$6.20		
			\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.40	\$5.80	\$6.20			
<b>Men</b>																														
Assemblers, class A-----	361	\$ 4.40	-	-	-	-	-	-	-	-	-	1	4	-	10	10	29	9	73	87	115	16	4	3	-	-	-	-	-	
Time-----	235	4.40	-	-	-	-	-	-	-	-	-	-	-	-	4	5	17	3	53	63	86	4	-	-	-	-	-	-	-	
Incentive-----	126	4.39	-	-	-	-	-	-	-	-	1	4	-	6	5	12	6	20	24	29	12	4	3	-	-	-	-	-	-	
Assemblers, class B-----	175	3.95	-	-	-	-	-	-	-	8	15	12	1	2	1	19	13	36	50	6	4	7	-	1	-	-	-	-	-	
Time-----	98	3.90	-	-	-	-	-	-	-	2	11	11	1	1	-	4	3	24	41	-	-	-	-	-	-	-	-	-	-	
Incentive-----	77	4.02	-	-	-	-	-	-	-	6	4	1	-	1	1	15	10	12	9	6	4	7	-	1	-	-	-	-	-	
Assemblers, class C-----	282	4.08	-	-	-	-	-	7	-	3	4	4	16	42	12	17	6	8	6	3	7	139	2	4	1	1	-	-	-	
Time-----	245	4.03	-	-	-	-	-	7	-	3	3	4	16	41	12	17	4	4	-	-	-	134	-	-	-	-	-	-	-	
Electricians, maintenance <sup>3</sup> -----	121	5.04	-	-	-	-	-	-	-	-	-	-	-	-	-	6	3	8	9	40	2	3	6	-	44	-	-	-	-	
Inspectors, class A (all timeworkers)-----	136	4.21	-	-	-	-	-	-	-	-	-	-	-	-	3	3	2	52	46	21	7	-	2	-	-	-	-	-	-	
Inspectors, class B (all timeworkers)-----	61	3.95	-	-	-	-	-	-	-	-	-	-	4	1	5	19	9	4	6	13	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)-----	156	3.35	12	-	-	-	5	4	11	5	15	2	15	7	5	40	1	3	2	-	29	-	-	-	-	-	-	-	-	
Laborers, material handling <sup>5</sup> -----	100	3.75	-	-	-	-	-	-	-	8	5	3	9	23	-	16	2	1	-	-	33	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>4</sup> -----	1,586	4.21	-	-	-	-	26	-	-	-	13	17	6	29	18	61	107	189	202	314	250	184	124	45	1	-	-	-	-	-
Time-----	1,300	4.22	-	-	-	-	26	-	-	-	13	17	5	25	17	61	77	125	153	235	217	169	118	42	-	-	-	-	-	-
Automatic-lathe operators-----	22	4.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	6	6	-	-	5	-	1	-	-	-	-	
Time-----	18	4.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	1	6	6	-	-	5	-	-	-	-	-	-	
Drill-press operators, radial-----	76	4.09	-	-	-	-	-	-	-	-	-	4	-	-	-	-	7	23	12	13	6	3	-	-	-	-	-	-	-	
Time-----	40	4.04	-	-	-	-	-	-	-	-	4	-	-	-	-	3	7	8	9	3	6	8	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle <sup>5</sup> -----	14	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	7	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	213	4.28	-	-	-	-	-	-	-	-	-	-	4	12	4	9	43	15	30	42	17	19	18	-	-	-	-	-	-	
Time-----	189	4.31	-	-	-	-	-	-	-	-	-	-	4	12	4	9	30	5	29	42	17	19	18	-	-	-	-	-	-	
Grinding-machine operators-----	477	4.19	-	-	-	-	26	-	-	-	13	-	4	-	-	31	65	55	120	49	54	59	1	-	-	-	-	-	-	-
Time-----	427	4.19	-	-	-	-	26	-	-	-	13	-	4	-	-	25	51	50	108	41	51	58	-	-	-	-	-	-	-	
Milling-machine operators-----	241	4.12	-	-	-	-	-	-	-	-	-	13	5	5	9	12	23	33	53	61	18	4	-	-	-	-	-	-	-	-
Time-----	181	4.12	-	-	-	-	-	-	-	-	13	5	5	4	9	5	14	18	30	56	18	4	-	-	-	-	-	-	-	
Screw-machine operators, automatic <sup>5</sup> -----	12	4.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	4	1	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	187	4.37	-	-	-	-	-	-	-	-	-	-	4	-	-	18	10	29	31	33	38	-	24	-	-	-	-	-	-	
Time-----	125	4.53	-	-	-	-	-	-	-	-	-	-	-	-	7	-	15	18	25	36	-	24	-	-	-	-	-	-	-	
Machine-tool operators, production, class B <sup>4</sup> -----	1,472	4.33	13	-	13	-	-	-	-	-	25	5	19	28	22	39	110	114	156	150	120	427	51	168	12	-	-	-	-	-
Time-----	849	4.45	13	-	13	-	-	-	-	-	6	4	15	11	15	53	49	60	26	28	395	28	133	-	-	-	-	-	-	-
Drill-press operators, radial <sup>5</sup> -----	21	3.87	-	-	-	-	-	-	-	-	-	3	-	-	2	5	4	2	-	4	1	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	39	3.89	-	-	-	-	-	-	-	-	5	-	-	1	2	10	6	4	4	5	2	-	-	-	-	-	-	-	-	
Incentive-----	30	4.04	-	-	-	-	-	-	-	-	-	-	-	1	2	8	4	4	4	5	2	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	75	4.15	13	-	-	-	-	-	-	-	-	-	-	-	10	4	-	-	-	20	28	-	-	-	-	-	-	-	-	
Incentive-----	14	3.77	-	-	-	-	-	-	-	-	-	-	-	-	10	4	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators-----	874	4.34	-	-	-	-	-	-	-	-	18	2	6	24	18	22	68	63	84	75	74	370	17	28	5	-	-	-	-	-
Time-----	564	4.41	-	-	-	-	-	-	-	-	1	-	2	13	11	13	43	32	49	21	26	353	-	-	-	-	-	-	-	-
Milling-machine operators-----	53	3.57	-	-	13	-	-	-	-	-	-	1	2	2	-	5	2	7	10	5	-	1	-	-	-	-	-	-	-	
Time-----	28	3.15	-	-	13	-	-	-	-	-	-	1	1	1	-	2	-	3	6	2	-	-	-	-	-	-	-	-	-	
Incentive-----	25	4.03	-	-	-	-	-	-	-	-	1	1	1	-	3	2	4	4	3	-	5	1	-	-	-	-	-	-	-	
Screw-machine operators, automatic <sup>5</sup> -----	318	4.64	-	-	-	-	-	-	-	-	1	-	6	1	3	1	7	15	40	56	31	5	5	140	7	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	43	3.93	-	-	-	-	-	-	-	-	1	2	-	1	-	1	5	13	11	5	4	-	-	-	-	-	-	-	-	
Time-----	20	3.85	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10	5	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	23	4.01	-	-	-	-	-	-	-	-	1	2	-	-	-	1	1	3	6	5	4	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 13. Occupational earnings: Hartford-New Britain-Bristol, Conn.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.40	\$5.80	\$6.20	\$6.60	
<b>Men—Continued</b>																														
Machine-tool operators, production, class C <sup>4</sup> .....	211	\$ 3.38	-	4	8	-	4	4	1	6	13	24	8	35	13	7	24	28	17	3	2	1	1	1	6	1	-	-	-	
Time.....	171	3.28	-	4	8	-	4	4	1	6	13	16	4	32	11	2	23	26	14	3	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle.....	45	3.34	-	-	-	-	-	1	-	-	5	3	20	6	3	1	2	-	3	1	-	-	-	-	-	-	-	-	-	
Time.....	28	3.33	-	-	-	-	-	1	-	-	-	-	19	5	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators <sup>3</sup> .....	15	3.05	-	4	-	-	-	-	-	-	4	1	1	-	2	-	-	-	3	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators.....	134	3.46	-	8	-	4	4	-	4	12	10	2	13	4	2	20	26	14	-	1	1	1	1	6	1	-	-	-	-	
Time.....	118	3.32	-	8	-	4	4	-	4	12	7	2	12	3	2	20	26	14	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, numerically controlled machines <sup>3,4</sup> .....	209	3.98	-	-	-	-	-	-	-	-	12	2	24	-	-	24	12	7	33	42	25	26	2	-	-	-	-	-	-	
Turret-lathe operators (including hand screw machine).....	10	4.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	4	-	3	-	-	-	-	-	-	-	
Incentive.....	6	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) (all timeworkers).....	302	4.65	-	-	-	-	-	-	-	-	-	-	-	-	3	3	8	23	43	66	49	17	13	18	16	43	-	-	-	
Grinding-machine operators (all timeworkers).....	158	4.93	-	-	-	-	-	-	-	-	-	-	-	-	2	-	6	5	5	36	31	6	4	10	10	43	-	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine).....	222	4.47	-	-	-	-	-	-	-	-	-	-	2	1	6	35	2	9	43	38	30	6	5	4	-	41	-	-	-	
Time.....	168	4.51	-	-	-	-	-	-	-	-	-	-	2	1	6	35	2	7	41	8	10	6	5	4	-	41	-	-	-	
Machinists, maintenance (all timeworkers).....	206	5.35	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	7	2	30	6	16	39	1	-	103	-	-	-	
Punch-press operators, class B.....	55	4.06	-	-	-	-	-	-	-	2	2	-	11	5	-	-	-	1	-	7	3	24	-	-	-	-	-	-	-	-
Time.....	42	4.03	-	-	-	-	-	-	-	2	-	-	11	5	-	-	-	-	-	1	-	23	-	-	-	-	-	-	-	-
Set-up men, machine tools.....	480	4.47	-	-	-	-	-	-	-	-	-	-	-	1	-	-	10	10	38	252	3	1	131	34	-	-	-	-	-	-
Time.....	475	4.47	-	-	-	-	-	-	-	-	-	-	-	1	-	-	10	9	38	252	-	-	131	34	-	-	-	-	-	-
Tool and/or die makers (jobbing) (all timeworkers).....	255	4.77	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	3	13	14	17	96	34	53	20	-	-	-	-
Time.....	239	5.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	17	15	2	23	21	56	62	-	-	65	-	-	-
Tool clerks <sup>3</sup> .....	101	3.77	-	-	1	-	-	-	2	4	5	1	14	-	1	39	2	-	-	4	-	28	-	-	-	-	-	-	-	-
Welders, hand, class A.....	64	4.52	-	-	-	-	-	-	-	-	-	-	-	-	-	9	3	14	16	-	-	8	6	8	-	-	-	-	-	-
Time.....	48	4.62	-	-	-	-	-	-	-	-	-	-	-	7	-	9	-	10	8	-	-	8	5	8	-	-	-	-	-	-
Welders, hand, class B.....	35	3.74	-	-	-	-	-	-	-	1	-	-	7	1	3	7	9	5	-	2	-	-	-	-	-	-	-	-	-	-
Time.....	26	3.64	-	-	-	-	-	-	-	1	-	-	7	-	3	6	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Welders, machine, class A <sup>6</sup> .....	18	3.97	-	-	-	-	-	-	-	-	-	-	4	5	-	2	1	-	1	-	1	1	2	1	2	1	-	-	-	-
Welders, machine, class B <sup>3</sup> .....	19	3.55	-	-	-	-	-	-	-	-	4	4	4	-	-	1	1	3	2	-	-	-	-	-	-	-	-	-	-	-
<b>Women</b>																														
Assemblers, class C.....	657	4.07	-	-	-	-	-	11	2	25	9	59	33	29	16	22	25	37	15	16	11	344	2	1	-	-	-	-	-	
Time.....	554	4.06	-	-	-	-	-	11	2	25	6	58	33	29	14	15	10	27	-	-	-	324	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners (all timeworkers).....	9	3.27	-	-	-	-	-	-	-	-	1	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B.....	46	3.90	-	-	-	-	-	-	-	-	1	2	13	6	2	-	3	2	1	-	3	6	1	6	-	-	-	-	-	-
Time.....	20	3.44	-	-	-	-	-	-	-	-	-	-	12	4	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Grinding-machine operators.....	46	3.90	-	-	-	-	-	-	-	-	1	2	13	6	2	-	3	2	1	-	3	6	1	6	-	-	-	-	-	-
Time.....	20	3.44	-	-	-	-	-	-	-	-	-	-	12	4	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-

<sup>1</sup> The area consists of Andover, Avon, Berlin, Bloomfield, Bolton, Bristol, Canton, Coventry, Cromwell, East Granby, East Hartford, East Windsor, Ellington, Framington, Glastonbury, Granby, Hartford, Manchester, New Britain, Newington, Plainville, Rocky Hill, Simsbury, Southington, South Windsor, Suffield, Vernon, West Hartford, Wethersfield, Windsor, and Windsor Locks, Connecticut.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>5</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly incentive workers.

<sup>6</sup> Workers paid under time and incentive systems were divided equally.

**Table 14. Occupational earnings: Houston, Tex.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, January 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																							
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20		
			\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	
Assemblers, class A (all timeworkers) -----	466	\$4.34	-	-	-	-	-	-	-	-	19	43	53	67	80	76	79	16	-	-	15	18	-	-	-	
Assemblers, class B <sup>4</sup> -----	691	3.64	5	15	55	65	39	36	62	49	40	62	8	173	34	15	12	6	6	9	-	-	-	-	-	
Assemblers, class C -----	70	3.39	-	4	2	2	19	2	5	5	13	2	14	1	1	-	-	-	-	-	-	-	-	-	-	
Time -----	49	3.11	-	4	2	2	19	2	5	5	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carpenters, maintenance (all timeworkers) -----	8	4.57	-	-	-	-	-	-	-	-	-	-	2	-	1	4	1	-	-	-	-	-	-	-	-	
Electricians, maintenance (all timeworkers) -----	124	5.00	-	-	-	-	-	-	-	-	-	-	8	-	4	12	30	18	49	-	-	-	-	-	3	
Inspectors, class A -----	374	4.76	-	-	-	-	-	-	-	-	1	16	16	88	24	51	12	99	6	61	-	-	-	-	-	
Time -----	307	4.61	-	-	-	-	-	-	-	-	1	16	16	88	24	51	12	99	-	-	-	-	-	-	-	
Inspectors, class B -----	183	4.20	-	-	-	2	-	8	14	6	8	17	4	32	80	-	12	-	-	-	-	-	-	-	-	
Time -----	171	4.15	-	-	-	2	-	8	14	6	8	17	4	32	80	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers) -----	337	3.06	11	29	23	43	34	36	78	55	2	26	-	-	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling (all timeworkers) -----	255	3.42	-	6	-	8	8	49	61	50	10	50	5	8	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>5</sup> -----	2,082	4.47	-	-	-	-	-	-	-	2	18	61	184	629	673	301	104	34	58	18	-	-	-	-	-	
Time -----	1,919	4.42	-	-	-	-	-	-	-	2	18	60	181	623	663	286	66	2	18	-	-	-	-	-	-	
Automatic-lathe operators -----	130	4.31	-	-	-	-	-	-	-	1	10	12	3	44	52	-	6	-	2	-	-	-	-	-	-	
Time -----	122	4.27	-	-	-	-	-	-	-	1	10	12	3	44	52	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial <sup>4</sup> -----	131	4.35	-	-	-	-	-	-	-	-	-	1	15	40	75	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle (all timeworkers) -----	61	4.21	-	-	-	-	-	-	-	-	3	12	8	26	-	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators -----	239	4.52	-	-	-	-	-	-	-	-	-	-	34	56	52	74	10	13	-	-	-	-	-	-	-	
Time -----	222	4.49	-	-	-	-	-	-	-	-	-	-	34	56	52	74	6	-	-	-	-	-	-	-	-	
Grinding-machine operators (all timeworkers) -----	136	4.34	-	-	-	-	-	-	-	-	1	2	17	63	52	1	-	-	-	-	-	-	-	-	-	
Milling-machine operators -----	317	4.45	-	-	-	-	-	-	-	1	4	5	26	79	133	51	15	3	-	-	-	-	-	-	-	
Time -----	294	4.42	-	-	-	-	-	-	-	1	4	5	26	77	133	46	2	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	517	4.48	-	-	-	-	-	-	-	-	-	9	53	156	127	141	15	16	-	-	-	-	-	-	-	
Time -----	461	4.44	-	-	-	-	-	-	-	-	-	9	50	154	117	131	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B <sup>5</sup> -----	1,178	4.06	-	-	-	-	-	16	91	93	99	160	202	358	46	72	29	12	-	-	-	-	-	-	-	
Time -----	1,029	4.00	-	-	-	-	-	16	91	93	99	148	185	328	22	47	-	-	-	-	-	-	-	-	-	
Automatic-lathe operators <sup>4</sup> -----	50	4.29	-	-	-	-	-	-	-	-	-	4	1	39	6	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial -----	40	3.93	-	-	-	-	-	2	6	-	-	13	5	13	1	-	-	-	-	-	-	-	-	-	-	
Time -----	24	3.75	-	-	-	-	-	2	6	-	-	11	-	4	1	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle -----	73	4.03	-	-	-	-	-	-	9	4	5	13	4	36	2	-	-	-	-	-	-	-	-	-	-	
Time -----	55	4.01	-	-	-	-	-	-	9	4	5	6	-	29	2	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators -----	88	3.91	-	-	-	-	-	2	12	8	8	17	26	4	11	-	-	-	-	-	-	-	-	-	-	
Time -----	80	3.87	-	-	-	-	-	2	12	8	8	17	23	4	6	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators -----	188	4.26	-	-	-	-	-	-	4	8	14	10	35	78	6	6	27	-	-	-	-	-	-	-	-	
Time -----	149	4.12	-	-	-	-	-	-	4	8	14	10	35	78	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators -----	115	4.00	-	-	-	-	-	-	16	18	28	12	34	5	-	2	-	-	-	-	-	-	-	-	-	
Time -----	101	3.96	-	-	-	-	-	-	16	18	25	8	34	-	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) -----	281	4.04	-	-	-	-	-	8	32	18	24	25	9	144	2	19	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.



**Table 14. Occupational earnings: Houston, Tex.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, January 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																					
			\$2.00 and under	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20
			\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40
Machine-tool operators, production, class B—Continued																								
Time	248	\$3.98	-	-	-	-	8	32	18	24	25	9	132	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>5</sup>	202	3.08	-	60	-	2	25	35	18	13	19	6	11	8	3	-	-	-	2	-	-	-	-	-
Time	163	2.84	-	60	-	2	25	35	18	11	10	-	-	2	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial <sup>6</sup>	12	3.37	-	-	-	-	4	-	-	3	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators <sup>4</sup>	22	3.68	-	-	-	2	2	-	-	-	10	1	7	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators <sup>4</sup>	41	3.22	-	-	-	-	2	23	14	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine) (all timeworkers)	37	3.18	-	-	-	-	11	12	4	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled machines <sup>5</sup>	403	4.47	-	-	-	-	-	-	20	-	10	13	17	24	201	62	18	35	-	3	-	-	-	-
Time	352	4.39	-	-	-	-	-	-	20	-	10	13	17	24	199	57	10	2	-	-	-	-	-	-
Automatic-lathe operators	165	4.64	-	-	-	-	-	-	-	-	-	-	5	11	88	18	7	33	-	3	-	-	-	-
Time	118	4.49	-	-	-	-	-	-	-	-	-	-	5	11	88	14	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle (all timeworkers)	25	4.38	-	-	-	-	-	-	-	-	-	-	-	7	18	-	-	-	-	-	-	-	-	-
Engine-lathe operators (all timeworkers)	52	4.25	-	-	-	-	-	-	10	-	-	-	-	-	42	-	-	-	-	-	-	-	-	-
Milling-machine operators (all timeworkers)	32	4.34	-	-	-	-	-	-	-	-	-	9	-	4	14	5	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) (all timeworkers) <sup>5</sup>	90	4.49	-	-	-	-	-	-	-	-	-	-	6	12	55	17	-	-	-	-	-	-	-	-
Grinding-machine operators (all timeworkers)	74	4.48	-	-	-	-	-	-	-	-	-	-	6	10	41	17	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) (all timeworkers)	165	4.62	-	-	-	-	-	-	-	-	-	-	16	12	15	115	5	2	-	-	-	-	-	-
Machinists, maintenance (all timeworkers)	99	4.71	-	-	-	-	-	-	-	-	2	2	6	12	6	17	15	39	-	-	-	-	-	-
Machinists, production (all timeworkers)	745	4.77	-	-	-	-	-	-	-	-	-	-	9	11	2	307	394	22	-	-	-	-	-	-
Mechanics, maintenance (all timeworkers)	251	4.92	-	-	-	-	-	-	-	-	-	-	4	10	20	34	82	101	-	-	-	-	-	-
Polishing and buffing machine operators (all timeworkers)	33	3.79	-	-	-	5	-	-	3	8	1	-	-	12	4	-	-	-	-	-	-	-	-	-
Tool and/or die makers (other than jobbing) (all timeworkers)	120	4.95	-	-	-	-	-	-	-	-	-	-	-	-	19	18	15	68	-	-	-	-	-	-
Tool clerks	119	3.86	-	5	-	-	9	9	-	15	-	26	19	5	31	-	-	-	-	-	-	-	-	-
Time	106	3.83	-	5	-	-	9	9	-	15	-	15	19	5	29	-	-	-	-	-	-	-	-	-
Welders, hand, class A	567	4.65	-	-	-	-	-	-	-	-	15	-	34	43	141	151	56	111	1	9	-	5	1	
Time	548	4.62	-	-	-	-	-	-	-	-	15	-	34	43	141	151	56	108	-	-	-	-	-	-
Welders, hand, class B	456	3.96	-	-	-	-	-	23	50	75	44	48	26	83	84	-	-	-	23	-	-	-	-	-
Time	433	3.89	-	-	-	-	-	23	50	75	44	48	26	83	84	-	-	-	-	-	-	-	-	-
Welders, machine, class B (all timeworkers)	27	3.49	-	-	-	-	-	9	4	4	6	-	2	-	2	-	-	-	-	-	-	-	-	-

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<sup>1</sup> The Houston Standard Metropolitan Statistical Area consists of Harris, Fort Bend, Brazoria, Montgomery, and Liberty Counties.  
<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.  
<sup>3</sup> Data limited to men workers.  
<sup>4</sup> Insufficient data to warrant presentation of separate averages by method of wage payment, predominantly timeworkers.

<sup>5</sup> Insufficient data to warrant presentation of separate averages by method of wage payment, predominantly incentive workers.  
<sup>6</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 15. Occupational earnings: Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove, Calif.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																								
			\$1.80 and under \$2.00	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	
			\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40		
<b>Men</b>																											
Assemblers, class A.....	1,180	\$4.38	-	-	-	-	-	22	26	34	64	103	137	162	158	334	36	52	50	-	2	-	-	-	-	-	-
Assemblers, class B.....	1,035	3.34	-	-	113	119	50	173	103	129	82	106	96	29	7	16	10	2	-	-	-	-	-	-	-	-	-
Assemblers, class C.....	369	2.96	8	48	103	46	6	14	26	86	5	-	7	6	2	10	2	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance.....	28	4.65	-	-	-	-	-	-	-	-	-	-	2	-	6	14	6	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance.....	102	4.95	-	-	-	-	-	-	-	-	-	-	2	-	9	7	25	49	5	-	5	-	-	-	-	-	-
Inspectors, class A.....	540	4.45	-	-	-	-	-	-	-	14	29	34	110	45	119	43	78	39	14	1	10	-	-	-	-	-	-
Inspectors, class B.....	355	3.63	-	-	-	25	19	43	14	87	42	38	17	25	34	11	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class C.....	90	3.28	-	20	2	12	4	-	2	20	2	13	1	4	7	3	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners.....	546	2.86	30	43	60	63	112	150	41	39	3	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling.....	368	3.19	-	26	53	18	54	39	44	-	47	59	22	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>3</sup> .....	3,452	4.64	-	-	-	-	-	27	14	8	66	117	346	637	784	336	173	199	239	305	153	8	40	-	-	-	-
Time.....	3,411	4.64	-	-	-	-	-	27	14	8	66	115	340	617	781	326	173	199	239	305	153	8	40	-	-	-	-
Automatic-lathe operators.....	102	4.75	-	-	-	-	-	-	-	-	10	4	2	29	22	-	-	15	20	-	-	-	-	-	-	-	-
Drill-press operators, radial.....	118	4.29	-	-	-	-	-	-	-	2	-	25	25	30	18	6	-	11	-	1	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle.....	181	4.20	-	-	-	-	-	-	10	-	8	29	32	13	89	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators.....	428	4.87	-	-	-	-	-	-	-	7	3	27	31	129	20	3	49	40	75	42	2	-	-	-	-	-	-
Grinding-machine operators.....	378	4.42	-	-	-	-	-	4	-	4	18	24	42	60	124	24	54	9	15	-	-	-	-	-	-	-	-
Time.....	359	4.43	-	-	-	-	-	4	-	4	18	24	41	42	124	24	54	9	15	-	-	-	-	-	-	-	-
Milling-machine operators.....	564	4.49	-	-	-	-	-	-	4	-	31	13	126	142	69	35	12	30	22	64	10	6	-	-	-	-	-
Screw-machine operators, automatic.....	71	4.41	-	-	-	-	-	-	-	-	-	2	4	32	20	10	3	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine).....	390	4.43	-	-	-	-	-	-	-	2	2	8	76	110	110	22	25	22	2	11	-	-	-	-	-	-	-
Time.....	378	4.42	-	-	-	-	-	-	-	2	2	8	76	110	108	12	25	22	2	11	-	-	-	-	-	-	-
Machine-tool operators, production, class B <sup>6</sup> .....	1,707	3.88	-	-	-	18	20	56	121	117	180	616	313	103	99	44	18	2	-	-	-	-	-	-	-	-	-
Drill-press operators, radial.....	46	4.04	-	-	-	-	-	-	3	1	2	6	23	5	6	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle.....	242	3.62	-	-	-	10	-	23	40	49	14	84	9	7	6	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators.....	358	3.94	-	-	-	-	-	13	4	20	45	200	21	33	-	22	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators.....	181	3.75	-	-	-	4	8	-	19	22	37	63	18	-	-	8	2	-	-	-	-	-	-	-	-	-	-
Milling-machine operators.....	215	3.98	-	-	-	4	-	-	-	12	19	90	61	5	24	-	-	-	-	-	-	-	-	-	-	-	-
Screw-machine operators, automatic.....	29	3.51	-	-	-	-	8	-	-	10	4	-	4	2	1	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine).....	119	3.98	-	-	-	-	-	-	15	3	10	22	45	8	12	4	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>3</sup> .....	492	3.13	-	-	98	72	25	32	96	125	15	8	5	6	6	-	4	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial.....	75	3.20	-	-	-	20	-	15	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle.....	40	3.16	-	-	-	-	5	10	24	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators.....	18	3.39	-	-	-	4	-	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators.....	53	3.19	-	-	8	-	20	7	-	7	7	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine).....	19	3.12	-	-	8	-	-	-	-	4	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled machines <sup>3</sup> .....	311	4.51	-	-	-	-	-	-	23	14	2	-	17	82	25	69	11	31	11	3	7	16	-	-	-	-	-

See footnotes at end of table.

**Table 15. Occupational earnings: Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove, Calif.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.80 and under \$2.00	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40		
<b>Men—Continued</b>																												
Machine-tool operators, production, numerically controlled machines <sup>3</sup> —Continued																												
Automatic-lathe operators	29	\$4.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	2	-	5	-	-	-	-	-	-	-	
Drill-press operators, radial	11	4.30	-	-	-	-	-	-	-	-	-	-	-	3	8	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle	53	4.37	-	-	-	-	-	-	-	-	4	2	-	2	12	20	11	2	-	-	-	-	-	-	-	-	-	
Engine-lathe operators	33	4.79	-	-	-	-	-	-	-	-	-	-	-	2	2	3	11	1	14	-	-	-	-	-	-	-	-	
Milling-machine operators	124	4.43	-	-	-	-	-	-	-	-	-	10	-	-	10	60	-	24	6	-	6	2	6	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) <sup>3</sup>	727	5.24	-	-	-	-	-	-	-	-	5	2	-	6	23	18	19	56	89	155	289	50	-	10	5	-	-	
Engine-lathe operators	201	5.09	-	-	-	-	-	-	-	-	5	-	-	-	-	9	9	48	23	64	38	-	-	5	-	-	-	
Grinding-machine operators	384	5.27	-	-	-	-	-	-	-	-	-	-	2	-	3	13	9	10	5	63	60	194	20	-	5	-	-	
Milling-machine operators	90	5.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	31	48	-	-	-	-	5	-	
Machine-tool operators, toolroom (operate more than 1 type of machine)	506	4.65	-	-	-	-	-	-	-	-	42	1	1	75	55	105	14	11	75	55	36	15	16	5	-	-	-	
Machinists, maintenance	51	4.84	-	-	-	-	-	-	-	-	-	-	-	-	2	-	23	17	4	4	1	-	-	-	-	-	-	
Machinists, production	596	4.96	-	-	-	-	-	-	-	-	-	-	7	7	22	70	167	142	14	41	58	18	-	50	-	-	-	
Mechanics, maintenance	115	4.57	-	-	-	-	-	-	-	5	-	-	8	23	9	4	11	39	7	9	-	-	-	-	-	-	-	
Polishing- and buffing-machine operators	72	3.34	-	-	-	-	26	-	14	2	16	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class A	83	3.79	-	-	-	3	3	6	4	10	21	2	15	7	11	1	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B	101	2.85	3	9	12	40	17	2	-	2	10	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools	25	4.83	-	-	-	-	-	-	-	-	-	3	-	-	-	-	8	8	-	2	2	-	-	-	-	-	-	
Tool and/or die makers (jobbing)	764	5.77	-	-	-	-	-	-	-	-	-	-	-	-	20	10	-	6	23	54	109	172	124	74	127	45		
Tool and/or die makers (other than jobbing)	320	5.09	-	-	-	-	-	-	-	-	-	-	6	20	11	17	21	42	71	51	32	7	12	30	-	-	-	
Tool clerks	197	3.50	-	-	3	26	16	11	23	17	33	14	51	1	2	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class A	1,282	4.76	-	-	-	-	-	-	2	4	12	-	44	151	246	257	67	338	92	53	5	1	10	-	-	-	-	
Welders, machine, class A	105	4.69	-	-	-	-	-	-	4	-	-	4	-	8	29	2	48	5	-	-	5	-	-	-	-	-	-	
<b>Women</b>																												
Assemblers, class A	440	3.49	-	-	-	8	30	85	71	68	74	42	38	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class B	1,588	2.88	24	8	267	347	369	331	98	102	35	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C	1,533	2.38	188	285	355	315	196	89	20	29	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class A	84	3.80	-	-	-	-	-	-	12	24	17	4	11	8	1	6	-	-	-	1	-	-	-	-	-	-	-	
Inspectors, class B	172	3.35	-	-	-	9	26	22	54	16	22	12	9	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class C	130	2.86	7	2	9	37	42	11	19	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A	13	3.74	-	-	-	-	-	-	-	-	11	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C	244	2.44	38	59	44	4	8	64	20	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time	111	2.86	-	2	6	4	8	64	20	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> The Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove Standard Metropolitan Statistical Areas consist of Los Angeles and Orange Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

Virtually all workers were paid on a time basis.

