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## Industry Wage Survey: Nonferrous Foundries, May 1975

U.S. Department of Labor

Bureau of Labor Statistics
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Bulletin 1952


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## Industry Wage Survey: Nonferrous Foundries, May 1975

U.S. Department of Labor<br>Ray Marshall, Secretary<br>Bureau of Labor Statistics<br>Julius Shiskin, Commissioner 1977

Bulletin 1952

## Preface

This bulletin summarizes the results of a Bureau of Labor Statistics survey of wages and supplementary benefits in the nonferrous foundry manufacturing industry in May 1975. A similar study was conducted in June 1970.

Separate releases were issued earlier for the following areas: Chicago, Cleveland; Detroit; Los Angeles-Long Beach; Milwaukee; Newark; New York; and Philadelphia. Copies of these releases are available from the Bureau of Labor Statistics, Washington, D.C. 20212, or any of its regional offices.

This study was conducted in the Bureau's Office of Wages and Industrial Relations. The analysis was prepared by Mary Kay Rieg of the Division of Occupational Wage Structures. Field work for the survey was directed by the Bureau's Assistant Regional Commissioners 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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## Contents

Page
Summary ..... 1
Industry characteristics ..... 1
Products and processes ..... 1
Employment trends ..... 2
Location ..... 2
Establishment size ..... 2
Union contract coverage .....  3
Method of wage payment ..... 3
Average hourly earnings ..... 3
Occupational earnings ..... 4
Establishment practices and supplementary wage provisions ..... 4
Scheduled weekly hours ..... 5
Shift differential provisions and practices ..... 5
Paid holidays ..... 5
Paid vacations ..... 5
Health, insurance, and retirement plans ..... 5
Other selected benefits ..... 5
Text tables:

1. Regional distribution of production foundry workers by primary method of casting ..... 2
2. Distribution of production foundry workers by method of casting in selected metropolitan areas ..... 2
3. Average hourly earnings by primary method of casting and region ..... 3
4. Average hourly earnings by primary method of casting and occupation ..... 4
Reference tables:
5. Average hourly earnings: By selected characteristics ..... 6
6. Earnings distribution: All establishments ..... 7
7. Earnings distribution: By method of production ..... 8
Occupational averages:
8. All establishments ..... 8
9. By size of establishment ..... 10
10. By size of community ..... 12
11. By labor-management contract coverage ..... 13
12. By method of wage payment ..... 14
13. Die-casting establishments ..... 15
14. Sand-casting establishments ..... 16
15. Permanent-mold casting establishments ..... 16
Occupational earnings:
16. Chicago, Ill. ..... 17
17. Cleveland, Ohio ..... 18
18. Detroit, Mich. ..... 19
19. Los Angeles-Long Beach, Calif. ..... 20
20. Milwaukee, Wis. ..... 21
21. Newark, N.J. ..... 22
22. New York, N.Y.-N.J ..... 23
23. Philadelphia, Pa.-N.J. ..... 24
Establishment practices and supplementary wage provisions:
24. Method of wage payment ..... 25
25. Scheduled weekly hours ..... 25

## Contents - Continued

Page
22. Shift differential provisions ..... 26
23. Shift differential practices ..... 27
24. Paid holidays ..... 28
25. Paid vacations ..... 29
26. Health, insurance, and retirement plans ..... 32
27. Other selected benefits ..... 34
Appendixes:
A. Regression analysis ..... 36
B. Scope and method of survey ..... 39
C. Occupational descriptions ..... 42

## Nonferrous Foundries, May 1975

## Summary

Straight-time earnings of production and related workers in nonferrous foundries averaged $\$ 4.45$ an hour in May 1975. Over four-fifths of the 54,432 production workers (mostly men) covered by the Bureau of Labor Statistics survey ${ }^{1}$ earned between $\$ 3$ and $\$ 6$ an hour; the middle 50 percent of the workers in the array had earnings between $\$ 3.62$ and $\$ 5.15$