<sup>3</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 16. Occupational earnings: Milwaukee, Wis.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																												
			\$2.40 and under	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	\$7.20	\$7.40 and over			
<u>Men</u>																															
Assemblers, class A -----	1,315	\$4.78	-	-	-	-	6	21	10	7	134	407	112	40	81	135	69	169	42	18	14	1	-	-	-	-	45	4	-	-	
Time -----	854	4.50	-	-	-	-	-	-	-	-	124	400	103	30	56	65	18	58	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	461	5.31	-	-	-	-	-	6	21	10	7	10	7	9	10	25	70	51	111	42	18	14	1	-	-	-	45	4	-	-	
Assemblers, class B -----	1,342	4.72	-	-	-	1	16	6	13	143	279	69	160	46	169	204	37	38	29	67	3	4	-	-	-	-	58	-	-	-	
Time -----	854	4.38	-	-	-	-	15	3	9	140	269	47	130	6	64	171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	488	5.31	-	-	-	1	1	3	4	3	10	22	30	40	105	33	37	38	29	67	3	4	-	-	-	-	58	-	-	-	
Assemblers, class C -----	743	4.48	-	-	4	16	21	37	117	167	18	3	5	97	22	35	91	42	24	3	10	15	-	-	-	14	2	-	-		
Time -----	286	3.83	-	-	-	-	-	-	27	103	142	12	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	457	4.90	-	-	4	16	21	10	14	25	6	3	5	95	22	35	91	42	24	3	10	15	-	-	-	14	2	-	-		
Carpenters, maintenance -----	28	4.96	-	-	-	-	-	-	-	1	-	2	3	6	-	-	7	7	-	2	-	-	-	-	-	-	-	-	-	-	
Time -----	18	4.78	-	-	-	-	-	-	-	1	-	2	3	6	-	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	229	5.26	-	-	-	-	-	-	-	-	4	-	-	7	27	32	35	54	20	11	2	37	-	-	-	-	-	-	-	-	
Electricians, maintenance -----	207	5.29	-	-	-	-	-	-	-	-	-	-	-	7	27	31	25	47	20	11	2	37	-	-	-	-	-	-	-	-	
Time -----	473	4.82	-	-	-	-	-	-	-	4	34	35	43	110	123	48	31	16	27	1	1	-	-	-	-	-	-	-	-	-	
Incentive -----	449	4.81	-	-	-	-	-	-	-	4	34	35	43	110	114	33	31	16	27	1	1	-	-	-	-	-	-	-	-	-	
Inspectors, class A -----	311	4.60	-	-	-	-	-	1	3	9	32	33	40	112	59	20	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	297	4.59	-	-	-	-	-	-	1	3	9	32	32	39	110	50	19	2	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	121	4.15	-	-	-	-	-	5	17	3	41	30	15	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class C <sup>3</sup> -----	370	3.82	1	2	-	13	36	34	87	35	145	13	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	357	3.81	1	2	-	13	36	34	87	31	138	11	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time -----	984	3.91	1	4	-	6	24	128	219	144	263	179	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive -----	975	3.91	-	4	-	6	24	128	219	143	257	178	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>4</sup> -----	3,301	5.03	-	-	-	-	-	1	52	45	146	256	462	481	212	446	407	268	134	103	37	85	70	10	83	1	-	-	2	-	
Time -----	1,701	4.70	-	-	-	-	-	-	13	28	116	211	395	412	89	169	105	128	35	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	1,600	5.37	-	-	-	-	-	1	39	17	30	45	67	69	123	277	302	140	99	103	37	85	70	10	83	1	-	-	2	-	
Automatic-lathe operators -----	244	5.51	-	-	-	-	-	-	1	4	1	4	14	14	20	31	34	30	3	2	2	55	29	-	-	-	-	-	-	-	-
Time -----	87	5.13	-	-	-	-	-	-	1	4	1	4	14	14	20	31	34	30	3	2	2	55	29	-	-	-	-	-	-	-	-
Incentive -----	157	5.73	-	-	-	-	-	-	1	4	1	4	7	3	11	26	12	28	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial -----	224	4.82	-	-	-	-	1	2	2	26	40	45	7	31	22	13	6	4	7	2	2	55	29	10	6	-	-	-	-	-	
Time -----	88	4.32	-	-	-	-	-	-	-	24	33	29	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	136	5.14	-	-	-	-	1	2	2	2	7	16	7	31	20	13	6	4	7	2	2	10	6	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle -----	166	5.21	-	-	-	-	-	-	12	1	-	-	-	6	14	64	31	3	15	-	3	9	5	3	-	-	-	-	-	-	-
Time -----	124	5.37	-	-	-	-	-	-	-	1	-	-	-	6	10	42	27	3	15	-	3	9	5	3	-	-	-	-	-	-	-
Incentive -----	259	4.78	-	-	-	-	-	-	1	51	29	35	44	17	10	20	38	3	5	5	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators -----	189	4.65	-	-	-	-	-	-	-	49	26	31	31	8	3	13	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	70	5.14	-	-	-	-	-	-	1	2	3	4	13	9	7	10	3	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	70	5.14	-	-	-	-	-	-	1	2	3	4	13	9	7	10	3	5	5	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators -----	318	5.52	-	-	-	-	-	-	1	3	34	7	27	9	38	70	33	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	163	4.89	-	-	-	-	-	-	2	34	7	25	6	27	34	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	155	6.17	-	-	-	-	-	-	1	1	-	-	2	3	11	36	5	3	3	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators -----	250	4.84	-	-	-	-	-	-	2	17	28	56	23	15	41	25	27	7	9	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	135	4.55	-	-	-	-	-	-	-	16	28	48	18	7	3	1	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	115	5.18	-	-	-	-	-	-	2	1	-	8	5	8	38	24	13	7	9	-	-	-	-	-	-	-	-	-	-	-	-
Screw-machine operators, automatic -----	85	5.15	-	-	-	-	-	-	-	1	2	7	6	7	26	24	1	-	9	2	-	-	-	-	-	-	-	-	-	-	-
Time -----	55	4.99	-	-	-	-	-	-	-	1	1	7	6	5	25	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	30	5.45	-	-	-	-	-	-	-	-	-	1	-	-	2	1	15	-	-	9	2	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine) -----	637	4.89	-	-	-	-	-	-	35	5	26	52	105	94	47	64	79	50	30	26	5	16	1	-	-	2	-	-	-	-	-
Time -----	218	4.57	-	-	-	-	-	-	-	8	29	85	78	8	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Incentive -----	419	5.06	-	-	-	-	-	-	35	5	18	23	20	16	39	56	77	50	30	26	5	16	1	-	-	2	-	-	-	-	-

See footnotes at end of table.

**Table 16. Occupational earnings: Milwaukee, Wis.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																														
			\$2.40 and under	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	\$7.20	\$7.40	and over				
			\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	\$7.20	\$7.40	and over				
<b>Men—Continued</b>																																	
Machine-tool operators, production, class B <sup>4</sup> -----	2,174	\$4.74	-	-	2	14	8	40	42	113	270	291	180	171	323	315	115	76	47	38	44	11	32	12	4	26	-	-	-	-			
Time-----	1,064	4.49	-	-	2	13	-	13	24	33	213	233	121	63	147	166	32	-	2	2	-	-	-	-	-	-	-	-	-	-			
Incentive-----	1,110	4.99	-	-	-	1	8	27	18	80	57	58	59	108	176	149	83	76	45	36	44	11	32	12	4	26	-	-	-	-			
Automatic-lathe operators-----	153	5.00	-	-	-	1	-	1	6	6	18	14	13	27	19	7	13	3	5	20	-	-	-	-	-	-	-	-	-	-			
Time-----	122	5.08	-	-	-	1	-	1	6	3	8	14	11	17	13	7	13	3	5	20	-	-	-	-	-	-	-	-	-	-			
Incentive-----	267	4.51	-	-	-	1	5	7	7	94	23	17	29	30	34	4	5	5	4	2	-	-	-	-	-	-	-	-	-	-			
Drill-press operators, radial-----	181	4.38	-	-	-	-	4	4	-	93	15	15	2	16	30	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-			
Time-----	86	4.77	-	-	-	1	1	3	7	1	8	2	27	14	4	4	5	5	2	2	-	-	-	-	-	-	-	-	-	-			
Incentive-----	305	4.68	-	-	-	1	16	2	46	37	9	13	32	53	50	18	5	3	1	6	1	8	4	-	-	-	-	-	-	-			
Drill-press operators, single- or multiple-spindle-----	92	4.46	-	-	-	-	1	17	24	-	6	16	20	6	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-			
Time-----	213	4.77	-	-	-	1	15	2	29	13	9	7	16	33	44	18	5	1	1	6	1	8	4	-	-	-	-	-	-	-	-		
Incentive-----	95	4.68	-	-	-	-	4	9	17	7	2	4	22	8	7	9	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Engine-lathe operators-----	36	4.43	-	-	-	1	-	4	11	6	-	2	8	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-	-		
Time-----	59	4.84	-	-	-	-	3	-	5	6	1	2	2	14	6	5	9	5	1	-	-	-	-	-	-	-	-	-	-	-	-		
Incentive-----	206	4.92	-	-	2	13	1	-	1	2	8	34	10	13	27	22	10	29	7	9	2	5	5	3	1	2	-	-	-	-	-		
Grinding-machine operators-----	72	4.33	-	-	2	13	-	-	-	-	25	9	6	16	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Time-----	134	5.23	-	-	-	1	-	1	2	8	9	10	7	11	12	10	29	7	9	2	5	5	3	1	2	-	-	-	-	-	-		
Incentive-----	259	4.78	-	-	-	2	4	6	11	38	55	7	9	52	42	6	-	2	1	-	-	-	-	-	-	24	-	-	-	-	-		
Milling-machine operators-----	157	4.52	-	-	-	-	4	7	29	49	-	4	32	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Time-----	102	5.17	-	-	-	2	4	2	4	9	6	7	5	20	10	6	-	2	1	-	-	-	-	-	-	24	-	-	-	-	-		
Incentive-----	215	4.57	-	-	-	-	3	2	15	37	50	4	20	42	22	12	-	1	2	4	-	-	-	1	-	-	-	-	-	-	-		
Turret-lathe operators, hand (including hand screw machine)-----	106	4.32	-	-	-	-	-	-	3	37	48	-	-	8	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Time-----	109	4.82	-	-	-	-	3	2	12	-	2	4	20	34	12	12	-	1	2	4	-	-	1	-	-	-	-	-	-	-	-		
Incentive-----	Machine-tool operators, production, class C <sup>4</sup> -----	469	4.45	13	2	13	28	42	17	61	29	13	13	21	40	44	23	24	9	7	8	7	26	21	2	1	-	5	-	-	-		
Time-----	99	3.74	13	2	-	-	25	-	15	18	-	-	8	-	16	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	370	4.64	-	-	13	28	17	17	46	11	13	13	13	40	28	21	24	9	7	8	7	26	21	2	1	-	5	-	-	-	-	-	
Automatic-lathe operators (all incentive workers)-----	35	4.75	-	-	8	-	-	-	-	1	-	1	-	3	6	1	3	2	3	1	5	-	-	1	-	-	-	-	-	-	-	-	
Time-----	46	3.89	-	-	-	16	8	-	4	-	-	-	-	16	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	149	5.05	-	-	1	4	1	2	5	17	6	8	11	15	6	8	12	6	3	-	-	25	19	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial <sup>5</sup> -----	137	5.16	-	-	1	4	1	2	5	5	6	8	11	15	6	8	12	6	3	-	-	25	19	-	-	-	-	-	-	-	-	-	
Time-----	61	4.74	-	-	-	4	-	-	15	2	1	2	1	14	5	5	2	-	-	1	1	1	-	1	1	-	1	1	-	5	-	-	
Incentive-----	44	5.12	-	-	-	4	-	-	-	-	1	2	1	14	5	5	2	-	-	1	1	1	-	1	1	-	1	1	-	5	-	-	
Machine-tool operators, production, numerically controlled machines <sup>4</sup> -----	217	4.98	-	-	-	1	5	3	1	13	7	23	11	48	46	13	16	6	8	9	5	-	-	2	-	-	-	-	-	-	-	-	
Time-----	155	4.96	-	-	-	-	2	1	-	10	-	22	4	40	40	13	12	4	2	1	2	-	-	2	-	-	-	-	-	-	-	-	
Incentive-----	62	5.02	-	-	-	1	3	2	1	3	7	1	7	8	6	-	4	2	6	8	3	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle (all incentive workers)-----	12	5.11	-	-	-	-	-	-	-	-	2	1	2	-	2	-	2	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) <sup>4</sup> -----	287	\$5.04	-	-	-	-	-	-	-	-	28	16	29	22	48	21	33	27	20	29	14	-	-	-	-	-	-	-	-	-	-	-	
Time-----	273	5.06	-	-	-	-	-	-	-	-	28	16	28	13	46	19	33	27	20	29	14	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	11	4.80	-	-	-	-	-	-	-	2	-	-	-	1	3	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial (all timeworkers)-----	24	5.41	-	-	-	-	-	-	-	-	-	-	-	1	3	3	6	2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	24	5.41	-	-	-	-	-	-	-	-	-	-	-	1	3	3	6	2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----																																	

See footnotes at end of table.

**Table 16. Occupational earnings: Milwaukee, Wis.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																								
			\$2.40 and under	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00	\$7.20	\$7.40 and over
<b>Men—Continued</b>																											
Machine-tool operators, toolroom (operate 1 type of machine) <sup>4</sup> —Continued																											
Grinding-machine operators	143	4.71	-	-	-	-	-	-	-	-	20	15	22	18	44	4	9	4	4	3	-	-	-	-	-	-	-
Time	131	4.71	-	-	-	-	-	-	-	-	20	15	21	9	42	4	9	4	4	3	-	-	-	-	-	-	-
Milling-machine operators (all timeworkers)	20	5.28	-	-	-	-	-	-	-	-	-	1	4	-	-	-	4	6	3	-	2	-	-	-	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine)	269	5.11	-	-	-	-	-	-	-	-	11	35	8	39	30	30	25	28	13	28	10	9	3	-	-	-	
Time	250	5.15	-	-	-	-	-	-	-	-	7	35	7	29	27	29	25	28	13	28	10	9	3	-	-	-	
Machinists, maintenance (all timeworkers)	62	4.78	-	-	-	-	-	-	-	-	-	5	3	42	-	3	9	-	-	-	-	-	-	-	-	-	
Machinists, production (all timeworkers)	73	5.06	-	-	-	-	-	-	-	2	-	2	6	11	-	21	-	30	1	-	-	-	-	-	-	-	
Mechanics, maintenance	258	5.12	-	-	-	-	-	-	-	-	24	11	54	34	50	7	20	11	15	17	15	-	-	-	-	-	
Time	246	5.13	-	-	-	-	-	-	-	-	23	11	52	25	50	7	20	11	15	17	15	-	-	-	-	-	
Polishing- and buffing-machine operators <sup>3</sup>	11	5.08	-	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class A	251	4.78	-	-	-	-	-	2	2	8	52	93	4	11	17	17	23	2	3	2	2	4	2	4	1	2	
Time	86	4.39	-	-	-	-	-	-	-	2	46	34	-	4	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive	165	4.98	-	-	-	-	-	2	2	6	6	59	4	7	17	17	23	2	3	2	2	4	2	4	1	2	
Punch-press operators, class B	125	4.35	-	6	-	-	14	5	25	8	13	4	2	5	3	10	6	3	5	6	4	2	2	2	2	-	
Time	64	3.54	-	6	-	-	14	4	25	5	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive	61	5.21	-	-	-	-	-	1	-	3	3	4	2	5	3	10	6	3	5	6	4	2	2	2	-	-	
Tool and/or diemakers (jobbing) (all timeworkers)	672	5.71	-	-	-	-	-	-	-	-	7	7	21	-	7	7	127	56	102	73	213	46	6	-	-	-	
Tool and/or diemakers (other than jobbing) (all timeworkers)	377	5.65	-	-	-	-	-	-	-	-	-	8	9	45	22	43	60	31	43	26	49	30	8	3	-	-	
Tool clerks	121	4.20	-	-	1	8	2	5	27	19	13	21	12	13	-	-	-	-	-	-	-	-	-	-	-	-	
Time	110	4.23	-	-	1	8	2	5	17	18	13	21	12	13	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class A	654	4.93	-	-	-	-	-	-	13	52	127	77	53	18	94	55	41	48	37	16	11	6	-	-	-	-	
Time	273	4.38	-	-	-	-	-	-	13	39	124	45	32	2	2	10	3	1	-	2	-	-	-	-	-	-	
Incentive	381	5.33	-	-	-	-	-	-	-	13	3	32	21	16	92	45	38	47	37	16	9	6	-	-	-	-	
Welders, hand, class B	1,093	4.65	-	-	13	-	-	12	51	256	172	62	34	94	56	61	41	53	45	49	41	28	18	3	1	2	
Time	504	3.96	-	-	13	-	-	4	51	254	155	17	4	6	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class A	267	4.91	-	-	-	-	-	-	-	3	21	87	46	-	37	20	8	25	16	3	1	-	-	-	-	-	
Time	168	4.59	-	-	-	-	-	-	-	1	21	84	44	-	16	2	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class B	155	4.00	-	-	-	-	-	-	36	32	13	18	24	24	1	2	1	-	-	3	-	-	-	-	-	-	
Time	139	3.89	-	-	-	-	-	-	36	32	13	18	24	16	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive	16	4.98	-	-	-	-	-	-	-	-	-	8	1	2	1	-	1	-	-	3	-	-	-	-	-	-	
<b>Women</b>																											
Assemblers, class B	141	\$4.36	-	-	-	-	16	-	4	5	22	14	35	21	17	-	2	2	1	2	-	-	-	-	-	-	
Time	30	3.63	-	-	-	-	16	-	-	2	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class A (all timeworkers)	13	4.19	-	-	-	-	-	-	4	1	3	-	1	3	-	1	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)	35	3.65	1	1	-	1	9	1	15	1	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling (all timeworkers)	23	3.78	-	-	-	-	1	5	10	-	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B	52	5.43	-	-	-	-	-	-	-	1	7	1	3	2	3	3	5	3	2	5	7	2	4	1	2	1	
Incentive	46	5.59	-	-	-	-	-	-	-	1	1	1	3	2	3	3	5	3	2	5	7	2	4	1	2	1	
Tool clerks (all timeworkers)	14	4.01	-	-	-	-	-	-	4	4	4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> The Milwaukee Standard Metropolitan Statistical Area consists of Milwaukee, Ozaukee, Washington, and Waukesha Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>5</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly incentive workers.

**Table 17. Occupational earnings: Minneapolis—St. Paul, Minn.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																										
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	and over
<b>Men</b>																													
Assemblers, class A -----	1,355	\$4.40	-	-	-	-	-	-	-	-	-	-	-	2	68	231	79	293	237	117	252	32	44	-	-	-	-	-	-
Assemblers, class B -----	707	3.72	-	-	-	-	-	-	-	-	21	71	140	96	90	66	126	31	32	5	16	1	6	3	1	1	1	-	
Time -----	685	3.67	-	-	-	-	-	-	-	-	21	71	140	96	90	66	126	31	32	4	8	-	-	-	-	-	-	-	
Assemblers, class C -----	283	3.58	3	6	-	-	-	5	8	-	18	13	16	18	143	6	42	8	-	-	-	-	-	-	-	-	-		
Electricians, maintenance -----	39	6.75	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	7	2	1	1	4	-	-	-		
Inspectors, class A -----	374	4.55	-	-	-	-	-	-	-	-	4	4	4	-	-	15	124	65	38	45	62	10	-	3	-	-	-		
Inspectors, class B -----	140	4.18	-	-	-	-	-	-	-	-	-	-	-	-	2	19	70	27	3	19	-	-	-	-	-	-	-		
Inspectors, class C -----	33	3.85	-	-	-	-	-	-	-	-	-	-	-	9	8	8	5	2	1	-	-	-	-	-	-	-	-		
Janitors, porters, and cleaners -----	393	3.45	-	-	2	-	7	-	17	5	10	34	140	31	69	52	8	18	-	-	-	-	-	-	-	-			
Laborers, material handling -----	334	3.83	-	-	-	2	-	-	-	-	2	-	76	2	100	26	20	70	24	12	-	-	-	-	-	-			
<b>Machine-tool operators, production,</b>																													
class A <sup>5</sup> -----	2,383	4.73	-	-	-	-	-	-	-	-	-	-	-	-	-	9	152	281	456	423	439	107	498	16	1	1	-		
Time -----	2,377	4.73	-	-	-	-	-	-	-	-	-	-	-	-	-	9	152	281	455	422	438	106	498	16	-	-	-		
Automatic-lathe operators -----	372	4.92	-	-	-	-	-	-	-	-	-	-	-	-	-	4	33	67	29	18	29	191	1	-	-	-	-		
Drill-press operators, radial -----	118	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	7	22	38	21	28	1	-	-	-	1	-	-		
Drill-press operators, single- or multiple-spindle -----	88	4.38	-	-	-	-	-	-	-	-	-	-	-	-	4	5	42	29	1	7	-	-	-	-	-	-	-		
Engine-lathe operators -----	324	4.74	-	-	-	-	-	-	-	-	-	-	-	-	-	17	34	63	15	131	19	45	-	-	-	-			
Grinding-machine operators -----	237	4.66	-	-	-	-	-	-	-	-	-	-	-	-	-	21	48	34	57	25	3	46	3	-	-	-			
Milling-machine operators -----	265	4.68	-	-	-	-	-	-	-	-	-	-	-	-	-	28	15	36	85	58	38	4	-	1	-	-			
Turret-lathe operators, hand (including hand screw machine) -----	235	4.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	40	96	84	-	4	-	-	-	-			
<b>Machine-tool operators, production,</b>																													
class B <sup>5</sup> -----	855	3.94	-	-	-	-	-	-	-	-	8	25	154	111	151	168	131	90	14	3	-	-	-	-	-	-	-		
Automatic-lathe operators -----	32	4.40	-	-	-	-	-	-	-	-	-	-	-	1	-	6	4	21	-	-	-	-	-	-	-	-	-		
Drill-press operators, radial -----	64	4.09	-	-	-	-	-	-	-	-	-	-	-	15	3	-	42	-	4	-	-	-	-	-	-	-			
Drill-press operators, single- or multiple-spindle -----	119	3.85	-	-	-	-	-	-	-	-	8	-	25	2	54	14	4	12	-	-	-	-	-	-	-	-			
Engine-lathe operators -----	60	4.13	-	-	-	-	-	-	-	-	-	-	2	3	5	32	1	17	-	-	-	-	-	-	-	-			
Grinding-machine operators -----	146	3.83	-	-	-	-	-	-	-	-	-	-	49	10	25	40	22	-	-	-	-	-	-	-	-	-			
Milling-machine operators -----	51	4.34	-	-	-	-	-	-	-	-	-	-	-	-	2	1	40	4	4	-	-	-	-	-	-	-			
Turret-lathe operators, hand (including hand screw machine) -----	43	4.14	-	-	-	-	-	-	-	-	-	-	-	-	17	-	2	10	14	-	-	-	-	-	-	-			
<b>Machine-tool operators, production,</b>																													
class C <sup>5</sup> -----	860	3.76	-	-	-	85	-	18	5	55	82	68	35	55	62	395	-	-	-	-	-	-	-	-	-	-			
Drill-press operators, single- or multiple-spindle -----	98	3.18	-	-	-	34	-	17	-	-	-	10	4	29	4	-	-	-	-	-	-	-	-	-	-				
<b>Machine-tool operators, production,</b>																													
numerically controlled machines <sup>5</sup> -----	373	4.48	-	-	-	17	-	-	-	-	17	34	21	-	4	23	6	35	51	28	-	120	-	17	-	-			
Drill-press operators, single- or multiple-spindle -----	10	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	-	-	-	-	-	-				
Milling-machine operators -----	83	4.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	21	4	-	37	-	-	-	-				
<b>Machine-tool operators, toolroom (operate 1 type of machine):</b>																													
Grinding-machine operators -----	46	4.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	16	6	3	12	-	3	-	-				
<b>Machine-tool operators, toolroom (operate more than 1 type of machine):</b>																													
Machinists, maintenance -----	30	4.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13	24	19	10	2	-	-	-				

See footnotes at end of table.

**Table 17. Occupational earnings: Minneapolis—St. Paul, Minn.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																												
			\$2.10 and under \$2.20	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	and over		
<b>Men—Continued</b>																															
Machinists, production -----	28	\$4.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	6	2	15	-	-	-	-	-	-	-	-	-	-	-
Mechanics, maintenance -----	76	4.73	-	-	-	-	-	-	-	-	-	-	-	2	-	1	4	-	18	25	17	-	-	1	4	4	-	-	-	-	
Punch-press operators, class A -----	94	4.43	-	-	-	-	-	-	-	-	-	-	-	-	9	11	21	11	42	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B -----	230	4.02	-	-	-	-	-	-	-	-	-	-	-	-	3	133	76	18	-	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools -----	36	4.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	-	6	13	-	-	-	-	-	-	-	-	
Tool and/or die makers (jobbing) -----	556	5.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	149	13	159	93	78	23	-	-	-		
Tool and/or die makers (other than jobbing) -----	140	5.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	16	8	32	27	24	29	1	-	-	-	-		
Tool clerks -----	52	4.26	-	-	-	-	-	-	-	-	-	-	-	2	23	6	6	2	5	4	-	-	-	4	-	-	-	-	-	-	
Welders, hand, class A -----	879	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	7	18	156	171	107	402	-	6	2	2	6	2	-	-	-	
Time -----	865	4.64	-	-	-	-	-	-	-	-	-	-	-	-	7	18	156	171	107	402	-	4	-	-	-	-	-	-	-	-	
Welders, hand, class B -----	222	4.19	-	-	-	-	-	-	-	-	-	-	4	3	-	121	76	10	8	-	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class A -----	170	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-	91	20	56	3	-	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class B -----	50	3.74	-	-	-	-	-	-	-	-	-	5	-	14	9	8	8	5	-	-	-	1	-	-	-	-	-	-	-	-	
<b>Women</b>																															
Assemblers, class A -----	79	4.05	-	-	-	-	-	-	-	-	-	-	2	3	26	5	-	39	-	4	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C -----	560	3.12	<sup>3</sup> 12	8	2	-	4	16	-	19	70	145	259	10	14	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class A -----	13	3.75	-	-	-	-	-	-	-	-	-	-	4	-	4	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class B -----	59	3.65	-	-	-	-	-	-	-	-	4	-	8	1	32	9	2	3	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	22	3.34	-	-	-	-	-	-	-	-	-	1	19	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	24	4.36	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5	7	5	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B -----	38	3.85	-	-	-	-	-	-	-	-	-	-	15	4	6	5	7	1	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C -----	145	2.98	-	-	-	-	-	17	-	17	93	-	3	3	8	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> The Minneapolis—St. Paul Standard Metropolitan Statistical Area consists of Anoka, Dakota, Hennepin, Ramsey, and Washington Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Virtually all workers were paid on a time basis.

<sup>3</sup> Includes 4 workers at \$2 to \$2.10.

<sup>4</sup> Workers were at \$8 to \$8.20.

<sup>5</sup> Includes data for operators of other machine tools in addition to those shown separately.



**Table 18. Occupational earnings: Newark and Jersey City, N.J.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40
<b>Men</b>																													
Assemblers, class A-----	829	\$4.50	-	-	-	-	-	2	-	-	4	2	53	11	54	103	89	179	48	24	240	6	5	-	3	-	2	4	
Time-----	698	4.53	-	-	-	-	2	-	-	-	4	2	51	7	28	88	42	179	37	21	236	6	3	-	-	-	-	-	
Incentive-----	131	4.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class B-----	480	3.90	-	-	-	-	-	9	-	45	68	32	108	64	35	22	19	17	32	5	1	7	16	-	-	-	-	-	
Time-----	319	3.75	-	-	-	-	-	9	-	45	68	32	20	46	32	22	15	-	30	-	-	-	-	-	-	-	-		
Incentive-----	161	4.21	-	-	-	-	-	-	-	-	-	-	88	18	3	-	4	17	2	5	1	7	16	-	-	-	-	-	
Assemblers, class C-----	194	4.21	-	8	8	-	8	-	8	2	1	13	7	9	26	2	4	15	2	4	4	3	2	3	1	-	-	-	
Time-----	84	3.21	-	8	8	-	8	-	8	2	-	-	29	4	17	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	110	3.98	-	-	-	-	-	-	-	-	1	13	42	5	9	2	4	15	2	4	4	3	2	3	1	-	-	-	
Carpenters, maintenance (all timeworkers)-----	23	4.36	-	-	-	-	-	-	-	-	-	-	-	-	-	12	5	3	-	1	2	-	-	-	-	-	-	-	
Electricians, maintenance (all timeworkers)-----	100	5.43	-	-	-	-	-	-	-	-	-	-	-	-	5	-	14	11	9	4	1	6	-	-	-	50	-	-	
Inspectors, class A <sup>3</sup> -----	189	4.49	-	-	-	-	-	-	-	-	-	1	8	15	36	27	34	14	17	8	29	-	-	-	-	-	-	-	
Inspectors, class B-----	177	4.44	-	-	-	-	-	-	-	-	3	3	7	-	54	7	8	87	8	-	-	-	-	-	-	-	-	-	
Time-----	167	4.49	-	-	-	-	-	-	-	-	-	-	3	-	54	7	8	87	8	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners-----	168	3.05	17	-	9	27	2	-	2	19	30	38	16	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	159	3.02	17	-	9	27	2	-	2	19	30	38	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling-----	178	3.32	-	9	-	2	4	4	2	21	4	44	39	40	7	2	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	164	3.29	-	9	-	2	4	4	2	21	4	44	39	26	7	2	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>4</sup> -----	1,589	4.58	-	-	-	-	-	-	-	2	2	2	70	76	164	162	367	167	157	323	89	-	-	-	-	-	2	6	
Time-----	1,234	4.58	-	-	-	-	-	-	-	-	-	-	55	39	87	134	356	158	109	229	67	-	-	-	-	-	-	-	
Incentive-----	355	4.60	-	-	-	-	-	-	-	2	2	2	15	37	77	28	11	9	48	94	22	-	-	-	-	-	2	6	
Automatic-lathe operators <sup>3</sup> -----	44	4.68	-	-	-	-	-	-	-	-	-	-	-	-	-	21	7	-	8	8	-	-	-	-	-	-	-	-	
Drill-press operators, radial-----	116	4.57	-	-	-	-	-	-	-	-	-	-	-	12	26	10	3	1	36	28	-	-	-	-	-	-	-	-	
Time-----	70	4.50	-	-	-	-	-	-	-	-	-	-	-	8	24	8	2	-	-	28	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	70	4.03	-	-	-	-	-	-	-	2	2	2	22	11	7	16	2	2	-	2	-	2	-	-	-	2	-	-	
Time-----	43	3.93	-	-	-	-	-	-	-	-	-	-	18	10	3	12	-	-	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	245	4.66	-	-	-	-	-	-	-	-	-	-	-	6	24	29	82	9	22	22	51	-	-	-	-	-	-	-	
Time-----	232	4.68	-	-	-	-	-	-	-	-	-	-	-	5	16	28	81	9	22	20	51	-	-	-	-	-	-	-	
Incentive-----	13	4.26	-	-	-	-	-	-	-	-	-	-	-	1	8	1	1	-	-	2	-	-	-	-	-	-	-	-	
Grinding-machine operators-----	145	4.55	-	-	-	-	-	-	-	-	-	-	3	12	20	7	34	23	2	44	-	-	-	-	-	-	-	-	
Time-----	106	4.61	-	-	-	-	-	-	-	-	-	-	2	-	16	2	30	22	2	32	-	-	-	-	-	-	-	-	
Incentive-----	39	4.40	-	-	-	-	-	-	-	-	-	-	1	12	4	5	4	1	-	12	-	-	-	-	-	-	-	-	
Milling-machine operators-----	223	4.54	-	-	-	-	-	-	-	-	-	28	4	36	10	37	12	24	64	8	-	-	-	-	-	-	-	-	
Time-----	176	4.60	-	-	-	-	-	-	-	-	-	25	-	11	7	37	11	15	62	8	-	-	-	-	-	-	-	-	
Incentive-----	47	4.30	-	-	-	-	-	-	-	-	-	-	3	4	25	3	-	1	9	2	-	-	-	-	-	-	-	-	
Screw-machine operators, automatic-----	59	4.86	-	-	-	-	-	-	-	-	-	-	-	-	4	3	28	11	7	-	-	-	-	-	-	-	-	5	
Time-----	49	4.58	-	-	-	-	-	-	-	-	-	-	-	-	-	3	28	11	7	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	302	4.57	-	-	-	-	-	-	-	-	-	-	17	21	19	31	92	7	7	108	-	-	-	-	-	-	-	-	
Time-----	177	4.49	-	-	-	-	-	-	-	-	-	-	10	7	5	21	89	3	4	38	-	-	-	-	-	-	-	-	
Incentive-----	125	4.67	-	-	-	-	-	-	-	-	-	-	7	14	14	10	3	4	3	70	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B <sup>4</sup> -----	1,160	4.51	-	-	-	-	-	-	-	28	41	138	67	63	86	63	45	51	29	380	167	-	-	-	-	-	-	2	
Time-----	1,038	4.54	-	-	-	-	-	-	-	28	40	132	32	51	74	60	45	-	29	380	167	-	-	-	-	-	-	-	
Incentive-----	122	4.22	-	-	-	-	-	-	-	-	1	6	35	12	12	3	-	51	-	-	-	-	-	-	-	-	-	2	
Drill-press operators, radial-----	53	4.15	-	-	-	-	-	-	-	-	1	5	8	2	18	-	-	19	-	-	-	-	-	-	-	-	-	-	
Incentive-----	41	4.21	-	-	-	-	-	-	-	-	1	3	8	-	10	-	-	19	-	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 18. Occupational earnings: Newark and Jersey City, N.J.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.10 and under \$2.20	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40 and over
<b>Men—Continued</b>																												
<b>Machine-tool operators, production, class B<sup>4</sup>—Continued</b>																												
Drill-press operators, single- or multiple-spindle-----	129	\$3.56	-	-	-	-	-	-	-	9	19	76	9	11	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	118	3.54	-	-	-	-	-	-	-	9	19	74	-	11	5	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----																												
Engine-lathe operators (all timeworkers)-----	65	3.85	-	-	-	-	-	-	-	-	9	9	7	18	6	11	-	-	-	-	5	-	-	-	-	-	-	
Milling-machine operators <sup>3</sup> -----	65	4.08	-	-	-	-	-	-	-	-	9	1	6	2	33	3	-	-	-	11	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	42	4.09	-	-	-	-	-	-	-	-	2	1	5	12	11	-	3	8	-	-	-	-	-	-	-	-	-	
Time-----	20	4.05	-	-	-	-	-	-	-	-	2	-	-	4	11	-	3	-	-	-	-	-	-	-	-	-	-	
Incentive-----	22	4.14	-	-	-	-	-	-	-	-	-	1	5	8	-	-	8	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, class C<sup>5</sup></b>																												
Time-----	157	3.30	-	-	14	4	-	28	23	20	25	55	9	23	10	-	6	6	-	-	-	-	-	-	-	-	-	
Incentive-----	66	3.40	-	-	10	4	-	24	12	16	16	43	3	23	10	-	6	6	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	39	3.20	-	-	-	-	-	9	-	8	15	5	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	
Time-----	33	3.09	-	-	-	-	-	9	-	8	14	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	43	3.42	-	-	-	-	-	4	9	2	5	8	2	9	2	-	2	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators <sup>6</sup> -----	37	3.28	-	-	4	4	-	2	-	3	21	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators <sup>3</sup> -----																												
Turret-lathe operators, hand (including hand screw machine) (all timeworkers)-----	21	3.43	-	-	-	-	-	-	-	8	1	4	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, numerically controlled machines<sup>4</sup></b>																												
Time-----	72	4.39	-	-	-	-	-	-	1	-	1	5	-	1	20	18	4	2	4	16	-	-	-	-	-	-	-	
Incentive-----	57	4.42	-	-	-	-	-	-	-	-	-	5	-	18	14	2	2	-	16	-	-	-	-	-	-	-	-	
Milling-machine operators <sup>3</sup> -----	15	4.27	-	-	-	-	-	-	1	-	1	-	-	1	2	4	2	-	4	-	-	-	-	-	-	-	-	
Time-----	22	4.19	-	-	-	-	-	-	-	-	-	-	-	1	10	10	1	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, toolroom (operate 1 type of machine)<sup>4</sup></b>																												
(all timeworkers)-----	432	5.02	-	-	-	-	-	-	-	-	-	-	8	24	28	20	80	30	21	46	26	44	3	16	86	-	-	
Engine-lathe operators-----	79	4.48	-	-	-	-	-	-	-	-	-	-	-	16	8	-	32	5	-	9	3	6	-	-	-	-	-	
Grinding-machine operators-----	168	5.43	-	-	-	-	-	-	-	-	-	-	8	-	-	8	12	14	8	17	9	3	3	-	86	-	-	
<b>Machine-tool operators, toolroom (operate more than 1 type of machine)(all timeworkers)</b>																												
-----	191	4.68	-	-	-	-	-	-	-	-	-	-	-	32	48	3	32	-	31	2	2	5	-	-	36	-	-	
<b>Machinists, production (all timeworkers)</b>																												
-----	162	4.20	-	-	-	-	-	-	-	-	-	-	-	46	30	44	22	12	8	-	-	-	-	-	-	-	-	
<b>Mechanics, maintenance (all timeworkers)</b>																												
-----	39	4.37	-	-	-	-	-	-	-	8	-	-	-	-	5	-	5	4	6	11	-	-	-	-	-	-	-	
<b>Polishers and buffers, metal<sup>3</sup></b>																												
-----	35	4.26	-	-	-	-	-	-	-	-	-	4	4	8	-	2	5	6	-	6	-	-	-	-	-	-	-	
<b>Polishing and buffing machine operators</b>																												
-----	36	3.93	-	-	-	-	-	-	-	-	-	-	1	31	4	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	11	3.95	-	-	-	-	-	-	-	-	-	-	-	7	4	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Punch-press operators, class A</b>																												
-----	124	3.93	-	-	-	-	-	-	2	4	8	30	11	18	27	11	2	-	-	7	-	-	4	-	-	-	-	
Incentive-----	83	3.99	-	-	-	-	-	-	2	4	8	2	9	17	22	11	2	-	-	2	-	-	4	-	-	-	-	
<b>Punch-press operators, class B</b>																												
-----	148	3.68	-	10	-	-	10	-	10	10	11	2	41	6	-	3	-	3	2	26	2	4	1	3	1	2	1	
Time-----	119	3.38	-	10	-	-	10	-	10	11	2	40	3	-	-	-	-	-	23	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 18. Occupational earnings: Newark and Jersey City, N.J.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>4</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40
<b>Men—Continued</b>																												
Tool and/or die makers (jobbing) (all timeworkers)-----	439	\$5.19	-	-	-	-	-	-	-	-	-	-	-	-	-	17	32	52	82	32	31	92	61	-	32	8	-	-
Tool and/or die makers (other than jobbing)(all timeworkers)-----	263	5.06	-	-	-	-	-	-	-	-	2	-	-	-	6	19	22	28	53	66	25	-	-	-	-	42	-	-
Tool clerks (all timeworkers)-----	83	3.91	-	-	-	-	-	-	2	-	1	18	24	10	6	2	-	20	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A-----	193	4.37	-	-	-	-	-	-	-	-	-	25	-	23	30	45	13	26	8	9	-	-	-	-	-	11	3	-
Time-----	162	4.38	-	-	-	-	-	-	-	-	-	25	-	23	28	18	13	26	8	7	-	-	-	-	-	11	3	-
Welders, hand, class B-----	57	3.96	-	-	-	-	-	-	8	-	4	-	9	1	30	1	-	1	-	-	-	-	-	-	-	1	-	2
Incentive-----	26	4.17	-	-	-	-	-	-	-	-	4	-	9	1	8	-	-	1	-	-	-	-	-	-	-	1	-	2
Welders, machine, class B <sup>3</sup> -----	122	3.59	10	10	-	-	10	10	-	-	-	18	9	11	5	12	15	-	3	2	-	1	4	1	1	-	-	-
<b>Women</b>																												
Inspectors, class B-----	36	3.43	-	-	-	-	-	-	4	4	-	8	3	13	1	2	1	-	-	-	-	-	-	-	-	-	-	-
Time-----	20	3.62	-	-	-	-	-	-	-	-	-	6	1	9	1	2	1	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B (all timeworkers)-----	29	3.61	-	-	-	-	-	-	-	-	-	8	17	1	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>6</sup> -----	13	3.63	-	-	-	-	-	-	-	1	5	-	1	5	-	1	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Newark and Jersey City Standard Metropolitan Statistical Areas consist of Essex, Hudson, Morris and Union Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant presentation of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>5</sup> Workers were distributed as follows: 2 at \$7 to \$7.20; 2 at \$7.60 to \$7.80; and 2 at \$8 to \$8.20.

<sup>6</sup> Insufficient data to warrant presentation of separate averages by method of wage payment, predominantly incentive workers.

**Table 19. Occupational earnings: New York, N.Y.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																										
			Under \$2.30	\$2.30 and under \$2.40	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	and over
<b>Men</b>																													
Assemblers, class A-----	630	\$4.57	-	-	-	-	-	-	-	-	-	1	10	11	38	63	74	168	88	45	78	41	7	4	2	-	-	-	-
Time-----	617	4.56	-	-	-	-	-	-	-	-	-	1	10	11	38	63	73	166	86	45	78	41	5	-	-	-	-	-	-
Incentive-----	13	5.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	-	-	-	-	2	4	2	-	-	-
Assemblers, class B-----	702	3.76	-	-	6	1	4	8	7	59	79	154	93	78	60	78	37	14	4	2	10	8	-	-	-	-	-	-	-
Time-----	663	3.69	-	-	6	1	4	8	7	59	79	154	90	78	52	76	35	14	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C-----	702	2.74	52	27	15	76	238	76	36	47	74	31	12	8	3	2	1	2	-	-	-	2	-	-	-	-	-	-	-
Time-----	545	2.74	52	27	15	76	88	76	36	47	74	31	12	8	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance (all timeworkers)-----	17	4.38	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	7	-	-	-	-	-	-	-	2	-	-	-
Electricians, maintenance (all timeworkers)-----	55	4.75	-	-	-	-	-	-	-	-	-	-	-	4	1	2	-	19	7	2	4	16	-	4	-	-	-	-	-
Inspectors, class A <sup>3</sup> -----	129	4.40	-	-	-	-	-	-	-	-	6	6	8	-	15	9	21	6	31	13	2	-	-	-	-	4	6	-	-
Inspectors, class B <sup>3</sup> -----	144	4.30	-	-	2	-	4	2	-	3	-	18	18	14	6	23	-	2	4	26	22	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners-----	226	2.97	5	16	5	16	21	18	15	2	55	31	22	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	214	2.94	5	16	5	16	21	18	15	2	55	29	22	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling (all timeworkers)-----	246	3.18	13	-	-	9	10	25	41	10	27	28	8	38	28	3	3	3	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>4</sup> -----	1,368	4.60	-	-	-	-	-	-	-	-	-	-	6	13	39	162	270	236	197	179	126	66	52	14	8	-	-	-	-
Time-----	1,198	4.55	-	-	-	-	-	-	-	-	-	-	6	9	37	159	238	221	187	169	114	40	10	6	2	-	-	-	-
Automatic-lathe operators <sup>3</sup> -----	57	4.94	-	-	-	-	-	-	-	-	-	-	4	-	-	8	3	-	8	16	10	4	-	-	-	-	-	-	-
Drill-press operators, radial-----	55	4.61	-	-	-	-	-	-	-	-	-	-	2	3	9	5	4	18	4	2	6	2	-	-	-	-	-	-	-
Time-----	29	4.44	-	-	-	-	-	-	-	-	-	-	-	3	7	5	-	12	-	-	-	2	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	107	4.29	-	-	-	-	-	-	-	-	-	6	1	15	7	57	11	-	-	-	8	-	2	-	-	-	-	-	-
Time-----	97	4.18	-	-	-	-	-	-	-	-	-	6	1	15	7	57	11	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	203	4.62	-	-	-	-	-	-	-	-	-	-	-	-	-	32	21	63	16	31	27	9	2	2	-	-	-	-	-
Time-----	190	4.61	-	-	-	-	-	-	-	-	-	-	-	-	-	32	13	62	16	31	27	9	-	-	-	-	-	-	-
Grinding-machine operators-----	139	4.77	-	-	-	-	-	-	-	-	-	-	-	-	-	8	18	28	26	10	18	19	8	2	2	-	-	-	-
Time-----	111	4.76	-	-	-	-	-	-	-	-	-	-	-	-	-	8	18	24	8	18	15	2	2	2	-	-	-	-	-
Milling-machine operators-----	252	4.58	-	-	-	-	-	-	-	-	-	-	-	9	45	44	35	28	38	32	11	10	-	-	-	-	-	-	-
Time-----	226	4.51	-	-	-	-	-	-	-	-	-	-	-	9	45	42	33	28	38	26	5	-	-	-	-	-	-	-	-
Screw-machine operators, automatic <sup>3</sup> -----	8	5.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	3	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	125	4.53	-	-	-	-	-	-	-	-	-	-	-	6	10	30	20	42	6	3	2	4	2	-	-	-	-	-	-
Time-----	109	4.48	-	-	-	-	-	-	-	-	-	-	-	6	10	22	20	42	6	3	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B <sup>4</sup> -----	1,027	3.74	-	-	-	-	8	9	7	50	120	159	157	309	107	50	31	13	1	6	-	-	-	-	-	-	-	-	-
Time-----	901	3.72	-	-	-	-	8	9	7	50	116	129	146	256	100	43	23	8	-	6	-	-	-	-	-	-	-	-	-
Incentive-----	126	3.88	-	-	-	-	-	-	-	-	-	4	30	11	53	7	7	8	5	1	-	-	-	-	-	-	-	-	-
Automatic-lathe operators (all timeworkers)-----	42	3.81	-	-	-	-	-	-	-	-	-	1	3	21	7	6	4	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial (all timeworkers)-----	13	3.90	-	-	-	-	-	-	-	-	-	-	-	1	7	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle <sup>3</sup> -----	107	3.44	-	-	-	-	6	9	1	9	24	16	32	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	88	4.05	-	-	-	-	-	-	-	-	-	17	3	27	16	5	6	8	-	6	-	-	-	-	-	-	-	-	-
Engine-lathe operators <sup>3</sup> -----	217	3.76	-	-	-	-	2	-	6	4	17	14	30	126	2	13	3	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	174	3.73	-	-	-	-	2	-	6	4	17	14	29	86	2	11	3	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators-----	214	3.72	-	-	-	-	-	-	-	-	10	2	73	44	54	13	6	12	-	-	-	-	-	-	-	-	-	-	-
Time-----	178	3.74	-	-	-	-	-	-	-	-	10	2	47	40	48	13	6	12	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 19. Occupational earnings: New York, N.Y.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.30	\$2.30 and under \$2.40	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40 and over	
<b>Men—Continued</b>																													
Machine-tool operators, production, class B <sup>4</sup> —Continued																													
Screw-machine operators, automatic <sup>3</sup> -----	21	\$3.54	-	-	-	-	-	-	-	-	6	2	-	6	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lath <sup>3</sup> operators, hand (including hand screw machine) --	36	3.79	-	-	-	-	-	-	-	-	-	10	2	2	6	12	4	-	-	-	-	-	-	-	-	-	-	-	-
Time -----	30	3.79	-	-	-	-	-	-	-	-	-	10	2	-	2	12	4	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C <sup>4</sup> -----	608	3.11	4	-	-	24	17	40	86	83	136	108	53	38	3	-	2	14	-	-	-	-	-	-	-	-	-	-	-
Time -----	400	3.19	-	-	-	24	17	10	17	23	113	106	43	36	1	-	10	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single-or multiple-spindle -----	104	3.21	-	-	-	9	3	2	5	6	29	42	-	-	2	-	2	4	-	-	-	-	-	-	-	-	-	-	-
Time -----	94	3.11	-	-	-	9	3	2	5	6	29	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators <sup>3</sup> -----	12	3.63	-	-	-	-	-	-	-	-	-	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators <sup>3</sup> -----	40	3.32	-	-	-	-	2	-	-	8	10	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators <sup>3</sup> -----	62	3.19	-	-	-	5	5	2	-	7	12	8	6	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Screw-machine operators, automatic (all timeworkers) -----	16	3.22	-	-	-	-	-	-	-	2	6	6	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled machines <sup>4</sup> --	119	4.46	-	-	-	1	2	-	2	5	-	5	8	9	4	13	15	13	17	2	8	13	2	-	-	-	-	-	-
Time -----	94	4.33	-	-	-	1	2	-	2	5	-	5	8	6	2	13	13	9	17	-	8	3	-	-	-	-	-	-	-
Drill-press operators, single-or multiple-spindle (all timeworkers) -----	19	3.86	-	-	-	-	-	-	-	5	-	-	2	6	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators (all timeworkers) -----	25	4.67	-	-	-	-	-	-	-	-	-	-	-	-	2	13	-	2	-	-	5	3	-	-	-	-	-	-	-
Milling-machine operators (operate only)(all timeworkers) --	13	3.71	-	-	-	-	2	-	2	-	-	-	6	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) (all timeworkers) -----	59	4.59	-	-	-	-	-	-	-	-	-	4	-	-	-	4	18	7	26	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)(all timeworkers) -----	49	4.25	-	-	-	-	-	-	-	-	-	3	14	-	6	-	14	4	5	3	-	-	-	-	-	-	-	-	-
Machinists, maintenance (all timeworkers) -----	70	5.02	-	-	-	-	-	-	-	-	-	-	-	-	-	2	18	10	11	14	-	-	4	-	-	-	11	-	-
Machinists, production (all timeworkers) -----	80	4.54	-	-	-	-	-	-	-	-	-	-	-	9	2	29	30	-	2	2	-	-	-	-	-	-	6	-	-
Mechanics, maintenance (all timeworkers) -----	61	4.15	-	-	-	-	-	-	-	6	4	4	11	-	13	5	3	5	-	-	10	-	-	-	-	-	-	-	-
Polishers, and buffers, metal (all timeworkers) -----	97	3.61	-	-	5	5	3	6	-	1	9	17	1	-	11	8	21	5	-	-	5	-	-	-	-	-	-	-	-
Punch-press operators, class A -----	51	4.52	-	-	5	-	-	-	-	-	-	-	1	10	2	6	-	5	-	8	2	8	2	2	-	-	-	-	-
Time -----	27	3.84	-	-	5	-	-	-	-	-	-	-	1	10	2	4	-	5	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class B <sup>3</sup> -----	189	2.73	936	-	35	15	6	46	11	16	14	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Set-up men, machine tools -----	69	4.29	-	-	-	-	-	-	-	-	1	3	1	19	3	16	11	3	11	1	-	-	-	-	-	-	-	-	-
Time -----	53	4.31	-	-	-	-	-	-	-	-	1	3	1	9	3	14	11	2	9	-	-	-	-	-	-	-	-	-	-
Tool and/or die makers (jobbing) (all timeworkers) -----	111	4.85	-	-	-	-	-	-	-	-	-	-	8	-	2	13	34	4	5	6	23	8	-	-	-	4	-	4	-

See footnotes at end of table.

**Table 19. Occupational earnings: New York, N.Y.—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																												
			Under \$2.30	\$2.30 and under \$2.40	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	and over		
<b>Men—Continued</b>																															
Tool clerks (all timeworkers)-----	63	\$3.73	-	-	5	1	-	-	-	-	2	5	9	6	10	20	3	-	-	-	2	-	-	-	-	-	-	-	-	-	
Welders, hand, class A (all timeworkers)-----	168	4.58	-	-	-	-	-	-	-	-	-	-	-	-	2	7	84	2	35	14	12	4	2	3	-	-	-	3	-	-	
Welders, hand, class B (all timeworkers)-----	119	3.61	-	-	-	-	-	-	1	9	11	24	57	13	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class A-----	79	4.59	-	-	-	-	-	-	-	-	-	2	-	-	16	11	25	5	5	-	9	4	-	2	-	-	-	-	-	-	
Time-----	69	4.47	-	-	-	-	-	-	-	-	-	2	-	-	16	11	25	5	5	-	5	-	-	-	-	-	-	-	-	-	
Welders, machine, class B (all timeworkers)-----	99	3.40	-	-	-	-	11	5	3	3	25	11	8	-	18	-	10	5	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Women</b>																															
Assemblers, class B (all timeworkers)-----	83	3.17	-	-	-	4	2	1	2	5	25	30	10	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C-----	558	2.79	11	25	34	16	331	19	8	51	14	7	-	4	4	4	2	14	12	2	-	-	-	-	-	-	-	-	-	-	-
Time-----	233	2.67	11	25	34	16	51	19	8	51	12	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class A (all timeworkers)-----	10	3.74	-	-	-	-	-	-	-	-	-	-	4	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class B (all timeworkers)-----	34	3.57	-	-	-	-	-	-	2	-	20	-	4	2	-	-	-	-	-	2	4	-	-	-	-	-	-	-	-	-	-
Inspectors, class C (all timeworkers)-----	49	2.96	-	-	-	-	6	15	2	23	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners (all timeworkers)-----	8	2.78	-	2	-	-	-	1	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B-----	59	3.51	-	-	-	-	2	18	-	4	-	3	7	12	7	1	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C-----	93	2.85	<sup>6</sup> 18	-	-	-	4	16	12	14	16	-	4	6	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	47	2.98	-	-	-	-	4	4	8	8	16	-	4	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The New York Standard Metropolitan Statistical Area consists of New York City, and Nassau, Rockland, Suffolk, and Westchester Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>5</sup> Workers were distributed as follows: 25 at \$2.10 to \$2.20 and 11 at \$2.20 to \$2.30.

<sup>6</sup> All workers were at \$2.20 to \$2.30.

**Table 20. Occupational earnings: Philadelphia, Pa.—N.J.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			Under \$2.20	\$2.20 and under \$2.40	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over
<b>Men</b>																												
Assemblers, class A-----	1,372	\$4.46	-	-	-	-	36	14	25	13	35	107	160	129	145	530	89	30	26	-	4	6	12	3	1	1	2	4
Time-----	1,275	4.41	-	-	-	-	36	14	25	12	35	106	152	113	119	523	86	27	25	-	2	-	-	-	-	-	-	-
Incentive-----	97	5.05	-	-	-	-	-	-	-	1	-	1	8	16	26	7	3	3	1	-	4	4	12	3	1	1	2	4
Assemblers, class B-----	650	3.59	5	10	10	32	20	96	60	54	130	42	96	54	33	3	1	-	2	-	-	-	-	-	-	-	-	-
Time-----	568	3.50	5	10	10	32	20	96	60	54	130	37	35	52	27	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C <sup>3</sup> -----	712	3.78	-	-	-	5	-	49	34	433	39	11	11	1	17	9	21	21	12	13	6	11	13	5	1	-	-	-
Carpenters, maintenance (all timeworkers)-----	22	4.79	-	-	-	-	-	-	-	-	-	-	2	-	5	7	-	8	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance (all timeworkers)-----	120	4.79	-	-	-	-	-	-	-	-	11	3	10	10	-	-	50	11	25	-	-	-	-	-	-	-	-	-
Inspectors, class A (all timeworkers)-----	288	4.38	-	-	-	-	4	-	16	4	37	88	47	7	15	31	6	2	31	-	-	-	-	-	-	-	-	-
Inspectors, class B (all timeworkers)-----	347	4.29	-	-	-	-	-	-	-	14	4	124	100	38	67	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class C (all timeworkers)-----	26	4.33	-	-	-	-	-	5	-	-	6	-	-	-	10	5	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners (all timeworkers)-----	376	3.48	20	-	14	10	9	21	13	77	137	14	36	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling (all timeworkers)-----	263	3.58	-	-	10	5	-	38	8	57	101	11	-	28	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A <sup>4</sup> -----	2,497	4.53	-	-	-	-	5	28	21	23	159	388	219	261	357	269	158	263	101	89	46	46	28	15	10	3	3	5
Time-----	2,082	4.41	-	-	-	-	5	28	21	20	156	382	188	234	306	238	117	222	69	57	16	12	11	-	-	-	-	-
Incentive-----	415	5.13	-	-	-	-	-	-	-	3	6	31	27	51	31	41	41	32	32	30	34	17	15	10	3	3	5	-
Automatic-lathe operators-----	57	4.23	-	-	-	-	-	10	-	2	8	15	8	-	2	3	-	3	-	2	5	-	-	-	-	-	-	-
Time-----	38	4.22	-	-	-	-	-	10	-	2	8	5	1	-	2	-	3	-	2	5	-	-	-	-	-	-	-	-
Drill-press operators, radial-----	226	4.36	-	-	-	-	-	10	-	5	20	23	65	58	13	11	10	5	1	2	2	2	1	-	-	-	-	-
Time-----	193	4.27	-	-	-	-	-	10	-	5	19	20	61	54	13	5	6	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle-----	100	4.22	-	-	-	-	5	10	-	1	18	14	15	5	6	1	3	1	5	1	7	8	-	-	-	-	-	-
Time-----	53	3.65	-	-	-	-	5	10	-	-	16	11	7	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators-----	364	4.83	-	-	-	-	-	-	-	8	18	4	27	100	41	10	69	48	13	5	9	9	1	-	-	-	-	2
Time-----	333	4.81	-	-	-	-	-	-	-	8	17	3	26	88	39	9	65	46	13	3	7	9	-	-	-	-	-	-
Incentive-----	31	5.02	-	-	-	-	-	-	-	-	1	1	1	12	2	1	4	2	-	2	2	2	1	-	1	-	-	2
Grinding-machine operators-----	476	4.07	-	-	-	-	-	18	1	-	102	179	52	26	33	11	15	37	-	-	-	1	1	-	-	-	-	-
Time-----	466	4.05	-	-	-	-	-	18	1	-	102	179	52	26	29	11	13	35	-	-	-	-	-	-	-	-	-	-
Incentive-----	10	5.03	-	-	-	-	-	-	-	-	-	-	-	4	-	2	2	-	-	-	1	1	-	-	-	-	-	-
Milling-machine operators-----	177	4.58	-	-	-	-	-	-	2	-	23	9	33	20	55	5	11	5	5	-	7	2	-	-	-	-	-	-
Time-----	151	4.59	-	-	-	-	-	-	-	23	7	29	12	47	5	11	5	5	-	5	2	-	-	-	-	-	-	-
Screw-machine operators, automatic-----	77	4.72	-	-	-	-	-	-	-	1	10	5	-	23	2	8	12	4	9	3	-	-	-	-	-	-	-	-
Time-----	31	4.25	-	-	-	-	-	-	-	1	10	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)-----	247	4.54	-	-	-	-	-	-	10	-	70	10	11	36	37	27	8	12	9	9	1	3	2	1	-	-	-	1
Time-----	194	4.34	-	-	-	-	-	-	10	-	70	9	8	31	35	21	-	5	-	5	-	-	-	-	-	-	-	-
Incentive-----	53	5.26	-	-	-	-	-	-	-	-	-	-	1	3	5	2	6	8	7	9	4	1	3	2	1	-	-	1
Machine-tool operators, production, class B <sup>4</sup> -----	1,534	4.24	-	10	5	20	20	60	30	76	160	135	129	255	225	200	46	27	24	31	45	17	14	2	3	-	-	-
Time-----	1,256	4.06	-	10	5	20	20	60	30	76	157	126	107	227	205	179	22	-	2	4	2	2	-	2	-	-	-	-
Automatic-lathe operators <sup>3</sup> -----	138	4.07	-	10	-	-	-	8	8	12	14	-	7	-	2	75	-	-	2	-	-	-	-	-	-	-	-	-
Drill-press operators, radial <sup>3</sup> -----	101	4.19	-	-	-	-	-	-	-	7	11	24	7	-	50	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle <sup>3</sup> -----	95	3.51	-	-	5	20	-	8	-	-	24	12	24	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Time-----	149	4.06	-	-	-	-	10	10	5	10	14	19	1	14	42	7	11	2	2	-	2	-	-	-	-	-	-	-
Engine-lathe operators-----	149	4.06	-	-	-	-	10	10	5	10	14	19	1	14	42	7	11	2	2	-	2	-	-	-	-	-	-	-
Time-----	132	3.97	-	-	-	-	10	10	5	10	13	19	-	10	40	5	10	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 20. Occupational earnings: Philadelphia, Pa.—N.J.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			Under \$2.20	\$2.20 and under \$2.40	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over		
<b>Men—Continued</b>																														
<b>Machine-tool operators, production, class B<sup>1</sup>—Continued</b>																														
Grinding-machine operators-----	271	\$4.81	-	-	-	-	-	-	4	1	6	16	24	51	29	13	20	20	18	21	27	12	5	1	3	-	-	-	-	
Time-----	96	4.29	-	-	-	-	-	-	4	1	4	15	13	35	16	-	-	-	2	-	2	-	-	-	-	-	-	-	-	
Milling-machine operators-----	253	4.32	-	-	-	-	-	-	3	6	13	18	24	146	15	2	4	2	3	4	8	2	3	-	-	-	-	-	-	
Time-----	216	4.20	-	-	-	-	-	-	3	6	13	10	23	143	14	-	2	-	-	2	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	170	4.48	-	-	-	-	-	10	-	3	10	2	30	10	28	42	11	3	1	4	6	3	6	1	-	-	-	-	-	
Time-----	129	4.28	-	-	-	-	-	10	-	3	10	2	23	5	26	40	10	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, class C<sup>4</sup>-----</b>																														
Time-----	465	3.33	-	30	28	53	18	65	65	62	29	80	32	40	1	3	3	6	-	-	-	-	-	-	-	-	-	-	-	
Incentive-----	50	4.03	-	30	28	53	18	64	65	61	19	59	27	35	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	
Automatic-lathe operators (all timeworkers)-----	82	3.77	-	-	4	-	4	-	2	16	-	52	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle <sup>3</sup> -----	23	3.26	-	-	-	-	9	-	5	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators (all timeworkers)-----	26	3.41	-	-	-	2	-	-	15	5	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators-----	64	3.74	-	4	4	-	5	1	-	1	11	21	5	5	1	3	1	2	-	-	-	-	-	-	-	-	-	-	-	
Time-----	22	3.29	-	4	4	-	5	-	-	-	5	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators (all timeworkers)-----	80	3.30	-	6	10	11	-	10	2	6	14	2	13	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine) (all timeworkers)-----	27	2.38	-	10	-	-	-	-	3	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production, numerically controlled machines<sup>4</sup>-----</b>																														
Time-----	492	4.65	-	-	5	-	-	5	5	5	2	28	23	115	28	92	23	119	64	12	-	8	-	-	-	-	-	-	-	
Incentive-----	48	4.88	-	-	-	-	-	-	-	1	10	-	4	2	6	-	2	15	-	-	8	-	-	-	-	-	-	-	-	
Drill-press operators, radial (all timeworkers)-----	17	4.49	-	-	-	-	-	-	-	-	5	-	-	6	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	63	4.64	-	-	-	-	-	-	1	1	18	4	8	-	9	-	-	14	-	-	8	-	-	-	-	-	-	-	-	
Time-----	20	4.11	-	-	-	-	-	-	1	-	8	4	4	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, toolroom (operate 1 type of machine) (all timeworkers)<sup>4</sup>-----</b>																														
Grinding-machine operators-----	142	4.48	-	-	21	-	-	-	-	5	28	15	5	5	5	6	6	12	6	10	6	2	4	6	-	-	-	-	-	
Time-----	12	4.27	-	-	-	-	-	-	-	-	-	10	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, toolroom (operate more than 1 type of machine)-----</b>																														
Time-----	150	4.68	-	-	-	-	-	-	1	34	8	7	8	38	18	14	9	3	4	2	1	-	1	-	-	-	-	-	2	
Time-----	123	4.50	-	-	-	-	-	-	1	34	8	7	5	36	18	10	4	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machinists, maintenance (all timeworkers)-----</b>																														
Time-----	110	4.83	-	-	-	-	-	-	1	-	2	9	3	15	9	2	68	1	-	-	-	-	-	-	-	-	-	-	-	
<b>Machinists, production (all timeworkers)-----</b>																														
Time-----	644	4.56	-	-	-	-	-	-	9	-	50	74	170	9	110	47	94	53	28	-	-	-	-	-	-	-	-	-	-	
<b>Mechanics, maintenance (all timeworkers)-----</b>																														
Time-----	119	4.69	-	-	-	-	-	-	-	13	-	5	1	42	3	12	8	35	-	-	-	-	-	-	-	-	-	-	-	
<b>Polishers and buffers, metal-----</b>																														
Time-----	44	4.15	-	-	12	-	-	-	4	-	-	8	6	1	-	1	2	1	3	-	3	1	-	-	1	-	1	-	1	
Time-----	31	3.51	-	-	12	-	-	-	4	-	-	8	5	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.



**Table 20. Occupational earnings: Philadelphia, Pa.—N.J.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME EARNINGS OF—																										
			Under \$2.20	\$2.20 and under \$2.40	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	\$6.80	\$7.00 and over	
<b>Men—Continued</b>																													
Polishing and buffing machine operators-----	52	\$4.17	-	-	-	2	-	-	-	6	7	19	10	1	-	-	-	1	-	-	1	1	-	-	-	-	2	-	2
Time-----	46	3.83	-	-	2	-	-	-	-	6	7	19	10	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class A (all timeworkers)-----	44	4.38	-	-	-	-	-	1	-	3	11	-	2	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B-----	87	3.93	-	-	-	7	-	-	13	18	30	-	10	2	-	-	1	1	2	2	1	-	-	-	-	-	-	-	
Time-----	76	3.77	-	-	-	7	-	-	13	16	30	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools (all timeworkers)-----	71	4.62	-	-	-	-	-	4	-	2	7	9	3	3	3	19	10	7	2	-	-	2	-	-	-	-	-	-	
Tool and/or die makers (jobbing) (all timeworkers)-----	385	5.28	-	-	-	-	4	-	-	-	-	-	-	8	8	30	23	128	47	24	65	6	32	4	-	-	-	6	
Tool and/or die makers (other than jobbing)-----	229	5.29	-	-	-	-	-	-	2	1	4	5	16	8	2	29	20	74	22	22	22	1	5	3	2	2	1	10	
Time-----	197	5.18	-	-	-	-	-	-	2	1	4	5	16	8	2	20	16	72	22	21	-	2	-	-	-	2	-	4	
Tool clerks (all timeworkers)-----	161	3.94	-	-	-	1	5	-	10	13	36	81	14	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class A-----	951	4.52	-	-	-	2	48	59	53	51	28	79	60	317	49	139	6	12	8	17	9	5	7	1	-	-	-	1	
Time-----	838	4.41	-	-	-	2	48	59	53	46	19	64	58	314	40	135	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class B-----	537	4.00	-	-	-	71	88	29	3	13	8	188	113	2	8	6	-	4	2	-	-	-	-	-	-	-	-	-	
Time-----	507	3.94	-	-	-	71	88	29	3	9	6	188	111	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class B (all timeworkers)-----	64	3.28	-	-	2	2	25	20	-	4	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Women</b>																													
Assemblers, class B (all timeworkers)-----	27	3.28	-	6	-	-	12	-	-	3	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)-----	23	2.87	5	5	-	2	-	3	4	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> The Philadelphia Standard Metropolitan Statistical Area consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa; and Burlington, Camden, and Gloucester Counties, N. J.  
<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.  
<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Includes data for operators of other machine tools in addition to those shown separately.  
<sup>5</sup> All workers were at \$2 to \$2.20.

**Table 21. Occupational earnings: Pittsburgh, Pa.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																							
			\$2.20 and under	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60 and over	
<b>Men</b>																										
Assemblers, class A-----	565	\$4.69	-	-	-	-	-	4	4	8	34	52	87	99	42	29	128	24	-	-	54	-	-	-	-	
Time-----	415	4.63	-	-	-	-	-	-	-	-	-	-	-	10	52	71	91	22	21	128	20	-	-	-	-	
Assemblers, class B-----	293	3.89	-	-	7	14	20	15	11	55	41	63	28	14	14	-	-	-	-	-	-	11	-	-	-	
Time-----	206	3.84	-	-	7	14	16	7	11	7	37	63	24	14	6	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C (all timeworkers)-	92	3.31	14	7	7	3	3	-	8	10	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carpenters, maintenance (all timeworkers)-----	17	4.68	-	-	-	-	-	-	-	-	-	-	6	-	-	11	-	-	-	-	-	-	-	-	-	
Electricians, maintenance (all timeworkers)-----	88	4.86	-	-	-	-	-	-	-	-	-	-	2	12	11	2	26	26	9	-	-	-	-	-	-	
Inspectors, class A-----	211	4.93	-	-	-	-	-	-	-	-	4	49	6	8	16	44	8	9	44	10	2	2	-	7	2	
Time-----	203	4.97	-	-	-	-	-	-	-	-	-	45	6	8	16	44	8	9	44	10	2	2	-	7	2	
Inspectors, class B-----	82	4.43	-	-	-	-	-	-	4	20	-	7	14	10	6	4	3	2	1	11	-	-	-	-	-	
Time-----	54	4.73	-	-	-	-	-	-	-	-	7	14	10	6	-	-	3	2	1	11	-	-	-	-	-	
Inspectors, class C-----	69	4.17	-	-	-	-	-	-	8	4	6	3	33	5	10	-	-	-	-	-	-	-	-	-	-	
Time-----	57	4.31	-	-	-	-	-	-	-	6	3	33	5	10	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)-----	120	3.49	-	-	15	6	9	32	13	18	-	-	19	8	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling (all timeworkers)-----	106	3.53	-	-	-	12	8	4	30	34	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>3</sup> -----	1,731	4.60	-	-	-	-	-	29	41	22	110	325	218	283	92	166	120	47	103	114	41	14	6	-	-	
Time-----	1,295	4.38	-	-	-	-	-	29	41	22	94	317	202	222	58	136	110	42	110	42	4	-	-	-	-	
Incentive-----	436	5.24	-	-	-	-	-	-	-	-	16	8	16	61	34	30	10	5	103	92	41	14	6	-	-	
Drill-press operators, radial-----	119	4.45	-	-	-	-	-	-	-	-	27	13	20	29	10	10	-	-	-	10	-	-	-	-	-	
Time-----	72	4.13	-	-	-	-	-	-	-	-	27	13	20	12	-	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle-----	41	4.23	-	-	-	-	-	2	2	4	6	-	11	8	4	4	-	-	-	-	-	-	-	-	-	
Time-----	17	3.79	-	-	-	-	-	2	2	4	6	-	3	-	-	-	-	-	-	-	-	-	-	-	-	
Engine-lathe operators-----	257	4.78	-	-	-	-	-	-	-	12	31	29	52	8	42	4	26	41	-	12	-	-	-	-	-	
Time-----	187	4.54	-	-	-	-	-	-	-	12	31	29	48	-	42	-	25	-	-	-	-	-	-	-	-	
Incentive-----	70	5.44	-	-	-	-	-	-	-	-	-	-	4	8	-	4	1	41	-	12	-	-	-	-	-	
Grinding-machine operators-----	291	4.86	-	-	-	-	6	3	3	8	9	40	42	3	60	25	15	27	50	-	-	-	-	-	-	
Time-----	216	4.71	-	-	-	-	6	3	3	-	9	40	38	3	52	25	15	-	22	-	-	-	-	-	-	
Incentive-----	75	5.26	-	-	-	-	-	-	-	8	-	-	4	-	8	-	-	27	28	-	-	-	-	-	-	
Milling-machine operators-----	240	4.56	-	-	-	-	-	-	-	-	94	47	20	11	26	4	3	-	24	5	-	6	-	-	-	
Time-----	176	4.29	-	-	-	-	-	-	-	-	94	43	8	7	22	-	2	-	-	-	-	-	-	-	-	
Incentive-----	64	5.28	-	-	-	-	-	-	-	-	-	4	12	4	4	4	1	-	24	5	-	6	-	-	-	
Screw-machine operators, automatic <sup>4</sup> -----	13	4.49	-	-	-	-	-	-	-	1	-	4	4	4	-	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	157	4.50	-	-	-	-	3	-	3	-	76	28	10	3	2	2	-	13	7	-	10	-	-	-	-	
Time-----	117	4.20	-	-	-	-	3	-	3	-	72	24	10	3	2	-	-	-	-	-	-	-	-	-	-	
Incentive-----	40	5.39	-	-	-	-	-	-	-	-	4	4	-	-	-	-	2	-	13	7	-	10	-	-	-	
Machine-tool operators, production, class B <sup>3</sup> -----	569	4.54	-	-	-	-	6	6	-	18	100	18	70	49	90	125	9	76	2	-	-	-	-	-	-	
Time-----	457	4.43	-	-	-	-	6	6	-	18	100	14	62	41	90	85	2	33	-	-	-	-	-	-	-	
Engine-lathe operators-----	113	4.66	-	-	-	-	-	-	-	-	-	-	36	9	22	40	6	-	-	-	-	-	-	-	-	
Time-----	67	4.47	-	-	-	-	-	-	-	-	-	-	36	9	22	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators-----	206	4.84	-	-	-	-	-	-	-	-	10	6	11	68	65	1	43	2	-	-	-	-	-	-	-	
Time-----	160	4.72	-	-	-	-	-	-	-	-	10	6	11	68	65	-	-	-	-	-	-	-	-	-	-	
Milling-machine operators (all timeworkers)-----	56	3.87	-	-	-	-	6	6	-	14	12	4	-	10	-	2	2	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 21. Occupational earnings: Pittsburgh, Pa.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																							
			\$2.20 and under	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60 and over	
			\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.20	\$6.40	\$6.60	and over	
<b>Men—Continued</b>																										
Machine-tool operators, production, class C <sup>3,4</sup> .....	193	\$4.08	-	-	2	-	6	-	18	29	22	47	6	11	51	1	-	-	-	-	-	-	-	-		
Grinding-machine operators (all timeworkers).....	95	4.39	-	-	2	-	-	-	-	-	14	16	-	11	51	1	-	-	-	-	-	-	-	-		
Machine-tool operators, production numerically controlled machines <sup>3</sup> .....	116	4.51	-	-	-	-	-	-	-	-	17	34	9	21	2	14	2	-	7	10	-	-	-	-		
Time.....	100	4.38	-	-	-	-	-	-	-	-	17	34	9	18	2	14	-	-	-	6	-	-	-	-		
Milling-machine operators.....	22	5.09	-	-	-	-	-	-	-	-	-	-	3	3	2	2	2	-	-	10	-	-	-	-		
Time.....	14	4.97	-	-	-	-	-	-	-	-	-	-	3	3	-	2	-	-	6	-	-	-	-	-		
Machine-tool operators, toolroom (operate 1 type of machine) <sup>3</sup> .....	46	4.64	-	-	-	-	-	-	-	-	3	15	-	4	-	-	14	10	-	-	-	-	-	-		
Time.....	34	4.40	-	-	-	-	-	-	-	-	3	15	-	4	-	-	12	-	-	-	-	-	-	-		
Grinding-machine operators <sup>4</sup> .....	34	4.52	-	-	-	-	-	-	-	-	3	15	-	4	-	-	2	10	-	-	-	-	-	-		
Machine-tool operators, toolroom (operate more than 1 type of machine) (all timeworkers).....	125	5.08	-	-	-	-	-	-	-	-	-	3	14	24	10	12	14	48	-	-	-	-	-	-		
Machinists, production.....	221	4.85	-	-	-	-	-	-	-	-	-	18	3	34	23	3	125	5	-	10	-	-	-	-		
Time.....	211	4.82	-	-	-	-	-	-	-	-	-	18	3	34	23	3	125	5	-	-	-	-	-	-		
Mechanics, maintenance <sup>4</sup> .....	155	4.73	-	-	-	-	-	-	-	-	-	2	8	62	17	28	38	-	-	-	-	-	-	-		
Polishing and buffing machine operators (all timeworkers).....	33	3.59	-	-	3	-	3	-	-	21	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
Punch-press operators, class A (all timeworkers).....	39	4.40	-	-	-	-	-	-	-	-	15	-	2	-	-	22	-	-	-	-	-	-	-	-		
Punch-press operators, class B (all timeworkers).....	29	3.91	-	-	-	-	-	2	-	11	2	14	-	-	-	-	-	-	-	-	-	-	-	-		
Tool and/or die makers (other than jobbing) <sup>4</sup> .....	72	4.89	-	-	-	-	-	-	-	-	2	-	-	-	33	19	8	4	-	6	-	-	-	-		
Tool clerks (all timeworkers).....	68	3.94	-	-	-	-	3	9	2	9	28	-	2	11	-	-	4	-	-	-	-	-	-	-		
Welders, hand, class A.....	302	4.81	-	-	-	-	-	-	-	-	25	-	56	61	-	19	112	1	4	-	-	-	24	-		
Time.....	289	4.80	-	-	-	-	-	-	-	-	25	-	56	57	-	15	112	-	-	-	-	-	24	-		
Welders, hand, class B <sup>4</sup> .....	155	4.04	-	-	-	-	-	2	-	55	3	46	14	30	-	5	-	-	-	-	-	-	-	-		
<b>Women</b>																										
Janitors, porters, and cleaners (all timeworkers).....	22	3.77	-	-	-	3	-	2	-	4	-	12	1	-	-	-	-	-	-	-	-	-	-	-		

<sup>1</sup> The Pittsburgh Standard Metropolitan Statistical Area consists of Allegheny, Beaver, Washington, and Westmoreland Counties.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Includes data for workers in classification in addition to those shown separately.

<sup>4</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

**Table 22. Occupational earnings: Portland, Oreg.—Wash.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																												
			Under \$3.10	\$3.10 and under \$3.20	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.10	\$5.20	\$5.40	\$5.60	\$5.80 and over			
Assemblers, class A.....	361	\$ 5.15	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	9	6	38	2	173	81	48	-	-		
Assemblers, class B.....	156	4.30	-	-	-	-	2	1	2	2	-	1	6	41	2	53	-	34	-	12	-	-	-	-	-	-	-	-	-		
Assemblers, class C.....	50	3.68	-	1	-	20	2	8	-	1	-	-	13	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-		
Electricians, maintenance.....	13	5.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	8	-	-	3	-	-		
Inspectors, class A.....	56	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	36	6	4	-	-	-		
Janitors, porters, and cleaners.....	44	3.84	4	6	-	-	1	-	-	10	5	2	11	6	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Laborers, material handling.....	75	4.25	-	-	-	-	7	1	-	-	-	2	10	22	1	-	6	1	14	11	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class A <sup>5</sup> .....	682	5.11	-	-	-	-	-	-	-	-	1	-	-	2	1	11	3	2	10	5	27	16	24	486	58	26	10	-	-		
Automatic-lathe operators.....	31	5.09	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	6	1	2	13	7	1	-	-	-	-		
Drill-press operators, radial.....	74	5.08	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	2	-	60	-	4	-	-	-	-		
Engine-lathe operators.....	231	5.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	6	12	20	154	17	19	-	-	-		
Grinding-machine operators.....	7	5.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	4	1	-	-	-	-		
Milling-machine operators.....	92	5.12	-	-	-	-	-	-	-	-	-	-	-	1	-	10	-	-	-	1	5	1	-	39	25	-	10	-	-		
Turret-lathe operators, hand (including hand screw machine)....	141	5.09	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	2	-	8	2	2	117	7	-	-	-	-	-		
Machine-tool operators, production, class B <sup>5</sup> .....	189	4.42	-	-	-	1	8	1	2	-	-	3	40	7	1	41	22	2	37	23	1	-	-	-	-	-	-	-	-	-	
Drill-press operators, radial.....	62	4.66	-	-	-	-	-	-	-	-	-	-	2	2	1	4	6	1	32	14	-	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle.....	26	4.00	-	-	-	1	8	1	1	-	-	2	4	-	-	8	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators.....	11	4.51	-	-	-	-	-	-	1	-	-	1	-	2	-	-	-	-	5	2	-	-	-	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)....	17	4.43	-	-	-	-	-	-	-	-	-	-	-	1	-	10	6	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine).....	27	5.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	2	16	2	-	-	-	-	
Mechanists, production.....	162	5.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	4	-	-	-	-	-	
Mechanics, maintenance.....	13	5.07	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	4	5	2	-	-	-	-	
Punch-press operators, class A.....	23	4.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	4	1	-	-	-	-	
Punch-press operators, class B.....	22	3.86	2	-	-	-	-	4	-	8	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tool and/or die makers (other than jobbing).....	15	5.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	8	-	-	
Tool clerks.....	12	4.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A.....	536	5.14	-	-	-	-	-	-	-	-	-	3	3	-	1	-	-	-	1	3	17	25	104	225	58	96	-	-	-	-	
Welders, hand, class B.....	12	4.24	-	-	2	-	-	-	-	-	-	-	-	1	2	1	5	-	1	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The Portland Standard Metropolitan Statistical Area consists of Clackamas, Multnomah, and Washington Counties, Oregon; and Clark County, Washington.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. All workers were paid on a time basis.

<sup>3</sup> Data limited to men workers.

<sup>4</sup> Workers were distributed as follows: 5 at \$2.90 to \$3; 1 at \$3 to \$3.10.

<sup>5</sup> Includes data for operators of other machine tools in addition to those shown separately.

**Table 23. Occupational earnings: St. Louis, Mo.—III.**<sup>1</sup>

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.70	\$2.70 and under \$2.80	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.40	\$6.80	and over
<b>Men</b>																													
Assemblers, class A-----	392	\$5.20	-	-	-	-	-	-	-	-	-	-	-	25	33	6	35	4	28	85	-	16	69	37	50	3	1		
Time-----	325	5.32	-	-	-	-	-	-	-	-	-	-	-	1	29	6	35	4	-	84	-	15	69	36	46	-	-		
Assemblers, class B-----	502	4.12	-	3	15	-	63	12	8	-	-	-	2	155	46	15	41	29	11	11	8	27	15	4	6	30	-	1	
Time-----	385	3.75	-	3	15	-	63	12	8	-	-	-	-	2	155	43	7	38	23	-	-	15	1	-	-	-	-	-	
Assemblers, class C <sup>3</sup> -----	598	3.71	-	-	-	-	-	5	78	-	-	18	43	65	331	14	37	1	2	-	2	-	-	-	-	-	-	-	
Carpenters, maintenance (all timeworkers)-----	11	5.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	7	-	-	-	-	-	-	-	
Electricians, maintenance-----	60	5.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	20	2	4	19	-	4	1	-	-	
Time-----	53	5.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	19	2	4	17	-	21	14	28	-	
Inspectors, class A-----	137	5.35	-	-	-	-	-	-	-	-	-	-	-	1	19	9	12	4	-	4	4	4	17	-	21	14	28	-	
Time-----	102	4.98	-	-	-	-	-	-	-	-	-	-	-	1	19	9	12	4	-	4	4	17	-	21	2	5	-		
Inspectors, class B <sup>3</sup> -----	130	4.20	-	-	-	-	-	-	-	-	-	-	-	-	33	22	68	2	-	-	-	1	-	-	-	3	1	-	
Inspectors, class C-----	35	3.80	-	-	-	-	-	-	3	-	12	-	1	2	9	5	-	-	1	1	-	1	-	1	-	-	-		
Time-----	29	3.66	-	-	-	-	-	-	3	-	12	-	2	7	5	-	-	-	-	-	-	-	-	-	-	-	-		
Janitors, porters, and cleaners (all timeworkers)-----	205	3.32	39	11	5	-	8	17	19	15	-	14	-	15	45	9	8	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling-----	413	3.67	-	16	-	3	6	1	11	3	18	4	236	12	36	19	47	-	-	-	1	-	-	-	-	-	-	-	
Time-----	390	3.66	-	16	-	3	6	1	8	3	18	3	235	11	22	19	45	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A <sup>5</sup> -----	1,073	5.47	-	-	-	-	-	-	-	-	-	-	-	1	1	53	110	90	116	47	68	116	85	117	128	95	46		
Time-----	719	5.14	-	-	-	-	-	-	-	-	-	-	-	-	-	51	109	86	112	44	24	90	63	87	43	10	-		
Automatic-lathe operators <sup>3</sup> -----	82	5.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	20	14	-	18	-	24	2	1	-			
Drill-press operators, radial <sup>3</sup> -----	41	5.22	-	-	-	-	-	-	-	-	-	-	-	1	11	1	11	1	2	-	1	-	24	-	-	-			
Grinding-machine operators-----	61	5.47	-	-	-	-	-	-	-	-	-	-	-	-	6	6	2	1	5	-	16	4	3	9	9	-			
Time-----	40	5.12	-	-	-	-	-	-	-	-	-	-	-	-	6	6	2	-	4	-	15	3	-	4	-	3			
Milling-machine operators-----	140	5.69	-	-	-	-	-	-	-	-	-	-	-	-	2	21	2	6	9	12	1	16	4	38	26	3			
Time-----	85	5.25	-	-	-	-	-	-	-	-	-	-	-	-	2	21	2	6	8	12	-	15	-	19	-	-			
Screw-machine operators, automatic-----	162	4.83	-	-	-	-	-	-	-	-	-	-	-	-	-	39	26	8	43	22	12	-	5	1	1	-	5		
Time-----	153	4.72	-	-	-	-	-	-	-	-	-	-	-	-	-	39	26	8	43	22	12	-	3	-	-	-			
Turret-lathe operators, hand (including hand screw machine)-----	140	5.22	-	-	-	-	-	-	-	-	-	-	-	-	1	1	6	33	33	11	-	15	18	1	14	4	3		
Time-----	115	5.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	30	32	10	-	12	15	-	10	-			
Machine-tool operators, production, class B <sup>5</sup> -----	621	4.19	-	-	-	-	-	-	4	3	48	28	87	165	90	81	29	6	13	13	12	6	1	6	10	13	6		
Time-----	516	3.98	-	-	-	-	-	-	4	3	48	28	85	159	80	72	17	-	6	8	6	-	-	-	-	-			
Drill-press operators, radial-----	40	5.07	-	-	-	-	-	-	-	-	11	-	5	3	-	-	-	-	-	-	3	-	3	-	7	-	2		
Time-----	22	3.99	-	-	-	-	-	-	-	-	11	-	5	3	-	-	-	-	-	-	3	-	-	-	-	-			
Drill-press operators, single- or multiple-spindle-----	123	4.03	-	-	-	-	-	-	-	-	36	5	25	6	9	11	10	6	10	6	4	-	-	-	-	-			
Time-----	78	3.83	-	-	-	-	-	-	-	-	36	5	23	-	1	4	-	-	6	6	3	-	-	-	-	-			
Engine-lathe operators (all timeworkers)-----	97	3.97	-	-	-	-	-	-	-	11	-	11	39	3	33	-	-	-	-	-	-	-	-	-	-	-			
Grinding-machine operators <sup>3</sup> -----	82	4.10	-	-	-	-	-	-	-	1	1	1	51	18	-	-	-	-	1	8	-	1	-	-	-	-			
Milling-machine operators-----	63	4.21	-	-	-	-	-	-	-	-	-	3	30	2	18	-	-	-	2	3	4	-	1	-	-	-			
Time-----	52	4.02	-	-	-	-	-	-	-	-	-	3	30	2	17	-	-	-	-	-	-	-	-	-	-	-			
Screw-machine operators, automatic-----	66	4.86	-	-	-	-	-	-	-	-	-	-	11	-	11	18	2	-	-	-	1	1	5	-	3	3	7	4	
Turret-lathe operators, hand (including hand screw machine) <sup>3</sup> -----	33	4.32	-	-	-	-	-	-	-	-	-	-	-	-	18	1	14	-	-	-	-	-	-	-	-	-			

See footnotes at end of table.

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**Table 23. Occupational earnings: St. Louis, Mo.—III.—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$2.70	\$2.70 and under	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.40	\$6.80	and over
			2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.40	6.80		
<b>Men—Continued</b>																													
Machining-tool operators, production, class <sup>3</sup> -----	190	\$3.64	-	59	-	-	-	3	3	-	6	24	2	6	51	24	-	-	-	-	-	-	1	-	-	-	3	8	-
Time-----	178	3.46	-	59	-	-	-	3	3	-	6	24	2	6	51	24	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle (all timeworkers)-----	37	3.70	-	-	-	-	-	3	-	-	3	9	2	6	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, numerically controlled machines <sup>2</sup> -----	161	5.43	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	16	10	27	34	5	13	13	1	23	4	12	
Time-----	133	5.16	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	16	10	27	34	4	12	12	-	15	-	-	
Automatic-lathe operators <sup>3</sup> -----	13	5.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	6	-	-	4	2	-	
Machine-tool operators (operate more than 1 type of machine) <sup>3</sup> -----	411	6.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	41	4	7	113	237	-	
Machinists, maintenance (all timeworkers)-----	62	5.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	26	2	2	-	12	9	-	
Machinists, production (all timeworkers)-----	428	5.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	12	52	44	-	-	28	268	-	-	
Mechanics, maintenance <sup>3</sup> -----	94	5.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	18	34	7	3	-	21	-	-	
Polishers and buffers, metal-----	52	4.45	-	-	-	-	-	-	-	-	-	-	3	5	23	-	-	7	1	3	1	4	4	1	-	-	-	-	
Time-----	41	4.21	-	-	-	-	-	-	-	-	-	-	3	5	23	-	-	7	-	3	-	-	-	-	-	-	-	-	
Polishing and buffing machine operators <sup>3</sup> -----	42	4.00	-	3	3	-	-	-	3	-	-	12	3	-	-	1	2	2	12	-	1	-	-	-	-	-	-	-	
Punch-press operators, class A-----	250	4.37	-	3	-	6	3	-	-	-	18	-	3	15	8	80	63	16	5	12	9	3	3	-	-	2	1	-	
Time-----	178	4.22	-	3	-	6	3	-	-	-	18	-	10	3	71	45	16	1	1	1	-	-	-	-	-	-	-	-	
Punch-press operators, class B-----	258	3.63	-	6	24	6	6	3	-	2	76	2	68	17	44	4	-	-	-	-	-	-	-	-	-	-	-	-	
Time-----	250	3.61	-	6	24	6	6	3	-	2	76	2	64	17	44	-	-	-	-	-	-	-	-	-	-	-	-	-	
Set-up men, machine tools (all timeworkers)-----	106	4.71	-	1	-	-	-	-	-	-	-	-	3	6	14	9	1	31	21	-	-	4	10	6	-	-	-	-	
Tool and/or die makers (jobbing) (all timeworkers)-----	343	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	301	28	
Tool and/or die makers (other than jobbing)-----	263	6.02	-	-	-	-	-	-	-	-	1	-	-	-	-	6	-	-	-	4	4	75	19	12	67	64	11	-	
Time-----	214	5.96	-	-	-	-	-	-	-	-	1	-	-	-	-	6	-	-	-	4	4	75	14	10	46	46	8	-	
Tool clerks (all timeworkers)-----	37	3.96	-	-	-	-	-	1	-	-	5	5	2	2	16	6	-	-	-	-	-	-	-	-	-	-	-	-	
Welders, hand, class A-----	214	5.34	-	-	-	-	-	-	-	-	7	-	-	-	21	2	25	-	4	36	6	7	-	-	82	15	8	1	
Time-----	205	5.31	-	-	-	-	-	-	-	-	7	-	-	-	21	2	25	-	4	36	3	6	-	-	81	15	5	-	
Welders, hand, class B (all timeworkers)-----	130	3.96	-	-	-	-	-	3	-	-	-	37	5	38	20	-	25	2	-	-	-	-	-	-	-	-	-	-	
Welders, machine, class B (all timeworkers)-----	80	3.69	-	-	-	-	-	-	-	27	6	44	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Women</b>																													
Assemblers, class B-----	93	4.41	-	-	-	6	-	-	-	-	2	31	18	2	2	-	1	2	6	3	5	2	5	7	-	1	-	-	
Time-----	53	3.72	-	-	-	6	-	-	-	-	2	30	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C-----	917	3.62	3	194	6	93	6	-	21	117	161	17	44	52	13	21	33	26	40	33	11	13	10	2	-	-	-	-	
Time-----	689	3.26	3	194	6	93	6	-	21	117	161	16	40	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class C-----	236	3.45	-	-	10	22	4	47	-	98	10	2	3	20	15	1	-	1	1	-	-	-	-	-	1	-	1	-	
Time-----	230	3.41	-	-	10	22	4	47	-	98	10	2	3	19	14	1	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners (all timeworkers)-----	10	3.24	62	-	-	-	-	-	4	-	1	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.

**Table 23. Occupational earnings: St. Louis, Mo.—III.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>3</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			Under \$2.70	\$2.70 and under \$2.80	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.40	\$6.80 and over
<b>Women—Continued</b>																												
Machine-tool operators, production, class B-----	46	\$4.13	-	-	-	-	-	-	-	-	-	-	-	8	8	14	9	4	1	-	1	-	-	-	1	-	-	-
Time-----	27	4.09	-	-	-	-	-	-	-	-	-	-	-	8	4	5	8	-	1	-	-	-	-	-	1	-	-	-
Machine-tool operators, production, class C <sup>3</sup> -----	348	3.83	-	8	-	-	6	6	72	96	-	3	10	1	30	16	15	12	15	17	21	13	4	2	-	1	-	-
Punch-press operators, class B (all timeworkers)-----	86	3.48	7	7	-	6	11	3	-	-	-	-	-	36	-	16	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The St. Louis Standard Metropolitan Statistical Area consists of the City of St. Louis; the counties of Franklin, Jefferson, St. Charles, and St. Louis, Mo.; and the counties of Madison and St. Clair, Ill.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>4</sup> Workers were distributed as follows: 14 at \$2.10 to \$2.20; 11 at \$2.40 to \$2.50; 7 at \$2.50 to \$2.60; and 7 at \$2.60 to \$2.70.

<sup>5</sup> Includes data for operators of other machine tools in addition to those shown separately.

<sup>6</sup> Workers were at \$2 to \$2.10.

**Table 24. Occupational earnings: San Francisco—Oakland, Calif.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation and sex	Number of workers	Average hourly earnings <sup>2</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																												
			\$1.80 and under \$2.00	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	\$6.00	\$6.40	\$6.80	\$7.20	\$7.60	\$8.00		
<b>Men</b>																															
Assemblers, class A-----	241	\$5.17	-	-	-	-	-	-	-	-	-	-	-	-	36	12	48	-	3	51	3	71	17	-	-	-	-	-	-		
Assemblers, class B-----	310	4.55	-	-	-	-	-	-	-	-	48	-	-	14	52	78	57	56	-	5	-	-	-	-	-	-	-	-	-		
Electricians, maintenance-----	26	6.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	-	3	-	-	9	-	-	-	-	6		
Inspectors, class A-----	135	5.66	-	-	-	-	-	-	-	-	-	2	2	4	-	6	-	-	-	14	4	4	75	17	-	-	-	-	-	-	
Inspectors, class B-----	28	4.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	3	13	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners-----	82	3.96	-	-	-	-	-	-	-	-	25	-	1	-	-	54	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling-----	51	4.55	-	-	-	-	-	-	-	-	-	-	-	-	11	28	-	12	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Machine-tool operators, production,</b>																															
class A <sup>3</sup> -----	773	6.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	30	-	-	166	152	348	53	8	-	-	-	-	
Engine-lathe operators-----	179	6.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	39	85	4	-	-	-	-	-	
Screw-machine operators, automatic-----	53	5.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	45	-	-	-	-	-	-	-	
Turret-lathe operators, hand (including hand screw machine)-----	27	5.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	13	-	1	-	-	-	-	-	
<b>Machine-tool operators, production,</b>																															
class B <sup>3</sup> -----	317	4.73	-	-	-	-	-	-	-	-	-	-	-	35	31	127	92	32	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial-----	42	4.81	-	-	-	-	-	-	-	-	-	-	-	-	-	12	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Milling-machine operators-----	24	4.70	-	-	-	-	-	-	-	-	-	-	-	-	-	8	11	5	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Machine-tool operators, production,</b>																															
class C <sup>3</sup> -----	331	4.59	-	-	-	-	-	-	-	4	-	4	-	4	46	16	223	-	34	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial-----	42	4.65	-	-	-	-	-	-	-	-	-	-	-	-	5	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Machine-tool operators, production,</b>																															
numerically controlled machines-----	94	5.11	-	-	-	-	-	-	-	-	-	-	-	-	3	15	8	10	-	34	17	-	7	-	-	-	-	-	-	-	-
Machinists, maintenance-----	48	6.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	-	-	-	37	4	-	-	-	-	-	-
Machinists, production-----	345	5.59	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	17	4	100	-	127	87	6	-	-	-	-	-	-	-
Punch-press operators, class A-----	56	5.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-	-	-	-	6	28	-	-	-	-	-	-	-	-
Tool and/or die makers (other than jobbing)-----	109	6.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	71	29	5	2	-	-	
Tool clerks-----	28	4.72	-	-	-	-	-	-	-	-	-	-	-	-	-	4	13	11	-	-	-	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A-----	332	5.61	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	2	-	26	90	165	3	30	-	-	-	-	-	-	-
<b>Women</b>																															
Assemblers, class B-----	64	3.64	-	-	-	-	16	14	5	4	-	-	-	-	10	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Assemblers, class C-----	486	3.10	32	65	43	35	24	94	21	21	-	-	-	151	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C-----	89	4.42	-	-	-	-	-	-	-	3	-	-	-	-	34	11	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>1</sup> The San Francisco-Oakland Standard Metropolitan Statistical Area consists of Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties.  
<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

All workers were paid on a time basis.  
<sup>3</sup> Includes data for operators of other machine tools in addition to those shown separately.





**Table 26. Occupational earnings: Worcester, Mass.<sup>1</sup>**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>2</sup> and under	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																										
			\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	
			\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	and over	
Assemblers, class A-----	259	\$4.44				10	2			2	17	5	1	9	26	12	45	11	31	22	12	17	5	17	6	5	1	3	
Time-----	192	4.27				10	2			2	16	4	1	9	25	10	43	8	26	19	4	13							
Assemblers, class B-----	187	3.86		5		3	3	21	12	25	14	18	28	15	18	7	4	7	1		2		1	1	2				
Time-----	160	3.81		5				20	10	24	13	18	27	15	17	6	1	4											
Assemblers, class C-----	51	3.58			2	1	6	9	15	4	6	4								3									
Time-----	43	3.50			1	2	5	9	15	4	5	2																	
Carpenters, maintenance	6	4.15					1									3	2												
Electrician, maintenance	25	4.56									1					2	5		7	6									
Time-----	21	4.59									1					1	4		5	6									
Inspectors, class A-----	98	4.30						6	2		8		5	5	16	17	13		7	7	1						1	3	
Time-----	92	4.21						6	2		8		5	5	16	17	13		7	6	1								
Inspectors, class B (all timeworkers)-	59	3.76				6	2	5	3	3	9	11	5	9	2	4													
Janitors, porters, and cleaners (all timeworkers)	76	3.17	20	4	16	10	6	16		4																			
Laborers, material handling (all timeworkers)	68	3.48	1	6	2	6	3	9	10	28	3																		
Machine-tool operators, production class A <sup>6</sup>	839	4.26					2	29	27	16	7	26	65	194	83	74	96	51	38	30	17	14	9	16	9	14	10	12	
Time-----	735	4.15					2	29	27	16	7	26	61	190	77	69	90	48	38	25	11	12		7					
Automatic-lathe operators (all timeworkers)	24	4.13										2		14			5	2	1										
Drill-press operators, radial	47	4.10							8	4		4	7	1	8	5	6		2								1	1	
Time-----	42	3.97							8	4		4	6	1	8	5	6												
Engine-lathe operators	66	4.33					2		3	3			9	16	6	9		4	6	1				2	1		3	1	
Time-----	56	4.17					2		3	3			9	14	6	9		4	6										
Grinding-machine operators	183	4.12						20	18	6		12	25	8	9	6	16	29	12	3	9	4	1	2	1		1	1	
Time-----	167	4.06						20	18	6		12	22	7	9	6	16	28	12	2	5	4							
Milling-machine operators	115	4.38					2				1	1	24	11	24	7	9	5	4	2	1	2	2	8	1	9	1	1	
Time-----	86	4.19					2				1	1	24	8	21	3	8	5	4	1		2		6					
Screw-machine operators, automatic <sup>4</sup>	30	4.44					2							1	9	10	1		1					1	2		1	2	
Turret-lathe operators, hand (including hand screw machine)	120	4.26								3		3	7	40	6	33	19					2				1		6	
Time-----	108	4.13								3		3	7	40	5	33	17												
Machine-tool operators, production, class B <sup>6</sup>	409	3.78	2	6	5	11	21	44	66	39	59	36	36	31	11	12	9	3	2	4	3		2	2		1	1	3	
Time-----	325	3.70			3	9	20	44	60	36	53	28	26	27	8	7	4												
Automatic-lathe operators <sup>4</sup>	15	3.77					2	2				5		1			3												
Drill-press operators, radial	17	3.82			1	2	1	1			1	2	5	2	1									1					
Time-----	14	3.74				1	2	1	1			2	4	2	1														
Drill-press operators, single- or multiple-spindle <sup>4</sup>	85	3.72	1	1	1	4	2	29	6	7	17	3	1		2	4	1	1	1	1	2							1	
Engine-lathe operators	20	3.94					2					3	3	4	3	2	2	1											
Time-----	18	3.93					2					3	3	2	3	2	2	1											
Grinding machine operators	102	3.69				4	13	6	20	11	23	8		8	2	5		1		1									
Time-----	98	3.67				4	13	6	20	11	22	7		8	2	5													
Milling-machine operators	78	3.82	1	5	3	1	1		30	6		7	4	8			3	1	1	1	1				1		1	2	
Time-----	49	3.65				2		1		30	3		4	3	6														
Turret-lathe operators, hand (including hand screw machine)	17	3.74					2	3	3	2	3	3	1																
Time-----	15	3.72					2	3	3	1	3	2	1																
Machine-tool operators, production, class C	71	3.48	1	5	4	3	8	11	20	5	10	4																	
Time-----	67	3.46	1	5	4	3	8	11	20	5	6	4																	

See footnotes at end of table.

**Table 26. Occupational earnings: Worcester, Mass.<sup>1</sup>—Continued**

(Number and average straight-time hourly earnings<sup>2</sup> of workers in selected occupations in machinery manufacturing establishments, February 1973)

Occupation <sup>3</sup>	Number of workers	Average hourly earnings <sup>4</sup>	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$2.90 and under	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80 and over
			\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80	
Machine-tool operators, production, numerically controlled machines <sup>5</sup> .....	65	\$4.22	-	-	2	-	-	2	-	2	2	10	5	10	3	5	11	-	5	-	-	-	-	5	-	1	-	2
Time.....	48	4.10	-	-	-	-	1	-	1	1	10	4	10	3	5	9	-	4	-	-	-	-	-	-	-	-	-	
Drill-press operators, single- or multiple-spindle.....	37	4.37	-	-	-	-	1	-	1	2	8	1	1	1	3	7	-	5	-	-	-	-	-	4	-	1	2	
Time.....	28	4.11	-	-	-	-	1	-	1	1	8	1	1	1	3	7	-	4	-	-	-	-	-	-	-	-	-	
Milling-machine operators (all timeworkers).....	16	4.07	-	-	-	-	-	-	-	-	1	3	8	2	1	1	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) <sup>6</sup> .....	188	3.97	-	-	-	3	1	16	4	32	25	-	39	21	37	7	-	1	-	-	-	-	-	-	1	1	-	
Time.....	186	3.95	-	-	-	3	1	16	4	32	25	-	39	21	37	7	-	1	-	-	-	-	-	-	-	-	-	
Engine-lathe operators (all timeworkers).....	18	3.80	-	-	-	-	-	1	-	14	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grinding-machine operators.....	21	4.26	-	-	-	-	1	-	-	-	1	-	9	-	1	6	-	1	-	-	-	-	-	-	1	1	-	
Time.....	19	4.14	-	-	-	-	1	-	-	-	1	-	9	-	1	6	-	1	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine) (all timeworkers).....	22	3.84	-	-	-	-	2	-	12	-	-	-	4	-	1	1	1	-	1	-	-	-	-	-	-	-	-	
Machinists, maintenance (all timeworkers).....	16	4.50	-	-	-	-	-	-	-	-	-	-	-	-	7	1	2	-	5	1	-	-	-	-	-	-	-	
Machinists, production <sup>4</sup> .....	158	4.46	-	-	-	-	5	-	-	7	5	4	5	16	-	39	-	6	5	20	45	-	-	-	-	-	1	
Mechanics, maintenance (all timeworkers).....	38	4.38	3	-	-	-	-	-	-	-	-	-	2	1	5	1	1	15	2	7	-	-	1	-	-	-	-	
Punch-press operators, class A <sup>4</sup> .....	10	4.13	-	-	-	-	-	-	-	-	6	-	-	-	1	1	-	1	-	-	-	-	1	-	-	-	-	
Tool and/or die makers (other than jobbing).....	79	4.63	-	-	-	-	-	1	-	-	-	8	-	-	9	4	-	22	17	-	1	1	6	-	3	7		
Time.....	67	4.50	-	-	-	-	1	-	-	-	-	8	-	-	8	4	-	22	17	-	1	-	6	-	-	-		
Tool clerks.....	23	3.62	-	5	-	3	2	3	3	3	-	-	1	1	-	-	-	1	-	-	-	-	-	-	1	-		
Time.....	21	3.50	-	5	-	3	2	3	3	3	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-		
Welders, hand, class A.....	30	4.40	-	-	-	-	-	2	-	-	1	1	2	5	1	7	-	6	1	1	-	-	1	-	1	1		
Time.....	25	4.26	-	-	-	-	-	2	-	-	1	1	5	1	7	-	6	1	-	-	-	-	-	-	-	-		
Welders, machine, class A (all timeworkers).....	8	4.08	-	-	-	-	-	-	-	-	-	2	2	4	-	-	-	-	-	-	-	-	-	-	-	-		

<sup>1</sup> The Worcester Standard Metropolitan Statistical Area consists of the City of Worcester, and the towns of Auburn, Berlin, Boylston, Brookfield, East Brookfield, Grafton, Holden, Leicester, Millbury, Northborough, Northbridge, North Brookfield, Oxford, Paxton, Shrewsbury, Spencer, Sterling, Sutton, Upton, Westborough, and West Boylston in Worcester County.

<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

<sup>3</sup> Data limited to men workers.

<sup>4</sup> Insufficient data to warrant publication of separate averages by method of wage payment, predominantly timeworkers.

<sup>5</sup> Includes 4 workers at \$2.60 to \$2.70; 6 at \$2.70 to \$2.80; and 4 at \$2.80 to \$2.90.

<sup>6</sup> Includes data for operators of other machine tools in addition to those shown separately.







**Table 30. Shift differential provisions: Plant workers**

(Percent of production workers in machinery manufacturing establishments by shift differential provisions, <sup>1</sup> February 1973)

Shift differential	Northeast							South					
	Boston	Buffalo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
<u>Second shift</u>													
Workers in establishments having second shift provisions -----	83.2	85.0	84.6	77.5	65.9	89.2	97.7	89.3	55.5	90.0	84.5	88.5	87.2
With shift differential -----	83.2	85.0	84.6	77.5	65.9	88.3	96.4	88.1	53.4	87.0	84.5	85.7	87.2
Uniform cents per hour -----	10.9	69.1	28.5	19.0	18.5	26.7	80.9	43.2	42.3	10.3	77.7	82.5	78.8
Under 10 cents -----	-	-	-	-	9.7	.5	4.1	-	2.9	-	-	15.3	-
10 cents -----	1.9	18.5	1.2	2.1	5.3	7.1	54.2	1.5	29.3	5.2	24.3	13.5	21.4
Over 10 and under 15 cents -----	1.1	-	2.4	-	-	-	10.8	-	-	-	4.0	11.1	20.7
15 cents -----	.7	24.1	.9	8.1	2.5	2.9	9.1	6.8	10.1	2.8	14.1	8.7	32.0
Over 15 and under 20 cents -----	-	11.4	-	-	-	-	2.8	-	-	-	4.4	19.1	-
20 cents -----	-	6.5	2.1	2.5	-	-	-	10.7	-	-	27.4	14.8	4.7
Over 20 and under 25 cents -----	-	-	2.2	.6	1.0	-	-	-	-	-	-	-	-
25 cents -----	4.5	5.5	1.2	3.0	-	4.1	-	24.2	-	-	3.6	-	-
Over 25 cents -----	2.6	3.2	18.4	2.7	-	12.2	-	-	2.3	-	-	-	-
Uniform percentage -----	63.1	15.9	55.3	55.9	47.4	61.7	10.5	42.7	4.1	76.7	5.1	-	8.4
4 percent -----	-	-	-	-	-	-	-	-	-	-	-	-	-
5 percent -----	-	1.2	18.3	14.3	-	-	1.2	6.0	4.1	31.2	-	-	-
Over 5 and under 10 percent -----	-	13.0	28.8	1.5	2.7	.2	-	1.9	-	2.9	-	-	-
10 percent -----	59.0	1.7	8.2	39.1	28.2	61.4	9.2	34.8	-	40.3	5.1	-	8.4
Over 10 and under 15 percent -----	3.4	-	-	1.0	8.3	-	-	-	-	-	-	-	-
15 percent -----	.4	-	-	-	8.1	-	-	-	-	2.4	-	-	-
Over 15 percent -----	.3	-	-	-	-	-	-	-	-	-	-	-	-
Other formal pay differential -----	9.2	-	.8	2.6	-	-	5.0	2.2	7.0	-	1.7	3.3	-
With no shift differential -----	-	-	-	-	-	.9	1.3	1.2	2.1	2.9	-	2.8	-
<u>Third or other late shift</u>													
Workers in establishments having third or other late shift provisions -----	66.6	79.3	72.2	70.4	34.1	65.2	89.8	70.2	23.3	83.5	45.0	67.7	56.6
With shift differential -----	66.6	79.3	72.2	70.4	34.1	63.4	89.8	69.0	23.3	83.5	40.6	65.0	56.6
Uniform cents per hour -----	10.2	46.0	22.2	16.5	5.2	16.3	78.2	31.6	20.3	7.3	40.6	63.7	53.4
Under 10 cents -----	-	-	-	-	-	-	.3	-	-	-	-	-	-
10 cents -----	1.9	5.5	-	.8	.5	.5	6.1	-	-	2.3	-	-	-
Over 10 and under 15 cents -----	1.1	-	-	-	-	-	3.8	-	-	-	-	-	12.5
15 cents -----	-	4.8	-	1.3	1.2	.2	48.4	-	20.3	-	8.2	3.3	-
Over 15 and under 20 cents -----	-	5.7	2.4	-	-	-	9.2	-	-	-	8.7	28.5	19.3
20 cents -----	-	19.3	-	6.0	-	2.6	3.9	3.2	-	2.8	23.7	12.8	21.5
Over 20 and under 25 cents -----	-	3.4	-	1.4	-	-	6.5	-	-	-	-	19.1	-
25 cents -----	2.3	5.5	5.4	4.3	2.5	4.1	-	4.2	-	-	-	-	-
Over 25 and under 30 cents -----	-	-	6.9	-	1.0	5.7	-	-	-	-	-	-	-
30 cents -----	-	-	2.0	-	-	-	-	-	2.3	-	-	-	-
Over 30 cents -----	4.9	1.8	5.4	2.7	-	3.4	-	24.2	-	-	-	-	-
Uniform percentage -----	47.2	15.9	49.3	51.2	28.8	45.8	7.6	35.2	-	73.3	-	-	3.3
5 percent -----	-	-	-	-	-	-	1.2	-	-	-	-	-	-
Over 5 and under 10 percent -----	-	1.2	2.8	-	-	.2	-	-	1.1	-	-	-	-
10 percent -----	18.8	14.6	46.5	47.6	21.6	43.3	6.4	35.2	-	72.1	-	-	3.3
Over 10 and under 15 percent -----	5.1	-	-	2.7	1.8	-	-	-	-	-	-	-	-
15 percent -----	23.2	-	-	1.0	5.4	2.3	-	-	-	-	-	-	-
20 percent -----	-	-	-	-	-	-	-	-	-	-	-	-	-
Other formal pay differential -----	9.2	17.4	.8	2.6	-	1.3	4.0	2.2	3.0	2.9	-	1.3	-
With no shift differential -----	-	-	-	-	-	1.7	-	1.2	-	-	4.4	2.8	-

See footnotes at end of table.

**Table 30. Shift differential provisions: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments by shift differential provisions, <sup>1</sup> February 1973)

Shift differential	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
<b>Second shift</b>										
Workers in establishments having second shift provisions -----	86.9	87.8	88.1	98.2	93.0	95.6	98.0	78.5	86.9	90.4
With shift differential -----	86.9	86.8	87.2	97.8	93.0	95.6	97.0	76.9	86.9	90.4
Uniform cents per hour -----	38.9	68.4	50.9	91.0	88.0	51.0	60.3	57.9	36.1	45.4
Under 10 cents -----	-	3.0	2.5	7	3.1	-	-	-	-	-
10 cents -----	5.0	7.1	7.9	11.7	17.1	12.5	22.7	6.0	-	10.0
Over 10 and under 15 cents -----	3.7	-	4.1	25.8	14.3	-	5.7	12.9	-	-
15 cents -----	6.1	14.5	4.7	25.3	27.4	15.2	21.5	23.6	17.6	5.3
Over 15 and under 20 cents -----	7.7	4.9	7	6.5	6.2	6.2	-	2.2	-	-
20 cents -----	6.6	13.0	14.6	2.8	12.9	-	8.5	5.1	-	15.7
Over 20 and under 25 cents -----	1.1	2.3	-	13.2	-	-	-	-	6.6	4.2
25 cents -----	7.3	18.9	14.4	3.9	2.0	14.8	1.9	7.2	6.3	6.8
Over 25 cents -----	1.5	4.5	2.0	1.1	5.0	2.4	-	8	5.6	3.3
Uniform percentage -----	45.7	14.8	36.2	5.2	5.0	44.6	33.9	14.7	4.9	14.9
4 percent -----	-	-	-	-	-	-	-	1.5	-	-
5 percent -----	1.0	2.2	25.8	3.5	-	14.2	-	5.1	-	1.0
Over 5 and under 10 percent -----	10.5	5.1	6.9	1.6	-	-	12.2	4	-	-
10 percent -----	32.3	7.4	3.6	-	5.0	30.4	21.7	7.6	4.9	13.9
Over 10 and under 15 percent -----	-	-	-	-	-	-	-	-	-	-
15 percent -----	1.8	-	-	1	-	-	-	-	-	-
Over 15 percent -----	.1	-	-	-	-	-	-	-	-	-
Other formal pay differential -----	2.3	3.7	-	1.6	-	-	2.7	4.4	45.9	30.1
With no shift differential -----	-	.9	1.1	.4	-	-	1.0	1.6	-	-
<b>Third or other late shift</b>										
Workers in establishments having third or other late shift provisions -----	74.3	59.7	70.0	93.3	73.7	87.8	86.2	40.6	73.5	77.6
With shift differential -----	74.2	59.7	70.0	93.0	73.7	87.8	86.2	40.6	73.5	77.6
Uniform cents per hour -----	34.8	42.1	37.2	79.8	71.2	33.4	34.5	18.6	16.7	17.8
Under 10 cents -----	-	-	-	-	-	-	-	-	-	-
10 cents -----	1.3	-	.7	3.0	2.1	1.6	6.5	-	-	-
Over 10 and under 15 cents -----	.9	3.1	.5	2.1	2.2	3.2	-	-	-	-
15 cents -----	3.8	9.1	8.3	4.8	28.6	1.2	17.8	3.1	-	-
Over 15 and under 20 cents -----	3.7	-	-	25.8	2.5	6.2	-	4.7	-	-
20 cents -----	6.5	1.5	8.1	18.7	24.3	5.9	8.9	5.9	-	-
Over 20 and under 25 cents -----	6.7	12.8	1.8	7.4	-	-	-	1.5	-	-
25 cents -----	10.0	8.5	14.2	3.3	.8	13.1	-	3.5	-	2.2
Over 25 and under 30 cents -----	.7	-	-	-	-	-	-	-	-	-
30 cents -----	-	7.0	2.5	10.7	.6	-	1.4	-	10.6	4.4
Over 30 cents -----	1.2	-	1.2	3.9	10.1	2.4	-	-	5.6	11.3
Uniform percentage -----	38.6	8.5	30.9	3.8	2.5	43.3	33.9	2.8	-	13.9
5 percent -----	1.0	-	-	-	-	-	-	-	-	-
Over 5 and under 10 percent -----	10.2	-	2.1	1.3	-	-	-	.5	-	-
10 percent -----	21.6	8.5	28.9	2.5	2.5	43.3	12.2	2.3	-	-
Over 10 and under 15 percent -----	3.2	-	-	-	-	-	21.7	-	-	-
15 percent -----	2.0	-	-	-	-	-	-	-	-	6.2
20 percent -----	-	-	-	-	-	-	-	-	-	7.7
Other formal pay differential -----	1.7	9.1	1.9	9.4	-	11.0	17.7	19.1	57.3	46.0
With no shift differential -----	.2	-	-	.4	-	-	-	-	-	-

<sup>1</sup> Refers to policies of establishments either currently operating late shifts or having provisions covering late shifts.

<sup>2</sup> Less than 0.05 percent

NOTE: Because of rounding, sums of individual items may not equal totals.



**Table 31. Shift differential practices: Plant workers**

(Percent of production workers in machinery manufacturing establishments employed on late shifts by amount of pay differential, February 1973)

Shift differential	Northeast								South				
	Boston	Buffalo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
<u>Second shift</u>													
Workers employed on second shift -----	10.0	20.0	19.5	14.5	6.3	18.5	21.0	14.5	4.8	22.2	14.8	20.6	21.4
Receiving shift differential -----	10.0	20.0	19.5	14.5	6.3	18.4	20.7	14.5	4.3	21.7	14.8	19.7	21.4
Uniform cents per hour -----	1.3	15.3	4.8	2.5	2.5	4.1	18.5	5.5	4.1	1.2	12.9	19.6	20.5
Under 10 cents -----	-	-	-	-	1.8	-	(1)	-	-	-	-	4.8	-
10 cents -----	.1	3.9	-	-	.2	.9	11.8	.1	3.5	-	3.7	4.6	3.2
Over 10 and under 15 cents -----	-	-	.7	-	-	-	2.3	-	-	-	.8	2.7	5.1
15 cents -----	.1	4.3	.2	1.0	.5	.5	2.9	.3	.6	.5	2.8	1.6	11.5
Over 15 and under 20 cents -----	-	3.2	-	-	-	-	1.5	-	-	-	1.4	2.2	-
20 cents -----	-	2.0	.2	.5	-	-	-	1.9	-	-	4.0	3.5	.7
Over 20 and under 25 cents -----	-	-	.3	-	.1	-	-	-	-	-	-	-	-
25 cents -----	.5	1.2	.2	.6	-	.2	-	3.2	-	-	.2	-	-
Over 25 cents -----	.5	.7	3.2	.3	-	2.5	-	-	.7	-	-	-	-
Uniform percentage -----	7.1	4.7	14.6	11.3	3.8	14.3	1.7	8.8	20.5	1.6	-	-	.9
4 percent -----	-	-	-	-	-	-	-	-	-	-	-	-	-
5 percent -----	-	.4	8.3	6.4	-	-	.3	1.9	-	11.7	-	-	-
Over 5 and under 10 percent -----	-	4.1	5.6	.3	-	-	-	.3	-	.2	-	-	-
10 percent -----	6.2	.2	.8	4.6	2.5	14.3	1.4	6.5	-	8.7	1.6	-	.9
Over 10 and under 15 percent -----	.9	-	-	-	.5	-	-	-	-	-	-	-	-
15 percent -----	-	-	-	-	.8	-	-	-	-	-	-	-	-
Over 15 percent -----	(1)	-	-	-	-	-	-	-	-	-	-	-	-
Other formal pay differential -----	1.7	-	.1	.7	-	-	.5	.2	.2	-	.4	.1	-
Receiving no shift differential -----	-	-	-	-	-	.1	.2	-	.5	.5	-	.9	-
<u>Third or other late shift</u>													
Workers employed on third or other late shift -----	.9	1.8	1.4	.7	.4	6.2	8.2	1.3	-	9.1	1.7	6.5	1.8
Receiving shift differential -----	.9	1.8	1.4	.7	.4	6.2	8.2	1.3	-	9.1	1.4	6.0	1.8
Uniform cents per hour -----	.1	.6	.3	.4	.3	.3	7.3	.4	-	1.4	6.0	1.4	-
Under 10 cents -----	-	-	-	-	-	-	-	-	-	-	-	-	-
10 cents -----	-	-	-	-	-	-	.9	-	-	-	-	-	-
Over 10 and under 15 cents -----	-	-	-	-	-	-	-	-	-	-	-	-	-
15 cents -----	-	-	-	-	.1	(1)	5.1	-	-	-	.4	-	-
Over 15 and under 20 cents -----	-	-	(1)	-	-	-	.7	-	-	-	.9	4.2	-
20 cents -----	-	-	-	.1	-	.1	.1	-	-	-	.1	.6	1.4
Over 20 and under 25 cents -----	-	.1	-	.1	-	.4	-	-	-	-	-	1.2	-
25 cents -----	.1	.5	.2	.2	.1	-	-	-	-	-	-	-	-
Over 25 and under 30 cents -----	-	-	-	-	(1)	(1)	-	-	-	-	-	-	-
30 cents -----	-	-	.1	-	-	-	-	-	-	-	-	-	-
Over 30 cents -----	-	.1	-	.1	-	.2	-	.5	-	-	-	-	-
Uniform percentage -----	.7	.7	1.2	.2	.1	6.0	.4	.9	9.0	-	-	-	.4
5 percent -----	-	-	-	-	-	-	.1	-	-	-	-	-	-
Over 5 and under 10 percent -----	-	-	-	-	-	-	-	-	-	-	-	-	-
10 percent -----	.4	.7	1.2	.1	(1)	5.9	.3	.9	9.0	-	-	-	.4
Over 10 and under 15 percent -----	-	-	-	.1	-	-	-	-	-	-	-	-	-
15 percent -----	.2	-	-	-	.1	.1	-	-	-	-	-	-	-
Other formal pay differential -----	.2	.5	-	.1	-	-	.5	-	-	.2	(1)	.5	-
Receiving no shift differential -----	-	-	-	-	-	-	-	-	-	.3	-	-	-

See footnote at end of table.

**Table 31. Shift differential practices: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments employed on late shifts by amount of pay differential, February 1973)

Shift differential	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis-- St. Paul	St. Louis	Denver	Los Angeles-- Long Beach and Anaheim-- Santa Ana-- Garden Grove	Portland	San Francisco-- Oakland
<u>Second shift</u>										
Workers employed on second shift -----	17.9	19.6	18.7	22.6	19.6	13.1	20.8	14.2	16.0	16.0
Receiving shift differential -----	17.9	19.4	18.5	22.5	19.6	13.1	20.8	14.0	16.0	16.0
Uniform cents per hour -----	8.2	15.1	8.5	21.6	19.1	7.5	14.5	10.9	5.0	8.2
Under 10 cents -----	-	( <sup>1</sup> )	-	-	.6	-	-	-	-	-
10 cents -----	.6	.8	1.1	3.2	1.9	.9	5.1	2.0	-	-
Over 10 and under 15 cents -----	.3	-	.6	5.9	2.6	-	2.0	2.7	-	-
15 cents -----	.9	1.7	1.0	5.8	8.5	1.6	5.4	3.1	.9	.9
Over 15 and under 20 cents -----	2.3	1.1	.1	.5	.8	1.5	-	.8	-	-
20 cents -----	1.5	4.5	2.3	.7	3.2	-	1.9	.7	-	4.5
Over 20 and under 25 cents -----	.3	.4	-	3.8	-	-	-	-	1.2	.4
25 cents -----	2.3	5.3	2.9	1.3	.4	3.2	-	1.4	1.0	2.1
Over 25 cents -----	( <sup>1</sup> )	1.2	.4	.2	1.1	.3	-	.1	1.9	.4
Uniform percentage -----	9.4	3.4	9.9	.9	.5	5.6	6.0	2.4	2.0	1.5
4 percent -----	-	-	-	-	-	-	-	.5	-	-
5 percent -----	.1	.7	8.1	.5	-	2.7	-	.6	-	-
Over 5 and under 10 percent -----	2.8	1.7	1.6	.4	-	-	1.3	( <sup>1</sup> )	-	-
10 percent -----	6.3	1.0	.2	-	.5	2.9	4.7	1.2	2.0	1.5
Over 10 and under 15 percent -----	-	-	-	-	-	-	-	-	-	-
15 percent -----	.2	-	-	( <sup>1</sup> )	-	-	-	-	-	-
Over 15 percent -----	( <sup>1</sup> )	-	-	-	-	-	-	-	-	1.2
Other formal pay differential -----	.4	1.0	-	.1	-	-	.4	.7	9.0	6.3
Receiving no shift differential -----	-	.2	.2	.1	-	-	-	.1	-	-
<u>Third or other late shift</u>										
Workers employed on third or other late shift -----	4.2	2.0	1.7	6.3	3.3	3.4	2.7	1.0	3.4	2.1
Receiving shift differential -----	4.2	2.0	1.7	6.2	3.3	3.4	2.7	1.0	3.4	2.1
Uniform cents per hour -----	2.8	1.9	.9	5.0	3.3	2.0	1.5	.2	-	.2
Under 10 cents -----	-	-	-	-	-	-	-	-	-	-
10 cents -----	( <sup>1</sup> )	-	-	.1	-	-	.4	-	-	-
Over 10 and under 15 cents -----	-	-	-	-	-	-	-	-	-	-
15 cents -----	-	.3	( <sup>1</sup> )	( <sup>1</sup> )	1.0	-	.8	-	-	-
Over 15 and under 20 cents -----	( <sup>1</sup> )	-	-	2.0	.1	-	-	.1	-	-
20 cents -----	( <sup>1</sup> )	.1	.6	1.1	1.1	.1	.3	.1	-	-
Over 20 and under 25 cents -----	1.0	1.2	( <sup>1</sup> )	.1	-	-	-	-	-	-
25 cents -----	1.6	.3	.1	.7	( <sup>1</sup> )	1.9	-	-	-	-
Over 25 and under 30 cents -----	( <sup>1</sup> )	-	.2	.3	1.1	-	-	-	-	.2
30 cents -----	-	-	-	-	-	-	-	-	-	-
Over 30 cents -----	.1	-	-	.6	-	-	-	-	-	-
Uniform percentage -----	1.4	.8	.1	( <sup>1</sup> )	.6	.6	1.2	-	-	.2
5 percent -----	-	-	-	-	-	-	-	-	-	-
Over 5 and under 10 percent -----	.7	-	.1	-	-	-	-	-	-	-
10 percent -----	.5	-	.6	.1	( <sup>1</sup> )	.6	-	-	-	-
Over 10 and under 15 percent -----	.1	-	-	-	-	-	1.2	-	-	.2
15 percent -----	-	-	-	-	-	-	-	-	-	-
Other formal pay differential -----	.1	.1	-	1.1	-	.8	-	.8	3.4	1.7
Receiving no shift differential -----	-	-	-	.1	-	-	-	-	-	-

<sup>1</sup> Less than 0.05 percent.

**Table 32. Paid holidays: Plant workers**

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid holidays, February 1973)

Number of paid holidays	Northeast								South				
	Boston	Buffalo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
All workers	100	100	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing paid holidays	100	100	100	100	100	100	100	100	100	100	100	100	100
3 days	5	-	-	-	-	-	-	-	-	-	-	-	-
5 days	-	-	-	-	-	-	-	-	22	2	12	1	3
5 days plus 1 half day	-	-	-	-	-	-	-	-	-	-	-	-	-
6 days	-	(1)	-	2	-	1	1	-	41	4	(1)	5	7
6 days plus 1, 2, or 3 half days	-	-	-	-	-	-	-	-	-	-	3	4	-
7 days	-	5	6	6	6	4	3	-	16	5	15	10	10
7 days plus 1, 2, or 3 half days	1	-	1	2	1	3	1	-	-	2	3	1	-
8 days	1	3	10	5	4	7	12	7	10	4	24	10	47
8 days plus 1, 2, or 3 half days	1	-	-	4	1	2	1	-	-	2	2	1	-
9 days	9	7	3	9	26	30	35	61	2	43	35	27	34
9 days plus 1 half day	19	6	1	-	4	1	6	-	-	-	-	-	-
9 days plus 2 half days	4	-	2	1	3	6	-	3	-	-	-	-	-
10 days	23	44	44	10	14	26	31	14	8	37	5	37	-
10 days plus 1, 2, or 3 half days	16	-	-	4	6	5	-	4	-	-	-	-	-
11 days	17	32	14	27	18	10	5	11	-	-	-	-	-
11 days plus 1 half day	3	-	-	4	2	-	-	-	-	-	-	-	-
12 days	3	-	18	18	10	4	-	-	-	-	-	-	-
12 days plus 1 half day	-	-	-	-	1	-	-	-	-	-	-	-	-
13 days	-	-	-	7	2	-	-	-	-	-	-	-	-
14 days	-	-	-	-	2	-	-	-	-	-	-	-	-
18 days	-	-	-	1	-	-	-	-	-	-	-	-	-
Workers in establishments providing no paid holidays	-	-	-	-	-	-	-	-	-	-	-	-	-
	North Central							West					
	Chicago	Cleveland	Detroit	Milwaukee	Minne- apolis- St. Paul	St. Louis	Denver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Portland	San Francisco- Oakland			
All workers	100	100	100	100	100	100	100	100	100	100			
Workers in establishments providing paid holidays	100	100	99	100	100	100	100	100	100	100			
3 days	-	-	-	-	-	-	-	-	-	-			
5 days	-	-	-	-	-	-	6	-	-	-			
5 days plus 1 half day	-	-	-	-	-	-	-	-	-	-			
6 days	8	9	7	1	6	1	3	19	1	-			
6 days plus 1, 2, or 3 half days	3	4	3	1	2	2	2	1	-	3			
7 days	1	3	4	(1)	5	11	6	4	2	9			
7 days plus 1, 2, or 3 half days	5	6	1	1	-	1	-	5	-	5			
8 days	4	3	7	1	12	-	7	18	26	4			
8 days plus 1, 2, or 3 half days	(1)	4	1	(1)	5	5	-	6	21	9			
9 days	20	14	7	18	33	25	6	26	50	63			
9 days plus 1 half day	2	(1)	-	-	1	-	3	-	-	-			
9 days plus 2 half days	3	2	-	-	-	3	-	-	-	-			
10 days	32	38	20	40	31	34	51	14	-	7			
10 days plus 1, 2, or 3 half days	1	-	-	-	-	4	5	-	-	-			
11 days	5	15	9	37	5	14	-	3	-	-			
11 days plus 1 half day	-	-	-	1	-	-	-	-	-	-			
12 days	16	1	39	-	-	-	-	1	-	-			
12 days plus 1 half day	-	-	-	-	-	-	-	3	-	-			
13 days	-	-	1	-	-	-	-	-	-	-			
14 days	-	-	-	-	-	-	-	-	-	-			
18 days	-	-	-	-	-	-	-	-	-	-			
Workers in establishments providing no paid holidays	-	-	1	-	-	-	-	-	-	-			

<sup>1</sup> Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal 100.



**Table 34. Paid vacations: Plant workers**

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	Northeast								South				
	Boston	Buffalo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
All workers-----	100	100	100	100	100	100	100	100	100	100	100	100	100
<u>Method of payment</u>													
Workers in establishments providing paid vacations-----	100	100	100	100	100	100	100	100	100	100	100	100	100
Length-of-time payment-----	98	80	96	91	98	87	75	79	97	100	90	93	91
Percentage payment-----	2	20	4	9	2	8	25	21	3	-	10	7	9
Other-----	-	-	-	-	-	5	-	-	-	-	-	-	-
<u>Amount of vacation pay<sup>1</sup></u>													
After 1 year of service:													
Under 1 week-----	-	-	-	-	-	-	-	-	-	-	-	-	-
1 week-----	44	87	43	88	79	85	92	75	89	96	68	90	87
Over 1 and under 2 weeks-----	5	-	44	3	7	2	-	-	-	-	-	-	-
2 weeks-----	49	13	14	9	14	12	5	25	11	5	33	10	13
Over 2 weeks-----	2	-	-	-	-	-	3	-	-	-	-	-	-
After 2 years of service:													
Under 1 week-----	-	-	-	-	-	-	-	-	-	-	-	-	-
1 week-----	26	63	35	34	14	26	62	51	56	42	23	12	18
Over 1 and under 2 weeks-----	8	9	44	21	13	20	11	2	5	6	-	( <sup>2</sup> )	4
2 weeks-----	63	28	19	45	70	54	25	47	40	52	77	87	78
Over 2 and under 3 weeks-----	2	-	2	-	3	-	3	-	-	-	-	-	-
3 weeks or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-
After 3 years of service:													
1 week-----	1	5	10	3	4	7	1	3	21	8	8	2	3
Over 1 and under 2 weeks-----	8	5	25	22	3	18	3	2	5	3	2	( <sup>2</sup> )	-
2 weeks-----	89	91	63	75	88	75	93	95	74	87	90	98	97
Over 2 and under 3 weeks-----	2	-	2	1	4	-	3	-	-	1	-	-	-
3 weeks and over-----	-	-	-	-	2	-	-	-	-	-	-	-	-
After 5 years of service:													
1 week and under 2 weeks-----	-	-	1	3	3	4	3	2	9	-	-	( <sup>2</sup> )	-
2 weeks-----	78	69	62	84	71	83	74	98	87	99	86	95	100
Over 2 and under 3 weeks-----	22	18	37	9	13	5	18	-	-	1	2	5	-
3 weeks-----	-	13	-	5	11	8	5	-	4	-	12	-	-
Over 3 weeks-----	-	-	-	-	2	-	-	-	-	-	-	-	-
After 10 years of service:													
1 week and under 2 weeks-----	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks-----	21	10	17	16	12	15	4	5	65	15	37	44	26
Over 2 and under 3 weeks-----	4	-	22	17	8	3	3	2	7	1	-	( <sup>2</sup> )	-
3 weeks-----	76	77	60	64	73	77	84	93	22	84	53	55	75
Over 3 and under 4 weeks-----	-	-	-	2	4	5	-	-	-	-	-	-	-
4 weeks or more-----	-	13	-	1	5	-	9	-	4	-	11	-	-
After 15 years of service:													
1 week and under 2 weeks-----	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks-----	10	5	5	9	6	6	3	-	47	10	13	8	10
Over 2 and under 3 weeks-----	-	-	-	-	-	-	3	2	-	-	-	-	-
3 weeks-----	74	37	48	52	78	45	45	94	43	79	73	88	79
Over 3 and under 4 weeks-----	12	33	45	18	2	16	29	-	4	1	-	3	-
4 weeks-----	4	24	1	21	12	34	12	4	4	10	14	-	11
Over 4 weeks-----	-	-	-	-	2	-	9	-	-	-	-	-	-

See footnotes at end of table.

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**Table 34. Paid vacations: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
All workers-----	100	100	100	100	100	100	100	100	100	100
<u>Method of payment</u>										
Workers in establishments providing paid vacations-----	100	100	99	100	100	100	100	100	100	100
Length-of-time payment-----	77	92	77	74	98	96	97	96	100	47
Percentage payment-----	22	8	23	26	2	4	3	3	-	53
Other-----	1	-	-	-	-	-	-	1	-	-
<u>Amount of vacation pay<sup>1</sup></u>										
After 1 year of service:										
Under 1 week-----	-	-	( <sup>2</sup> )	( <sup>2</sup> )	-	-	-	-	-	-
1 week-----	65	78	70	75	77	88	44	69	100	32
Over 1 and under 2 weeks-----	5	10	4	17	7	6	-	3	-	7
2 weeks-----	21	6	19	3	16	6	56	19	-	60
Over 2 weeks-----	9	6	6	4	-	-	-	9	-	2
After 2 years of service:										
Under 1 week-----	-	-	( <sup>2</sup> )	-	-	-	-	-	-	-
1 week-----	34	43	34	25	25	61	18	17	69	-
Over 1 and under 2 weeks-----	3	29	11	21	9	-	8	2	-	10
2 weeks-----	52	22	46	45	66	36	74	68	31	88
Over 2 and under 3 weeks-----	3	-	5	5	-	3	-	8	-	2
3 weeks or more-----	8	6	3	4	-	-	-	5	-	-
After 3 years of service:										
1 week-----	3	9	4	3	-	-	2	3	-	-
Over 1 and under 2 weeks-----	2	32	27	9	2	2	8	2	-	-
2 weeks-----	75	50	50	70	98	95	82	80	100	97
Over 2 and under 3 weeks-----	13	4	11	13	1	3	9	10	-	3
3 weeks and over-----	8	6	8	4	-	-	-	5	-	-
After 5 years of service:										
1 week and under 2 weeks-----	2	4	1	-	-	-	4	3	-	-
2 weeks-----	71	77	52	68	82	81	54	68	99	84
Over 2 and under 3 weeks-----	5	12	23	27	5	19	9	13	-	6
3 weeks-----	20	6	18	4	13	-	34	10	1	11
Over 3 weeks-----	1	2	6	1	-	-	-	5	-	-
After 10 years of service:										
1 week and under 2 weeks-----	2	1	-	-	-	-	2	2	-	-
2 weeks-----	8	16	9	1	4	2	10	21	19	7
Over 2 and under 3 weeks-----	5	13	36	( <sup>2</sup> )	-	2	2	1	-	-
3 weeks-----	70	61	36	81	96	96	77	62	81	90
Over 3 and under 4 weeks-----	13	9	11	18	1	-	9	3	-	3
4 weeks or more-----	2	1	8	-	-	-	-	10	-	( <sup>2</sup> )
After 15 years of service:										
1 week and under 2 weeks-----	2	1	-	-	-	-	2	-	-	-
2 weeks-----	4	3	7	( <sup>2</sup> )	1	2	9	18	3	7
Over 2 and under 3 weeks-----	1	1	10	( <sup>2</sup> )	-	-	-	-	-	-
3 weeks-----	51	41	51	28	86	65	46	58	95	67
Over 3 and under 4 weeks-----	6	25	14	16	4	16	9	7	-	3
4 weeks-----	36	30	14	52	9	17	35	12	2	23
Over 4 weeks-----	-	-	5	4	-	-	-	5	-	-

See footnotes at end of table.

**Table 34. Paid vacations: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	Northeast—Continued								South—Continued				
	Boston	Buffalo	Hartford— New Britain— Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
<b>Amount of vacation pay<sup>1</sup>—Continued</b>													
After 20 years of service:													
1 week -----	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks -----	10	5	5	5	6	6	3	-	31	10	13	8	10
Over 2 and under 3 weeks -----	-	-	-	-	-	-	3	-	-	-	-	-	-
3 weeks -----	22	4	16	21	44	17	34	3	54	10	38	24	35
Over 3 and under 4 weeks -----	-	-	1	3	1	2	9	2	-	1	-	-	-
4 weeks -----	68	70	79	67	44	68	31	95	9	79	49	68	55
Over 4 and under 5 weeks -----	-	6	-	3	3	5	11	-	4	-	-	-	-
5 weeks -----	-	15	-	1	2	2	7	-	-	-	-	-	-
Over 5 weeks -----	-	-	-	-	-	-	4	-	-	-	-	-	-
After 25 years of service:													
1 week -----	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks -----	10	5	5	4	6	5	3	-	31	10	13	8	10
Over 2 and under 3 weeks -----	-	-	-	-	-	-	3	-	-	-	-	-	-
3 weeks -----	20	4	13	18	41	17	5	1	49	10	38	20	35
Over 3 and under 4 weeks -----	-	-	-	1	1	1	-	-	-	-	-	-	-
4 weeks -----	50	57	49	59	44	60	64	79	14	37	49	69	55
Over 4 and under 5 weeks -----	2	6	28	9	3	-	12	-	-	1	-	-	-
5 weeks -----	18	15	4	9	6	12	4	20	-	42	-	2	-
Over 5 weeks -----	-	13	-	-	-	5	9	-	4	-	-	-	-
After 30 years of service: <sup>3</sup>													
1 week -----	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks -----	10	5	5	4	6	5	3	-	31	10	13	8	10
Over 2 and under 3 weeks -----	-	-	-	-	-	-	3	-	-	-	-	-	-
3 weeks -----	20	4	13	17	40	17	5	1	49	10	35	20	35
Over 3 and under 4 weeks -----	-	-	-	1	1	1	-	-	-	-	-	-	-
4 weeks -----	41	57	46	45	36	37	49	58	14	6	53	69	55
Over 4 and under 5 weeks -----	2	6	29	4	3	-	1	-	-	1	-	-	-
5 weeks -----	27	15	6	28	15	35	29	35	-	73	-	2	-
Over 5 and under 6 weeks -----	-	-	-	-	-	5	-	-	-	-	-	-	-
6 weeks and over -----	-	13	-	-	-	-	9	6	4	-	-	-	-

See footnotes at end of table.

**Table 34. Paid vacations: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	North Central—Continued						West—Continued			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach— and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
<b>Amount of vacation pay<sup>1</sup>—Continued</b>										
After 20 years of service:										
1 week -----	-	1	-	-	-	-	2	-	-	-
2 weeks -----	6	3	7	( <sup>2</sup> )	1	2	9	18	3	7
Over 2 and under 3 weeks -----	1	-	10	( <sup>2</sup> )	-	-	-	-	-	-
3 weeks -----	16	17	17	3	23	17	26	36	71	20
Over 3 and under 4 weeks -----	3	7	11	1	-	-	-	6	-	3
4 weeks -----	56	58	44	63	72	81	49	33	27	56
Over 4 and under 5 weeks -----	2	1	1	18	-	-	14	5	-	14
5 weeks -----	16	12	8	12	4	-	-	1	-	-
Over 5 weeks -----	-	-	2	3	-	-	-	( <sup>2</sup> )	-	-
After 25 years of service:										
1 week -----	-	1	-	-	-	-	2	-	-	-
2 weeks -----	6	3	7	( <sup>2</sup> )	1	2	9	18	3	7
Over 2 and under 3 weeks -----	1	-	10	( <sup>2</sup> )	-	-	-	-	-	-
3 weeks -----	14	13	17	3	23	14	20	35	61	20
Over 3 and under 4 weeks -----	3	3	11	1	-	-	-	5	-	3
4 weeks -----	38	51	45	17	68	74	24	35	23	56
Over 4 and under 5 weeks -----	2	3	1	2	-	-	14	6	13	14
5 weeks -----	31	26	7	61	8	11	31	1	-	-
Over 5 weeks -----	6	1	3	14	-	-	-	( <sup>2</sup> )	-	-
After 30 years of service: <sup>3</sup>										
1 week -----	-	1	-	-	-	-	2	-	-	-
2 weeks -----	6	3	7	( <sup>2</sup> )	1	2	9	18	3	7
Over 2 and under 3 weeks -----	1	-	10	( <sup>2</sup> )	-	-	-	-	-	-
3 weeks -----	14	13	17	3	23	14	20	35	61	20
Over 3 and under 4 weeks -----	3	2	11	1	-	-	-	5	-	3
4 weeks -----	38	42	43	17	66	74	24	35	23	56
Over 4 and under 5 weeks -----	2	5	1	2	-	-	14	6	-	14
5 weeks -----	29	33	9	23	9	11	31	1	13	-
Over 5 and under 6 weeks -----	-	1	2	6	-	-	-	-	-	-
6 weeks and over -----	8	-	1	47	-	-	-	( <sup>2</sup> )	-	-

<sup>1</sup> Vacation payments such as percent of annual earnings were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 10 years may include changes which occurred between 5 and 10 years.

<sup>2</sup> Less than 0.5 percent.

<sup>3</sup> Maximum vacation provisions were virtually the same.

NOTE: Because of rounding, sums of individual items may not equal totals.



**Table 35. Paid vacations: Office workers**

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	Northeast								South				
	Boston	Buffalo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
All workers	100	100	100	100	100	100	100	100	100	100	100	100	100
<u>Method of payment</u>													
Workers in establishments providing paid vacations	100	100	100	100	100	100	100	100	100	100	100	100	100
Length-of-time payment	100	96	100	100	100	100	100	72	100	100	99	100	100
Percentage payment	-	4	-	-	-	-	-	28	-	-	2	-	-
<u>Amount of vacation pay<sup>1</sup></u>													
After 1 year of service:													
Under 1 week	-	-	-	-	-	-	-	-	-	-	-	-	-
1 week	16	35	20	13	22	13	13	8	70	16	18	53	24
Over 1 and under 2 weeks	-	-	-	-	2	1	-	-	-	-	-	-	-
2 weeks	82	65	59	74	76	86	82	92	30	84	83	46	76
Over 2 and under 3 weeks	2	-	22	13	( <sup>2</sup> )	-	2	-	-	-	-	1	-
3 weeks and over	-	-	-	1	-	-	-	-	-	-	-	-	-
After 2 years of service:													
Under 1 week	-	-	-	-	-	-	-	-	-	-	-	-	-
1 week	8	18	5	4	2	5	7	5	34	7	4	1	4
Over 1 and under 2 weeks	2	1	-	4	2	4	1	( <sup>2</sup> )	4	2	-	( <sup>2</sup> )	-
2 weeks	87	81	71	78	93	91	91	94	62	91	96	98	96
Over 2 and under 3 weeks	2	-	24	13	3	-	2	-	-	-	-	-	-
3 weeks or more	-	-	-	1	( <sup>2</sup> )	-	-	-	-	-	-	1	-
After 3 years of service:													
1 week	-	5	5	1	1	4	1	1	12	3	1	( <sup>2</sup> )	-
Over 1 and under 2 weeks	2	1	-	2	( <sup>2</sup> )	3	-	( <sup>2</sup> )	4	2	1	( <sup>2</sup> )	-
2 weeks	95	94	65	80	94	91	97	99	85	96	98	99	100
Over 2 and under 3 weeks	2	-	30	16	4	2	2	-	-	-	-	-	-
3 weeks	-	-	-	1	( <sup>2</sup> )	-	-	-	-	-	-	1	-
Over 3 weeks	-	-	-	-	-	-	-	-	-	-	-	-	-
After 5 years of service:													
1 week and under 2 weeks	-	4	1	2	( <sup>2</sup> )	1	-	( <sup>2</sup> )	7	-	-	( <sup>2</sup> )	-
2 weeks	81	49	68	63	74	76	58	99	93	100	70	96	100
Over 2 and under 3 weeks	19	22	24	17	12	10	8	-	-	-	5	3	-
3 weeks	-	25	6	18	12	13	34	-	-	-	25	1	-
Over 3 weeks	-	-	-	-	2	-	-	-	-	-	-	-	-
After 10 years of service:													
1 week and under 2 weeks	-	4	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks	20	7	26	7	19	15	6	2	66	5	30	33	25
Over 2 and under 3 weeks	7	-	15	2	4	1	2	( <sup>2</sup> )	3	-	-	( <sup>2</sup> )	-
3 weeks	73	67	52	73	72	78	54	98	29	95	49	66	75
Over 3 and under 4 weeks	-	-	6	16	1	6	18	-	-	-	-	-	-
4 weeks or more	-	22	-	1	4	-	19	-	-	-	21	1	-
After 15 years of service:													
1 week	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks	7	8	6	5	14	6	6	2	43	3	9	12	2
Over 2 and under 3 weeks	-	-	-	-	-	-	2	( <sup>2</sup> )	-	-	-	-	-
3 weeks	77	46	61	28	72	41	41	93	52	94	71	81	80
Over 3 and under 4 weeks	13	22	26	17	2	14	6	-	3	-	-	-	-
4 weeks	2	25	7	43	13	39	25	6	-	3	21	6	19
Over 4 and under 5 weeks	-	-	-	6	-	-	-	-	-	-	-	-	-
5 weeks	-	-	-	-	-	-	19	-	-	-	-	1	-

See footnotes at end of table.

**Table 35. Paid vacations: Office workers—Continued**

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
All workers	100	100	100	100	100	100	100	100	100	100
<u>Method of payment</u>										
Workers in establishments providing paid vacations	100	100	100	100	100	100	100	100	100	100
Length-of-time payment	96	90	97	94	99	100	100	100	100	88
Percentage payment	4	10	3	6	1	-	-	-	-	12
<u>Amount of vacation pay<sup>1</sup></u>										
After 1 year of service:										
Under 1 week	-	-	( <sup>2</sup> )	-	-	-	-	-	-	-
1 week	18	25	16	40	20	27	7	30	67	4
Over 1 and under 2 weeks	1	7	4	( <sup>2</sup> )	1	-	-	4	-	( <sup>2</sup> )
2 weeks	74	68	79	60	79	73	93	52	33	95
Over 2 and under 3 weeks	7	-	1	-	-	-	-	14	-	-
3 weeks and over	-	-	( <sup>2</sup> )	-	-	-	-	( <sup>2</sup> )	-	-
After 2 years of service:										
Under 1 week	-	-	( <sup>2</sup> )	-	-	-	-	-	-	-
1 week	9	15	5	5	5	13	2	9	63	-
Over 1 and under 2 weeks	( <sup>2</sup> )	( <sup>2</sup> )	2	2	-	-	1	1	-	-
2 weeks	84	84	86	93	95	87	98	72	37	100
Over 2 and under 3 weeks	7	-	1	( <sup>2</sup> )	-	-	-	9	-	-
3 weeks or more	-	-	6	-	-	-	-	9	-	-
After 3 years of service:										
1 week	1	4	2	2	-	-	1	5	-	-
Over 1 and under 2 weeks	( <sup>2</sup> )	2	( <sup>2</sup> )	2	-	1	1	1	-	-
2 weeks	82	90	72	88	99	99	98	75	100	99
Over 2 and under 3 weeks	17	4	17	8	-	-	-	11	-	( <sup>2</sup> )
3 weeks	-	-	9	-	-	-	-	( <sup>2</sup> )	-	-
Over 3 weeks	-	-	( <sup>2</sup> )	-	-	-	-	9	-	-
After 5 years of service:										
1 week and under 2 weeks	-	1	( <sup>2</sup> )	-	-	-	2	4	-	-
2 weeks	78	90	59	87	61	92	55	63	99	94
Over 2 and under 3 weeks	4	2	5	10	2	-	-	13	-	4
3 weeks	19	7	36	3	37	8	44	10	( <sup>2</sup> )	3
Over 3 weeks	-	-	( <sup>2</sup> )	-	-	-	-	9	-	-
After 10 years of service:										
1 week and under 2 weeks	-	1	-	-	-	-	1	4	-	-
2 weeks	5	21	8	3	3	1	6	23	32	8
Over 2 and under 3 weeks	3	2	9	-	-	1	-	1	-	-
3 weeks	73	72	53	91	96	98	92	54	68	92
Over 3 and under 4 weeks	17	4	17	5	1	-	-	4	-	( <sup>2</sup> )
4 weeks or more	2	( <sup>2</sup> )	13	1	-	-	-	14	-	( <sup>2</sup> )
After 15 years of service:										
1 week	-	1	-	-	-	-	1	-	-	-
2 weeks	2	3	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6	12	9	6
Over 2 and under 3 weeks	-	-	2	-	-	-	-	-	-	-
3 weeks	66	54	54	53	84	66	46	64	68	79
Over 3 and under 4 weeks	1	19	3	5	-	-	-	8	-	( <sup>2</sup> )
4 weeks	26	23	36	42	15	34	47	8	23	15
Over 4 and under 5 weeks	5	-	-	-	-	-	-	9	-	-
5 weeks	-	-	( <sup>2</sup> )	-	-	-	-	-	-	-

See footnotes at end of table.

**Table 35. Paid vacations: Office workers—Continued**

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	Northeast—Continued							South—Continued					
	Boston	Buffalo	Hartford— New Britain— Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
<u>Amount of vacation pay</u> <sup>1</sup> —Continued													
After 20 years of service:													
1 week	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks	7	8	6	4	10	6	6	-	25	3	9	12	2
Over 2 and under 3 weeks	-	-	-	-	-	-	2	-	-	-	-	-	-
3 weeks	18	8	23	11	38	17	18	1	49	8	30	22	33
Over 3 and under 4 weeks	-	-	15	-	1	1	-	( <sup>2</sup> )	-	-	-	-	-
4 weeks	75	53	50	65	48	62	36	99	21	89	61	66	66
Over 4 and under 5 weeks	-	8	-	13	-	7	18	-	3	-	-	-	-
5 weeks	-	24	6	7	4	7	17	-	-	-	-	1	-
6 weeks	-	-	-	-	-	-	3	-	-	-	-	-	-
After 25 years of service:													
1 week	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks	7	8	6	4	10	5	5	-	25	3	9	12	2
Over 2 and under 3 weeks	-	-	-	-	-	-	2	-	-	-	-	-	-
3 weeks	14	8	12	10	33	15	6	1	40	8	30	17	33
Over 3 and under 4 weeks	-	-	-	-	1	1	-	-	-	-	-	-	-
4 weeks	55	48	50	26	47	49	48	76	29	36	61	69	66
Over 4 and under 5 weeks	3	8	22	18	-	1	18	-	-	-	-	-	-
5 weeks	21	28	10	41	8	23	2	23	-	53	-	3	-
Over 5 weeks	-	-	-	-	-	6	19	-	3	-	-	-	-
After 30 years of service: <sup>3</sup>													
1 week	-	-	( <sup>2</sup> )	1	-	-	-	-	2	-	-	-	-
2 weeks	7	8	6	4	10	5	5	-	25	3	9	12	2
Over 2 and under 3 weeks	-	-	-	-	-	-	2	-	-	-	-	-	-
3 weeks	14	8	12	10	33	15	6	1	22	8	27	17	33
Over 3 and under 4 weeks	-	-	-	-	1	1	-	-	-	-	-	-	-
4 weeks	42	48	49	12	27	38	32	46	48	16	65	69	61
Over 4 and under 5 weeks	3	8	23	13	-	1	-	-	-	-	-	-	-
5 weeks	33	6	10	60	29	35	33	49	-	72	-	3	5
Over 5 and under 6 weeks	-	-	-	-	-	6	-	-	-	-	-	-	-
6 weeks and over	-	22	-	-	-	-	22	4	3	-	-	-	-

See footnotes at end of table.

**Table 35. Paid vacations: Office workers—Continued**

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, February 1973)

Vacation policy	North Central—Continued						West—Continued			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach— and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
<u>Amount of vacation pay<sup>1</sup>—Continued</u>										
After 20 years of service:										
1 week	-	1	-	-	-	-	1	-	-	-
2 weeks	2	3	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6	12	9	6
Over 2 and under 3 weeks	-	-	2	-	-	-	-	-	-	-
3 weeks	15	17	15	4	16	16	16	24	43	25
Over 3 and under 4 weeks	-	7	2	-	-	-	-	5	-	( <sup>2</sup> )
4 weeks	61	68	58	81	80	83	75	50	48	60
Over 4 and under 5 weeks	7	-	-	7	-	-	2	9	-	9
5 weeks	15	5	19	9	4	-	-	1	-	-
6 weeks	-	-	-	-	-	-	-	( <sup>2</sup> )	-	-
After 25 years of service:										
1 week	-	1	-	-	-	-	1	-	-	-
2 weeks	2	3	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6	12	9	6
Over 2 and under 3 weeks	-	-	2	-	-	-	-	-	-	-
3 weeks	14	16	14	4	16	15	14	24	42	25
Over 3 and under 4 weeks	-	-	2	-	-	-	-	4	-	( <sup>2</sup> )
4 weeks	46	62	54	29	70	75	26	49	45	57
Over 4 and under 5 weeks	-	-	-	( <sup>2</sup> )	-	-	2	11	4	9
5 weeks	29	19	24	64	13	10	51	1	-	3
Over 5 weeks	9	-	( <sup>2</sup> )	3	-	-	-	( <sup>2</sup> )	-	-
After 30 years of service: <sup>3</sup>										
1 week	-	1	-	-	-	-	1	-	-	-
2 weeks	2	3	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6	12	9	6
Over 2 and under 3 weeks	-	-	2	-	-	-	-	-	-	-
3 weeks	14	16	14	4	16	15	14	24	42	25
Over 3 and under 4 weeks	-	-	2	-	-	-	-	4	-	( <sup>2</sup> )
4 weeks	46	43	54	29	68	75	26	49	45	56
Over 4 and under 5 weeks	-	7	-	( <sup>2</sup> )	-	-	2	10	-	11
5 weeks	27	31	24	21	15	10	51	2	4	3
Over 5 and under 6 weeks	-	-	-	1	-	-	-	-	-	-
6 weeks and over	11	-	( <sup>2</sup> )	45	-	-	-	( <sup>2</sup> )	-	-

<sup>1</sup> Vacation payments such as percent of annual earnings were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 10 years may include changes which occurred between 5 and 10 years.

<sup>2</sup> Less than 0.5 percent.

<sup>3</sup> Maximum vacation provisions were virtually the same.

NOTE: Because of rounding, sums of individual items may not equal totals.

**Table 36. Health, insurance and retirement plans: Plant workers**

(Percent of production workers in machinery manufacturing establishments with specified health, insurance and retirement plans<sup>1</sup> February 1973)

Type of plan	Northeast								South				
	Boston	Buffalo	Hartford— New Britain— Bristol	Newark and Jersey City	New York	Phila- delphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:													
Life insurance -----	93	99	98	98	92	97	96	100	87	94	98	96	100
Noncontributory plans -----	78	86	81	89	69	93	95	64	65	63	62	47	65
Accidental death and dismemberment insurance -----	81	78	87	71	57	85	66	93	67	61	84	78	88
Noncontributory plans -----	67	78	80	67	54	81	61	63	54	61	48	47	47
Sickness and accident insurance or sick leave or both <sup>2</sup> -----	89	82	97	67	79	91	96	99	40	94	84	83	81
Sickness and accident insurance -----	74	80	96	56	38	86	96	94	30	88	83	61	71
Noncontributory plans -----	58	64	86	49	38	83	94	80	23	86	51	33	47
Sick leave (full pay, no waiting period) -----	46	5	6	13	71	31	5	37	9	38	9	10	25
Sick leave (partial pay, or waiting period) -----	-	-	2	5	2	4	-	9	5	3	9	26	4
Hospitalization insurance -----	99	100	99	99	98	99	100	100	100	100	96	100	100
Noncontributory plans -----	62	94	79	98	93	97	93	70	65	92	64	49	53
Surgical insurance -----	100	100	99	99	98	99	100	100	100	100	96	100	100
Noncontributory plans -----	62	94	79	98	83	97	93	70	65	92	64	49	53
Medical insurance -----	95	94	93	96	93	95	97	100	74	100	96	100	100
Noncontributory plans -----	58	88	74	95	76	93	92	70	45	92	64	49	53
Major medical insurance -----	98	58	79	66	50	85	94	100	68	82	92	98	84
Noncontributory plans -----	58	45	54	62	44	85	88	70	38	74	64	49	37
Dental insurance -----	3	-	2	5	28	-	-	-	2	-	-	4	-
Noncontributory plans -----	2	-	2	5	28	-	-	-	2	-	-	2	-
Retirement plans <sup>3</sup> -----	79	97	76	85	78	88	95	95	49	92	53	78	76
Pensions -----	79	97	76	85	78	88	95	95	49	92	53	78	73
Noncontributory plans -----	69	97	75	78	77	83	95	95	30	34	51	74	61
Severance pay -----	-	-	-	1	-	5	-	-	-	-	-	7	3
No plans -----	-	-	-	1	2	-	-	-	-	-	2	-	-

See footnotes at end of table.

**Table 36. Health, insurance and retirement plans: Plant workers—Continued**

(Percent of production workers in machinery manufacturing establishments with specified health, insurance and retirement plans, <sup>1</sup> February 1973)

Type of plan	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
All workers	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:										
Life insurance	99	95	95	99	92	97	93	93	99	96
Noncontributory plans	74	87	93	95	85	91	92	78	99	95
Accidental death and dismemberment insurance	84	74	90	85	77	93	53	83	94	85
Noncontributory plans	64	69	88	82	73	91	53	69	94	84
Sickness and accident insurance or sick leave or both <sup>2</sup>	91	88	91	99	95	98	89	48	78	88
Sickness and accident insurance	87	88	90	98	65	91	45	10	18	37
Noncontributory plans	64	79	89	95	59	89	43	7	77	37
Sick leave (full pay, no waiting period)	5	1	9	-	31	11	48	36	9	35
Sick leave (partial pay or waiting period)	5	( <sup>4</sup> )	1	1	4	7	8	9	-	19
Hospitalization insurance	99	100	99	100	100	100	100	99	100	100
Noncontributory plans	76	94	97	91	92	98	89	78	97	99
Surgical insurance	99	100	99	100	100	100	100	100	100	100
Noncontributory plans	76	94	97	91	95	98	89	79	97	99
Medical insurance	97	99	94	100	100	100	100	100	100	100
Noncontributory plans	74	92	92	91	95	98	89	79	97	99
Major medical insurance	73	48	42	84	90	74	97	100	100	96
Noncontributory plans	51	43	40	77	69	72	85	79	97	95
Dental insurance	10	2	( <sup>4</sup> )	7	5	-	-	19	78	70
Noncontributory plans	10	2	( <sup>4</sup> )	5	5	-	-	17	54	67
Retirement plans <sup>3</sup>	83	82	86	95	88	85	56	61	97	78
Pensions	79	80	82	87	76	85	56	56	97	78
Noncontributory plans	77	80	82	82	75	85	56	44	97	60
Severance pay	5	2	4	8	23	-	-	5	-	7
No plans	( <sup>4</sup> )	-	( <sup>4</sup> )	-	-	-	-	-	-	-

<sup>1</sup> Includes only those plans for which the employer pays at least part of the cost and excludes legally required plans such as workmen's compensation and social security. However, plans required by State temporary disability insurance laws are included if the employer contributes more than is required or the employers receive benefits over the legal requirements. \*Noncontributory plans\* include only those financed entirely by the employer.

<sup>2</sup> Unduplicated total of workers in plants having sick leave or sickness and accident insurance shown separately.

<sup>3</sup> Unduplicated total of workers in plants having pension and severance pay plans shown separately.

<sup>4</sup> Less than 0.5 percent.

NOTE - Because of rounding, sums of individual items may not equal totals.

**Table 37. Health, insurance and retirement plans: Office workers**

(Percent of office workers in machinery manufacturing establishments with specified health, insurance and retirement plans, <sup>1</sup> February 1973)

Type of plan	Northeast								South				
	Boston	Buffalo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pittsburgh	Worcester	Atlanta	Baltimore	Dallas	Houston	Tulsa
All workers	100	100	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:													
Life insurance	98	99	98	98	93	90	96	100	89	98	99	94	99
Noncontributory plans	78	71	64	75	58	70	90	63	66	46	43	41	49
Accidental death and dismemberment insurance	90	73	82	77	51	77	64	96	77	44	85	90	99
Noncontributory plans	70	71	60	53	44	68	61	56	60	44	36	50	43
Sickness and accident insurance or sick leave or both <sup>2</sup>	85	64	99	80	84	84	97	99	59	98	95	93	85
Sickness and accident insurance	67	59	94	67	38	75	66	92	37	38	81	51	66
Noncontributory plans	55	59	71	43	36	65	63	78	25	37	53	24	42
Sick leave (full pay, no waiting period)	59	52	43	48	78	40	72	93	21	88	36	73	38
Sick leave (partial pay, or waiting period)	-	-	-	-	-	4	-	5	12	1	15	7	4
Hospitalization insurance	99	99	99	99	95	98	99	100	100	100	96	100	100
Noncontributory plans	56	94	75	85	87	91	94	57	65	97	59	30	37
Surgical insurance	100	99	99	99	95	98	99	100	100	100	96	100	100
Noncontributory plans	56	94	75	85	83	91	94	57	65	97	59	30	37
Medical insurance	97	96	92	98	90	91	97	100	74	100	96	100	100
Noncontributory plans	53	87	67	84	77	84	93	57	44	97	59	30	37
Major medical insurance	96	85	95	87	80	91	97	100	74	94	96	100	100
Noncontributory plans	50	54	66	57	68	79	93	57	44	38	59	30	37
Dental insurance	2	-	2	3	4	(3)	-	-	1	-	-	5	-
Noncontributory plans	2	-	2	3	4	(3)	-	-	1	-	-	5	-
Retirement plans <sup>3</sup>	87	96	86	84	77	79	82	98	70	98	45	69	69
Pensions	87	96	86	84	77	79	82	98	70	98	45	69	66
Noncontributory plans	70	94	70	77	70	78	60	98	59	19	29	54	52
Severance pay	-	-	-	1	-	6	-	-	-	-	-	6	4
No plans	-	(4)	-	1	1	-	-	-	-	-	1	-	-

See footnotes at end of table.

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**Table 37. Health, insurance and retirement plans: Office workers—Continued**

(Percent of office workers in machinery manufacturing establishments with specified health, insurance and retirement plans, <sup>1</sup> February 1973)

Type of plan	North Central						West			
	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis— St. Paul	St. Louis	Denver	Los Angeles— Long Beach and Anaheim— Santa Ana— Garden Grove	Portland	San Francisco— Oakland
All workers	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:										
Life insurance	98	98	98	99	96	96	95	97	100	97
Noncontributory plans	73	82	96	96	73	81	80	79	76	97
Accidental death and dismemberment insurance	84	68	90	82	90	88	49	81	94	91
Noncontributory plans	67	63	88	79	70	82	38	63	73	91
Sickness and accident insurance or sick leave or both <sup>2</sup>	92	89	95	99	90	66	88	78	88	88
Sickness and accident insurance	77	69	86	98	50	52	34	21	72	10
Noncontributory plans	59	59	85	94	28	48	20	15	48	10
Sick leave (full pay, no waiting period)	47	54	58	37	67	46	76	70	42	68
Sick leave (partial pay or waiting period)	10	( <sup>4</sup> )	4	12	3	4	5	4	2	12
Hospitalization insurance	99	100	99	100	100	100	100	99	100	100
Noncontributory plans	79	91	90	93	74	85	88	74	75	65
Surgical insurance	99	100	99	100	100	100	100	100	100	100
Noncontributory plans	79	91	97	93	74	85	88	75	75	65
Medical insurance	96	98	96	100	100	100	100	100	100	100
Noncontributory plans	78	89	87	93	74	85	88	75	75	65
Major medical insurance	84	65	79	97	96	100	100	100	100	97
Noncontributory plans	59	58	56	73	68	85	88	73	75	62
Dental insurance	15	1	( <sup>4</sup> )	8	-	5	-	32	49	53
Noncontributory plans	15	1	( <sup>4</sup> )	6	-	5	-	32	25	51
Retirement plans <sup>3</sup>	86	91	92	97	89	86	68	59	57	68
Pensions	84	89	91	87	81	86	68	55	57	68
Noncontributory plans	73	86	89	74	65	68	68	39	57	35
Severance pay	2	3	2	10	39	7	-	3	-	4
No plans	1	-	-	-	-	-	-	-	-	-

<sup>1</sup> Includes only those plans for which the employer pays at least part of the cost and excludes legally required plans such as workmen's compensation and social security. However, plans required by State temporary disability insurance laws are included if the employer contributes more than 1¢ is required or the employees receive benefits over the legal requirements. \*Noncontributory plans\* include only those financed entirely by the employer.

<sup>2</sup> Unduplicated total of workers in plants having sick leave or sickness and accident insurance shown separately.

<sup>3</sup> Unduplicated total of workers in plants having pension and severance pay plans shown separately.

<sup>4</sup> Less than 0.5 percent.

NOTE - Because of rounding, sums of individual items may not equal totals.



# Appendix A. Scope and Method of Survey

## Scope of survey

The survey included establishments engaged primarily in manufacturing machinery, except electrical (major group 35 as defined in the 1967 edition of the *Standard Industrial Classification Manual*, prepared by the U.S. Office of Management and Budget). This major group includes establishments engaged in manufacturing machinery and equipment, other than electrical equipment (major group 36) and transportation equipment (major group 37). Machines powered by built-in or detachable motors ordinarily are included in major group 35, with the exception of electrical household appliances (major group 36). Portable tools, both electric and pneumatic powered, are included in major group 35, but handtools are classified in major group 34. Separate auxiliary units such as central offices of the firms studied were excluded.

The study covered establishments with 20 workers or more at the time of reference of the data used in compiling the universe lists. Also included were establishments which employed 8 to 19 workers and primarily manufactured special dies and tools, die sets, jigs and fixtures, or machine-tool accessories and measuring devices (industries 3544 and 3545).

The number of establishments and workers actually studied by the Bureau and the number estimated to be in the industries during the payroll period studied are shown in table A-1.

## Method of study

Data were obtained by personal visits of the Bureau's field staff. The survey was conducted on a sample basis. To obtain appropriate accuracy at minimum cost, a greater proportion of large rather than small establishments was studied. In combining the data, however, all establishments were given their appropriate weight. All estimates are presented, therefore, as relating to all establishments in the industries in the selected areas, excluding only those below the minimum size at the time of reference of the universe data.

## Establishment definition

An establishment, for purposes of this study, is defined as a single physical location where industrial

operations are performed. An establishment is not necessarily identical with the company, which may consist of one or more establishments.

## Employment

Estimates of the number of workers within scope of the study are intended as a general guide to the size and composition of the labor force included in the survey rather than as precise measures of employment.

## Production and office workers

The term "production workers" or "plantworkers," as used in this bulletin, includes working supervisors and all nonsupervisory workers engaged in nonoffice functions. Administrative, executive, professional, and technical personnel and force-account construction employees, who were utilized as a separate work force on the firm's own properties, were excluded.

The term "office workers," includes all nonsupervisory office workers and excludes administrative, executive, professional, and technical employees.

## Occupations selected for study

Occupational classification was based on a uniform set of job descriptions designed to take into account interestablishment and interarea variations in duties within the same job. (See appendix B for these descriptions.) The occupations were chosen for their numerical importance, their usefulness in collective bargaining, or their representativeness of the entire job scale in the industry. Working supervisors, apprentices, learners, beginners, trainees, and handicapped, part-time, temporary, and probationary workers were not reported in the data for selected occupations.

## Wage data

Information on wages relates to straight-time hourly earnings, excluding premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, such as those resulting from piecework or production bonus systems and cost-of-living bonuses, were included as part of the worker's regular pay; but nonproduction bonus payments, such as Christmas or yearend bonuses, were excluded.

**Table A-1. Estimated number of establishments and workers within scope of survey and number studied, machinery manufacturing industries, 23 areas, February 1973**

Area <sup>1</sup>	Payroll period	Number of establishments <sup>2</sup>		Workers in establishments			
				Within scope of study			Actually studied
		Within scope of study	Actually studied	Total <sup>3</sup>	Production workers	Office workers	Total
Total, 23 areas .....		5,390	1,061	661,109	442,829	89,279	372,017
<b>Northeast:</b>							
Boston .....	Feb. 1973	178	49	21,418	14,180	2,817	11,858
Buffalo .....	Feb. 1973	93	26	11,964	7,309	1,812	7,665
Hartford—New Britain—							
Bristol .....	Feb. 1973	155	40	20,110	15,536	1,847	14,710
Newark and Jersey City .....	Feb. 1973	236	51	24,652	17,543	3,272	15,556
New York .....	Feb. 1973	381	85	25,628	17,043	3,151	11,335
Philadelphia .....	Feb. 1973	315	60	40,139	25,907	5,250	22,122
Pittsburgh .....	Feb. 1973	131	30	16,666	11,160	2,161	9,728
Worcester .....	Feb. 1973	47	20	8,097	5,652	1,187	6,683
<b>South:</b>							
Atlanta .....	Feb. 1973	64	23	4,676	3,300	493	2,370
Baltimore .....	Feb. 1973	56	19	10,396	7,639	1,308	8,670
Dallas .....	Jan. 1973	110	31	16,626	11,029	2,366	9,624
Houston .....	Jan. 1973	146	33	24,723	17,297	2,984	15,028
Tulsa .....	Jan. 1973	50	19	6,824	4,683	1,130	5,058
<b>North Central:</b>							
Chicago .....	Feb. 1973	800	122	104,214	70,712	15,601	52,043
Cleveland .....	Feb. 1973	361	69	41,041	29,138	5,678	22,042
Detroit .....	Feb. 1973	765	102	66,232	47,720	7,700	30,482
Milwaukee .....	Feb. 1973	214	51	55,021	37,870	8,207	41,240
Minneapolis—St. Paul .....	Feb. 1973	219	42	46,671	23,946	6,433	32,135
St. Louis .....	Feb. 1973	145	32	20,573	14,722	2,491	12,375
<b>West:</b>							
Denver .....	Feb. 1973	55	24	10,789	6,831	1,078	9,028
Los Angeles—Long Beach and Anaheim—Santa Ana— Garden Grove .....	Feb. 1973	675	85	66,075	41,081	9,363	21,021
Portland .....	Feb. 1973	59	18	6,070	4,321	998	3,939
San Francisco—Oakland .....	Feb. 1973	135	30	12,504	8,210	1,952	7,305

<sup>1</sup> For definition of areas, see footnote 1 in tables 4-26.

<sup>2</sup> Includes only establishments manufacturing dies and tools, die sets, jigs and fixtures, or machine-tool accessories and measuring devices which employed 8 workers or more, and

other machinery establishments with 20 workers or more at the time of reference of the universe data.

<sup>3</sup> Includes executive, professional, and other workers excluded from the separate production and office worker categories

Average (mean) hourly rates (or earnings) for each occupation were calculated by weighting each rate by the number of workers receiving the rate, totaling, and dividing by the number of individuals. The hourly earnings of salaried workers were obtained by dividing their straight-time salary by normal rather than actual hours.

### Wage trends

The machinery index series has been developed from data obtained in the Bureau's program of occupational wage surveys in 21 metropolitan areas studied separately since 1955, and is based on straight-time hourly earnings of men production workers in the following occupations:

Assemblers (classes A, B, and C); maintenance electricians; inspectors (classes A, B, and C); janitors, porters, and cleaners; material handling laborers; machine-tool operators on production (classes A, B, and C); production machinists; tool and diemakers (other than jobbing); and class A hand welders.

Area indexes reflect changes in average hourly earnings but not changes in the proportion of workers in the separate occupations. For each area, an aggregate of earnings was obtained by weighting the average straight-time hourly earnings for the respective occupations by a set of weights, based on average employments in the occupations in that area for 1966 and 1968. (Occupational weights for these years are not available for Tulsa and Atlanta since they were added to the survey in 1970 and 1973, respectively.) The percent of change was determined by comparing this aggregate with the aggregate for the previous year; the current index was computed by applying this percent of change to the previous index (in this case, 1970) for the area.

The index for all 21 areas combined is constructed so as to minimize the effect of employment changes among the areas studied. The composite index was obtained by following techniques similar to those used to determine area indexes. An aggregate of earnings was obtained by weighting the average straight-time hourly earnings for the selected occupations in the areas by a set of weights, based on average employments in the machinery industries in these areas for 1966 and 1968. The percent of change was determined by comparing this aggregate with the aggregate for the previous year, and the current index was computed by applying this percent of change to the previous index (1970) for all areas combined.

From time to time, the index procedure is revised to bring the weighting pattern up to date by changing the set of occupational weights and the area weights. The new indexes are linked to the existing ones to form a continuous series.

#### **Method of wage payment**

Tabulations by method of wage payment relate to the number of workers paid under the various time and incentive wage systems. Formal rate structures for time-rated workers provide single rates or a range of rates for individual job categories. In the absence of a formal rate structure, pay rates are determined primarily by the qualifications of the individual workers. A single rate structure is one in which the same rate is paid to all experienced workers in the same job classification. **Learners, apprentices, or probationary workers may be paid according to rate schedules which start below the single rate and permit the workers to achieve the full**

job rate over a period of time. Individual experienced workers occasionally may be paid above or below the single rate for special reasons, but such payments are exceptions. Range of rate plans are those in which the minimum and/or maximum rates paid experienced workers for the same job are specified. Specific rates of individual workers within the range may be determined by merit, length of service, or a combination of various concepts of merit and length of service. Incentive workers are classified under piecework or bonus plans. Piecework is work for which a predetermined rate is paid for each unit of output. Production bonuses are based on production over a quota or for completion of a task in less than standard time.

#### **Scheduled weekly hours**

Data on weekly hours refer to the predominant work schedule for full-time production workers (or office workers) employed on the day shift.

#### **Shift provisions and practices**

Shift provisions relate to the policies of establishments either currently operating late shifts or having formal provisions covering late shift work. Practices relate to workers employed on late shifts at the time of the survey.

#### **Supplementary wage provisions**

Supplementary benefits were treated statistically on the basis that if formal provisions were applicable to half or more of the production workers (or office workers) in an establishment, the benefits were considered applicable to all such workers. Similarly, if fewer than half of the workers were covered, the benefit was considered nonexistent in the establishment. Because of length-of-service and other eligibility requirements, the proportion of workers receiving the benefits may be smaller than estimated.

*Paid holidays.* Paid holiday provisions relate to full-day and half-day holidays provided annually.

*Paid vacations.* The summaries of vacation plans are limited to formal arrangements, excluding informal plans whereby time off with pay is granted at the discretion of the employer or supervisor. Payments not on a time basis were converted; for example, a payment of 2 percent of annual earnings was considered the equivalent of 1 week's pay. The periods of service for which data are presented represent the most common practices, but they do not necessarily reflect individual establishment provisions for progression. For example, the

changes in proportions indicated at 10 years of service may include changes which occurred between 5 and 10 years.

*Health, insurance, and retirement plans.* Data are presented for health, insurance, pension, and retirement plans for which all or part of the cost is borne by the employer, excluding programs required by law, such as workmen's compensation and social security. Among the plans included are those underwritten by a commercial insurance company, and those paid directly by the employer from his current operating funds or from a fund set aside for this purpose.

Death benefits are included as a form of life insurance. Sickness and accident insurance is limited to that type of insurance under which predetermined cash payments are made directly to the insured on a weekly or monthly basis during illness or accident disability. Information is presented for all such plans to which the employer contributes at least a part of the cost. However, in New York and New Jersey, where temporary disability insurance laws require employer contributions,<sup>1</sup> plans are included only if the employer (1) contributes more than is legally required or (2) provides the employees with benefits which exceed requirements of the law.

Tabulations of paid sick-leave plans are limited to formal plans which provide full pay or a proportion of the worker's pay during absence from work because of illness; informal arrangements have been omitted. Separate tabulations are provided according to (1) plans

which provide full pay and no waiting period, and (2) plans providing either partial pay or a waiting period.

Medical insurance refers to plans providing for complete or partial payment of doctors' fees. These plans may be underwritten by a commercial insurance company or a nonprofit organization, or they may be a form of self-insurance.

Major medical insurance, sometimes referred to as extended medical insurance, includes plans designed to cover employees for sickness or injury involving an expense which exceeds the normal coverage of hospitalization, medical, and surgical plans.

Dental insurance, for purposes of this survey, usually covers fillings, extractions, and X-rays. Excluded are plans which cover only oral surgery or accident damage.

Tabulations of retirement pensions are limited to plans which provide regular payments for the remainder of the retiree's life. Data are presented separately for retirement severance payments (one payment or several over a specified period of time) made to employees on retirement. Establishments providing both retirement severance payments and retirement pensions to employees were considered as having both retirement pension and retirement severance plans. Establishments having optional plans providing employees a choice of either retirement severance payments or pensions were considered as having only retirement pension benefits.

<sup>1</sup> The temporary disability insurance laws in California and Rhode Island do not require employer contributions.

## Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field staff in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits the grouping of occupational wage rates representing comparable job content. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field staff is instructed to exclude working supervisors, apprentices, learners, beginners, trainees, and part-time, temporary, and probationary workers.

### Assembler

*(Bench assembler; floor assembler; jig assembler; line assembler; subassembler)*

Assembles and/or fits together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor, depending upon the size of the units and the organization of the production process. Work may include processing operations requiring the use of handtools in scraping, chipping, and filing of parts to obtain a desired fit as well as power tools and special equipment when punching, riveting, soldering, or welding of parts is necessary. *Workers who perform any of these processing operations exclusively as part of specialized assembling operations are excluded.*

*Class A* - Assembles parts into complete units or subassemblies that require fitting of parts and decisions regarding proper performance of any component part or the assembled unit. Work involves *any combination of the following*: Assembling from drawings, blueprints, or other written specifications; assembling units composed of a variety of parts and/or subassemblies; assembling large units requiring careful fitting and adjusting of parts to obtain specified clearances, using a variety of hand and powered tools and precision measuring instruments.

*Class B* - Assembles parts into units or subassemblies in accordance with standard and prescribed procedures.

Work involves *any combination of the following*: Assembling a limited range of standard and familiar products composed of a number of small- or medium-sized parts requiring some fitting or adjusting; assembling large units that require little or no fitting of component parts; working under conditions where accurate performance and completion of work within set time limits are essential for subsequent assembling operations; using a limited variety of hand or powered tools.

*Class C* - Performs short-cycle, repetitive assembling operations. Work does not involve any fitting or making decisions regarding proper performance of the component parts or assembling procedures.

### Automatic-lathe operator

*(Automatic-between-centers-lathe operator; automatic-chucking-machine operator; automatic-turret-lathe operator)*

Operates one or more lathes equipped with automatic feed mechanism for actuating the cutting tools over the complete work cycle. Automatic lathes may differ as to type of construction (horizontal or vertical); number of spindles (single or multiple); method of feed (hand-feed, automatic-chucking, or hopper-feed); method of holding the work (in chucks or between centers); method of presenting the tools to the stock in sequence (turrets, slides, revolving work stations). (For description of class of work, see machine-tool operator, production, page 98.)

### **Carpenter, maintenance**

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves *most of the following*: Planning and laying out of work from blueprints, drawings, models, or verbal instructions; using a variety of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

### **Drill-press operator, radial**

Operates one or more types of radial-drilling machines designed primarily for the purpose of drilling, reaming, countersinking, counterboring, spot-facing, or tapping holes in large heavy metal parts. Several types of radial drills are in use, the most common type being designed so that the tool head and saddle are movable along a projecting arm which can be rotated about a vertical column and adjusted vertically on that column. (For description of class of work, see machine-tool operator, production, page 98.)

### **Drill-press operator, single- or multiple-spindle**

Operates one or more types of single- or multiple-spindle drill-presses, to perform such operations as drilling, reaming, countersinking, counterboring, spot-facing, and tapping. *Drill-press operators, radial and operators of portable drilling equipment are excluded.* (For description of class of work see machine-tool operator, production, page 98.)

### **Electrician, maintenance**

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generating, distribution, or utilization of electric energy in an establishment. Work involves *most of the following*: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layout, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring

or electrical equipment; using a variety of electrician's handtools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

### **Engine-lathe operator**

Operates an engine lathe for shaping external and internal cylindrical surfaces of metal objects. The engine lathe, basically characterized by a headstock, tailstock, and power-fed tool carriage, is a general-purpose machine tool used primarily for turning. It is also commonly used in performing such operations as facing, boring, drilling and threading, and equipped with appropriate attachments, may be used for a very wide variety of special machining operations. The stock may be held in position by the lathe "centers" or by various types of chucks and fixtures. *Bench-lathe operators, automatic-lathe operators, screw-machine operators, automatic, and turret-lathe operators, hand (including hand screw machine) are excluded.* (For description of class of work, see machine-tool operator, production, page 98.)

### **Grinding-machine operator**

*(Centerless-grinder operator; cylindrical-grinder operator; external-grinder operator; internal-grinder operator; surface-grinder operator; Universal-grinder operator)*

Operates one of several types of precision grinding machines to grind internal and external surfaces of metal parts to a smooth and even finish and to required dimensions. Precision grinding is used primarily as a finishing operation on previously machined parts, and consists of applying abrasive wheels rotating at high speed to the surfaces to be ground. In addition to the types of grinding machines indicated above, this classification *includes* operators of other *production grinding machines* such as: Single-purpose grinders (drill-grinders, broach grinders, saw grinders, gear cutter grinders, thread grinders, etc.) and automatic and semi-automatic general purpose grinding machines. *Operators of portable grinders are excluded.* (For description of class of work, see machine-tool operator, production, page 98.)

### **Inspector**

Inspects parts, products and/or processes of the establishment. Performs such operations as examining parts or products for flaws and defects, checking their dimensions and appearance to determine whether they

meet the required standards and specifications. Does not include inspectors in toolrooms or inspectors of purchased parts.

**Class A** - Responsible for decisions regarding the quality of the product and/or operations. Work involves *any combination of the following*: Thorough knowledge of the processing operations in the branch of work to which he is assigned, including the use of a variety of precision measuring instruments; interpreting drawings and specifications in inspection work on units composed of a large number of component parts; examining a variety of products or processing operations; determining causes of flaws in products and/or processes and suggesting necessary changes to correct work methods; devising inspection procedures for new products.

**Class B** - Work involves *any combination of the following*: Knowledge of processing operations in the branch of work to which he is assigned, limited to familiar products and processes or where performance is dependent on past experience; performing inspection operations on products and/or processes having rigid specifications, but where the inspection procedures involve a sequence of inspection operations, including decisions regarding proper fit or performance of some parts; using precision measuring instruments.

**Class C** - Work involves *any combination of the following*: Short-cycle, repetitive inspection operations; using a standardized, special-purpose measuring instrument repetitively; visual examination of parts of products, rejecting units having obvious deformities or flaws.

#### **Janitor, porter, or cleaner**

*(Sweeper, charwoman; janitress)*

Cleans and keeps in an orderly condition factory working areas and washrooms, *or* premises of an office, or other establishment. Duties involve a *combination of the following*: Sweeping, mopping, or scrubbing, and polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; cleaning lavatories, showers, and restrooms. *Workers who specialize in window washing are excluded.*

#### **Laborer, material handling**

*(Loader and unloader; handler and stacker; shelver; trucker; stocker or stock helper; warehouseman or warehouse helper)*

A worker employed in a warehouse, manufacturing plant, store, or other establishment whose duties involve

*one or more of the following*: Loading and unloading various materials and merchandise on or from freight cars, trucks, or other transporting devices; unpacking, shelving, or placing materials or merchandise in proper storage location; transporting materials or merchandise by hand truck, car, or wheelbarrow. *Longshoreworkers who load and unload ships are excluded.*

#### **Machine-tool operator (miscellaneous)**

Includes certain specialist operators, as well as all operators who are required alternately to operate more than one type of nonportable power-driven machine tool that shapes metal by progressively removing portions of the stock in the form of chips or shavings or by abrasion. (For definition of machine tool, see machine-tool operator, production.) *For wage study purposes, specialist operators are limited to those on boring machine, gear cutter, gear finisher, planer, shaper, or metal-cutting type machine tools not specially listed in the general definition of MACHINE-TOOL OPERATOR, PRODUCTION on page .* (For description of class of work, see machine-tool operator, production, page 98.)

*Operators of bench lathes, and single-purpose millers such as thread millers, duplicator, diesinkers, pantograph millers and engraving millers are excluded.*

#### **Machine-tool operator, production**

Operates or tends one or more nonportable, power-driven machine tools (including numerically controlled machine tools) in order to shape metal by progressively removing portions of the stock in the form of chips or shavings, or by abrasion, such as:

Automatic lathes	*Machine tools, miscellaneous
Boring machines	Milling machines
Drill presses, radial	Planers
Drill presses, single- or multiple-spindle	Screw machines, automatic
Engine lathes	Screw machines, hand
Gear-cutting machines	Shapers
Gear-finishing machines	Turret lathes, automatic
Grinding machines	Turret lathes, hand

**Class A** - Sets up machines, by determining proper feeds, speeds, tooling and operation sequence or by selecting those prescribed in drawings, blueprints, or layouts; makes necessary adjustments during operations where changes in work and set-up are relatively frequent and where care is essential to achieve requisite dimensions of very close tolerances.

\* Includes operators of machine tools not specifically listed above but within the general definition of operators of machine tools of the metal-cutting type, as well as operators required alternately to operate more than one type of machine tool.

**Class B** - Sets up machines on standard or roughing operations where feeds, speeds, tooling, and operation sequence are prescribed or maintains operation set-up made by others; makes all necessary adjustments during operation where care is essential to achieve very close tolerances or where changes in product are relatively frequent.

**Class C** - Operates machine on routine and repetitive operations; makes only minor adjustments during operations; when trouble occurs, stops machine and calls supervisor, leadperson, or set-up person to correct the operation.

#### **Machine-tool operator, toolroom**

Specializes in the operation of one or more types of machine tools such as jig borers, cylindrical or surface grinders, engine lathes, or milling machines in the construction of machine-shop tools, gages, jigs, fixtures, or dies. Work involves *most of the following*: Planning and performing difficult machining operations; processing items requiring complicated set-ups or a high degree of accuracy; using a variety of precision measuring instruments; selecting feeds, speeds, tooling and operation sequence; making necessary adjustments during operation to achieve requisite tolerances or dimensions. May be required to recognize when tools need dressing, to dress tools, and to select proper coolants and cutting and lubricating oils.

This occupation includes operators employed in the construction of machine shop dies, tools, gages, jigs, etc., produced for sale as the end product of an establishment, as well as operators engaged in making or maintaining these items for use within the establishment. Thus, most class A machine-tool operators in establishments classified in SIC 3544 will be classified as machine-tool operators, toolroom.

Also includes operators of numerically controlled machines if the *machining operations* are of the "toolroom" level of difficulty.

For wage survey purposes, workers are classified as follows:

- (Operates only one type of machine tool)
  - Drill-press operators, radial (see page 97)
  - Engine-lathe operators (see page 97)
  - Grinding-machine operators (see page 97)
  - Milling-machine operators (see page 100)
  - Other (not specified) toolroom machine
- (Operates more than one type of machine tool)<sup>1</sup>

#### **Machinist, maintenance**

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment operated

in an establishment. Work involves *most of the following*: Interpreting written instructions and specifications; planning and laying out of work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds and speeds of machining; knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment required for his work; fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

#### **Machinist, production**

*(All-around machinist; custom machinist)*

Fabricates, by a series of progressive machining operations, complete metal parts, mechanisms, or machines, to be used as, or as part of, the end product of the establishment. Work involves *most of the following*: Interpreting written instructions and specifications; planning and laying out work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds and speeds of machining, knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment needed for his work; fitting and assembling parts. In general, the machinist's work normally requires a rounded training in machine shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

#### **Mechanic, maintenance**

Repairs machinery or mechanical equipment of an establishment. Work involves *most of the following*: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending of the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shop; reassembling

<sup>1</sup> Includes operators of N/C machining centers (multi-purpose N/C machine-tools).



machines; and making all necessary adjustments for operations. In general, the work of a maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. *Excluded from this classification are workers whose primary duties involve setting up or adjusting machines.*

#### **Milling-machine operator**

*(Milling-machine operator, automatic;  
milling-machine operator, hand)*

Performs a variety of work such as grooving, planing, and sharpening metal objects on a milling machine, which removes material from metal surfaces by the cutting action of multi-toothed rotating cutters of various sizes and shapes. Milling-machine types vary from the manually controlled machines employed in unit production to fully automatic (conveyor-fed) machines found in plants engaged in mass production. *For wage study purposes, operators of single-purpose millers such as thread millers, duplicators, diesinkers, pantograph millers and engraving millers are excluded. (For description of class of work, see machine-tool operator, production, page 98.)*

#### **Polisher and buffer, metal**

Polishes (or buffs) various metal objects to produce a smooth surface or a high luster. Uses a variety of portable polishers or buffers and/or holds objects against polishing and buffing wheels, straps, belts, and shafts on stationary machines. Work involves *most of the following*: Attaining a smooth surface and removing flaws and machine marks on a variety of objects involving the maintenance of contours, radii, and uniformity of shape; polishing and/or buffing to close tolerances; selecting proper wheels, shafts, belts, abrasives, and polishing compounds; and setting up the equipment and maintaining wheels. In general, metal polishers and buffers in this classification are required to perform operations which involve a rounded knowledge of the trade, usually acquired through a formal apprenticeship or equivalent training and experience.

#### **Polishing- and buffing-machine operator**

Polishes (or buffs) metal objects to produce a smooth surface or high luster by holding objects against rapidly rotating wheels, belts, or straps on a stationary machine set up to achieve a *specialized* phase of polishing or buffing on a *repetitive* basis. Work involves *one of the following*: Setting up and operating machine where wheels and abrasive and polishing compounds are prescribed; polishing or buffing which involves

the maintenance of contours, radii, and uniformity of shape on machines set up by others. May select polishing compounds and abrasives on machines set up by others.

#### **Punch-press operator**

Feeds and operates a power press equipped with special production dies that perform one or a combination of cutting and shaping operations on the stock. Individual pieces of stock or partly fabricated units may be positioned in the machine by the operator, or the machine may be equipped with a feeding device that automatically positions single pieces of stock or repetitively positions strip or sheet stock for successive operations.

Punch presses are commonly designated by functional names derived from the operation they perform, such as blanking press or forming press; by names descriptive of the frame, such as arch press; or by names that indicate how the power is transmitted, such as crank press or toggle press.

*Class A* - Work involves *any combination of the following*: Difficult positioning of work units because of size or shape, or type of operation to be performed, processing unusually large work that is positioned in the press with the aid of other workers; processing work units that must be steadied while operations are being performed; deep drawing or forming operations requiring careful positioning of work and prompt recognition of faulty operation; short-run work requiring ability to perform a variety of punch-press operations or to operate several types of presses; examining output and making adjustments as necessary to maintain production within standards; setting, aligning, and adjusting dies and fixtures in the press.

*Class B* - Required mainly to feed, control, and examine operation of the press, and when trouble occurs to call on Supervisor, Leadperson, or Die Maker to correct the situation. Work involves *one or more of the following*: Performing single operations, such as punching, blanking, or piercing on small or medium size stock easily positioned by hand; feeding small units into the press from a feed race or chute; loading and tending a press equipped with a feeding device for handling a strip or sheet stock, or a dial drum, magazine or hopper feed for handling individual stock blanks.

#### **Screw-machine operator, automatic**

Operates one or more multiple- or single-spindle automatic screw machines. Automatic screw machines are production turning machines with automatic-feed

cycle designed to produce parts from bar or tube stock fed automatically through spindles or the head stock. These machines, equipped with from one to eight spindles or a turret, automatically perform and repeat a cycle of operations on each length of stock fed into the machine. (For description of class of work, see machine-tool operator, production, page 98.)

#### **Set-up man, machine tools**

Sets up machine tools (including numerically controlled machine tools) so that metal-fabricating operations can be maintained by operators of these machines. Work involves *most of the following*: Working from drawings, blueprints, job lay-outs, or other written specifications; determining feeds, speeds, tooling, and operation sequence; installing cutting tools and adjusting guides, stops, working tables, and other controls to handle the size of stock to be machined; operating and adjusting machines until parts produced conform with specifications; and, after turning over machines to regular operators, making necessary adjustments to set-ups during course of operation to maintain accurate production.

#### **Tool and die maker**

*(Die maker; mold makers; jig makers; toolmaker; fixture maker; gage maker)*

Constructs and repairs machine-shop tools, gages, jigs, fixtures or dies for forgings, punch, and other metal or plastics-forming work. Work involves *most of the following*: Planning and laying out of work from models, blueprints, drawings, or other oral and written specifications; using a variety of tool and die maker's handtools and precision measuring instruments; understanding the working properties of common metals and alloys; setting up and operating of machine tools and related equipment; making necessary shop computations relating to dimensions of work, speeds, feeds, and tooling of machines; heat-treating of metal parts during fabrication as well as of finished tools and dies to achieve required qualities; working to close tolerances; fitting and assembling of parts to prescribed tolerances and allowances; selecting appropriate materials, tools, and processes. In general, the tool and die maker's work requires a rounded training in machine shop and toolroom practice usually acquired through a formal apprenticeship or equivalent training and experience. *Excludes die sinkers.*

(For distinction between "jobbing" and "other than jobbing" tool and die makers, see below.)

For wage study purposes, tool and die makers are classified as follows:

#### **Tool and die makers (jobbing)**

Workers making dies and tools, die sets, jigs, and fixtures, etc., as the end product of the establishment.

#### **Tool and die makers (other than jobbing)**

Workers making and/or maintaining dies and tools, die sets, jigs, and fixtures, etc., for use within the establishment.

#### **Tool clerk**

*(Store clerk; tool checker; tool crib attendant; tool handler; tool keeper; toolperson)*

Receives, stores, and issues handtools, machine tools, dies, and equipment, such as measuring devices and materials, in industrial establishments. Work consists of *most of the following*: Keeps records of loaned tools; searches for lost or misplaced tools; prepares periodic inventory and requisitions stock as needed; unpacks and stores new equipment; and reports damaged and worn-out equipment to superiors. May carry tools or move them on trucks to workers, and may make minor tool repairs.

#### **Turret-lathe operator, hand**

*(Including hand screw machine)*

Operates a lathe equipped with a turret used to present a number of cutting tools, required for a cycle of machining operations, to the work in sequence. Operations commonly performed on a turret-lathe include turning, facing, boring, drilling, and threading. The operator rotates or indexes the turret to bring the tools toward the work for each operation. Individual workpieces, such as forgings and castings, are held in a chuck or the lathe may be equipped with a bar stock feeding device to present the correct length of stock to the tools at the beginning of each cycle of operations. (For description of class of work, see machine-tool operator, production page 98.)

#### **Welder, hand**

Fuses (welds) metal objects by means of an *oxyacetylene torch* or *arc welding apparatus* in the fabrication of metal shapes and in repairing broken or cracked metal objects. In addition to performing hand welding or brazing operation, the welder may also lay out guide lines or marks on metal parts and may cut metal with cutting torch.

*Class A* - Performs welding operations requiring *most of the following*: Planning and laying out of work from drawings, blueprints, or other written specifications; knowledge of welding properties of a variety of metals

and alloys, setting up work and determining operation sequence; welding high pressure vessels or other objects involving critical safety and load requirements; working from a variety of positions.

*Class B* - Performs welding operations on repetitive work, where no critical safety and load requirements are involved; where the work calls mainly for one-position welding; and where the layout and planning of the work are performed by others.

#### **Welder, machine**

*(Butt welder; flash welder; seam welder; spot welder)*

Operates one or more types of *resistance welding apparatus* to weld (bond) together metal objects such as bars, pipes, and plates. Resistance welding is a process wherein an electric current is passed through the parts to be welded at the point of contact, and mechanical pressure is applied forcing the contact surfaces together at the points to be joined. Welding

machines are generally designed according to type of weld performed and arrangement of welding surfaces of parts to be joined. Welds may be made on overlapping units in the form of one or more spots (spot welding) or lineally by using a rolling electrode (seam welding). Machine welding of units where the edges are brought together without lapping is referred to as butt welding.

*Class A* - Work involves *most of the following*: Working from lay-out or other specifications; knowledge of welding properties of a variety of metals and alloys; selecting and setting-up work-holding fixtures and electrodes; determination of proper pressures, temperatures, timing, and flow of current; determination of number and spacing of welds; positioning and welding units with or without fixtures; using such handtools as hammers, pliers, files, and wrenches.

*Class B* - Work involves: Performing repetitive welding operations on standard units where current settings and electrodes are prescribed or set by others; using fixtures for positioning work or positioning by hand small parts requiring simple welding operations.

# Industry Wage Studies

The most recent reports providing occupational wage data for industries included in the Bureau's program of industry wage surveys since 1960 are listed below. Copies are for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from any of its regional sales offices, and from the regional offices of the Bureau of Labor Statistics shown on the inside back cover. Copies that are out of stock are available for reference purposes at leading public, college, or university libraries, or at the Bureau's Washington or regional offices.

## *Manufacturing*

Basic Iron and Steel, 1972. BLS Bulletin 1839  
Candy and other Confectionary Products, 1970.  
BLS Bulletin 1732  
Cigar Manufacturing, 1972. BLS Bulletin 1796  
Cigarette Manufacturing, 1971. BLS Bulletin 1748  
  
Fabricated Structural Steel, 1969. BLS Bulletin 1695  
Fertilizer Manufacturing, 1971. BLS Bulletin 1763  
Flour and Other Grain Mill Products, 1972.  
BLS Bulletin 1803  
Fluid Milk Industry, 1964. BLS Bulletin 1464<sup>1</sup>  
Footwear, 1971. BLS Bulletin 1792  
Hosiery, 1970. BLS Bulletin 1743  
Industrial Chemicals, 1971. BLS Bulletin 1768  
Iron and Steel Foundries, 1967. BLS Bulletin 1626<sup>1</sup>  
Leather Tanning and Finishing, 1973.  
BLS Bulletin 1835  
Machinery Manufacturing, 1970-71. BLS Bulletin 1754<sup>1</sup>  
Meat Products, 1969. BLS Bulletin 1677  
Men's and Boys' Separate Trousers, 1971.  
BLS Bulletin 1752  
Men's and Boys' Shirts (Except Work Shirts) and  
Nightwear, 1971. BLS Bulletin 1794  
Men's and Boys' Suits and Coats, 1973.  
BLS Bulletin 1843.  
Miscellaneous Plastics Products, 1969.  
BLS Bulletin 1690  
Motor Vehicles and Parts, 1969. BLS Bulletin 1679  
  
Nonferrous Foundries, 1970. BLS Bulletin 1726  
Paints and Varnishes, 1970. BLS Bulletin 1739  
Paperboard Containers and Boxes, 1970.  
BLS Bulletin 1719  
Petroleum Refining, 1971. BLS Bulletin 1741  
Pressed or Blown Glass and Glassware, 1970.  
BLS Bulletin 1713.  
Pulp, Paper, and Paperboard Mills, 1972.  
BLS Bulletin 1844<sup>1</sup>  
Southern Sawmills and Planing Mills, 1969.  
BLS Bulletin 1694  
Structural Clay Products, 1969. BLS Bulletin 1697

## *Manufacturing—Continued*

Synthetic Fibers, 1970. BLS Bulletin 1740  
Textile Dyeing and Finishing, 1970. BLS Bulletin 1757  
Textiles, 1971. BLS Bulletin 1801  
West Coast Sawmilling, 1969. BLS Bulletin 1704  
Women's and Misses' Coats and Suits, 1970.  
BLS Bulletin 1728  
Women's and Misses' Dresses, 1971.  
BLS Bulletin 1783<sup>1</sup>  
Wood Household Furniture, Except Upholstered, 1971.  
BLS Bulletin 1793  
Work Clothing, 1968. BLS Bulletin 1624<sup>1</sup>

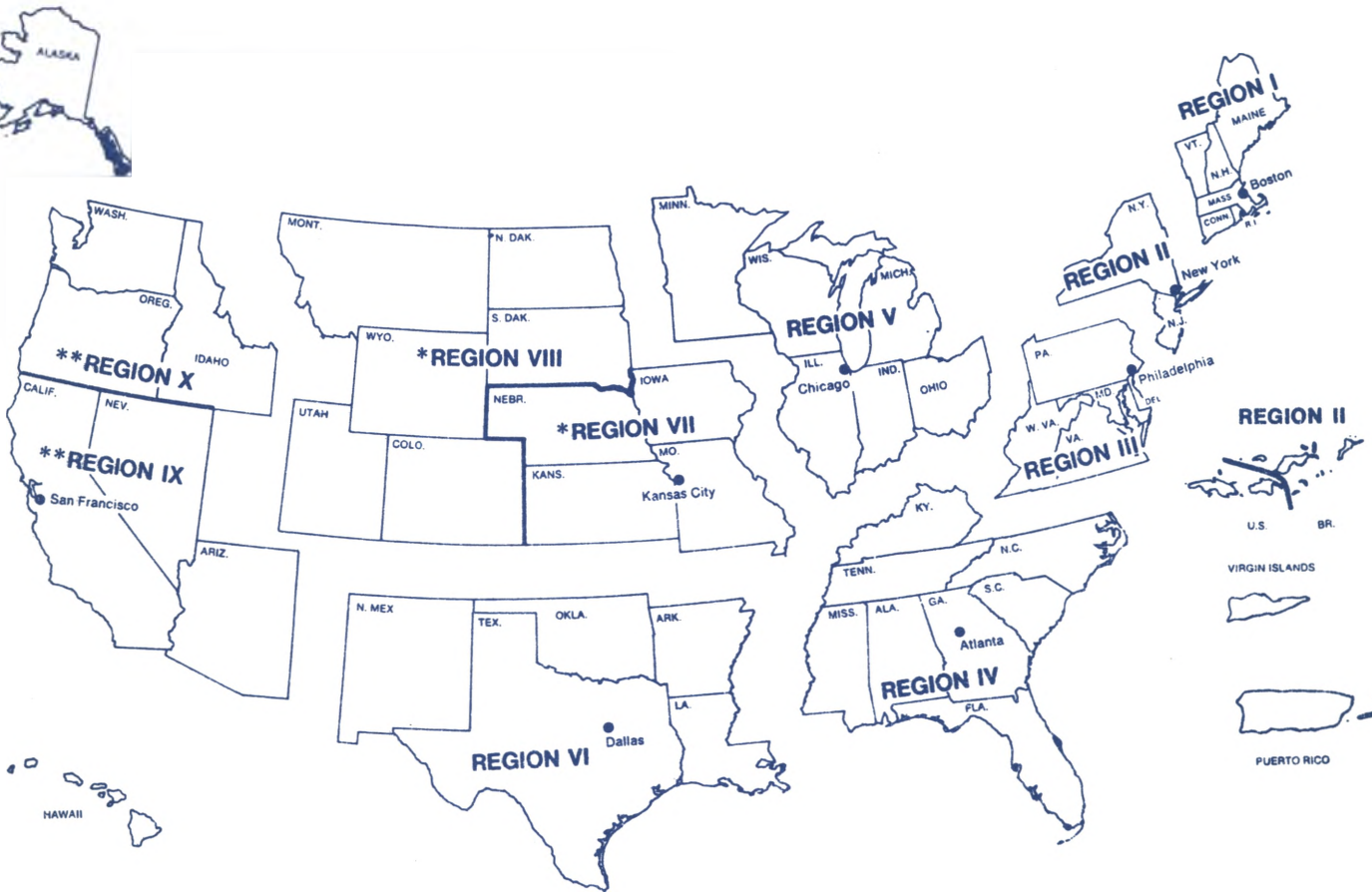
## *Nonmanufacturing*

Appliance Repair Shops, 1972. BLS Bulletin 1838  
Auto Dealer Repair Shops, 1969. BLS Bulletin 1689  
Banking, 1969. BLS Bulletin 1703  
Bituminous Coal Mining, 1967. BLS Bulletin 1583  
Communications, 1973. BLS Bulletin 1854  
Contract Cleaning Services, 1971. BLS Bulletin 1778  
Contract Construction, 1972. BLS Bulletin 1853  
Crude Petroleum and Natural Gas Production, 1972.  
BLS Bulletin 1797  
Educational Institutions: Nonteaching Employees,  
1968-69. BLS Bulletin 1671  
Electrical Appliance 1972. BLS Bulletin 1838  
Electric and Gas Utilities, 1972. BLS Bulletin 1834.  
  
Hospitals, 1972. BLS Bulletin 1829  
Laundry and Cleaning Services, 1968.  
BLS Bulletin 1645<sup>1</sup>  
Life Insurance, 1971. BLS Bulletin 1791  
Metal Mining, 1972. BLS Bulletin 1820  
Motion Picture Theaters, 1966. BLS Bulletin 1542<sup>1</sup>  
Nursing Homes and Related Facilities, 1973.  
BLS Bulletin 1855  
Scheduled Airlines, 1970. BLS Bulletin 1734  
Wages and Tips in Restaurants and Hotels, 1970.  
BLS Bulletin 1712

<sup>1</sup> Bulletin out of stock.

# BUREAU OF LABOR STATISTICS

## REGIONAL OFFICES



### Region I

1603 JFK Federal Building  
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Boston, Mass. 02203  
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### Region II

Suite 3400  
1515 Broadway  
New York, N.Y. 10036  
Phone: 971-5405 (Area Code 212)

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Philadelphia, Pa. 19101  
Phone: 597-1154 (Area Code 215)

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### Regions VII and VIII \*

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911 Walnut St.,  
Kansas City, Mo. 64106  
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450 Golden Gate Ave.  
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\* Regions VII and VIII are serviced by Kansas City  
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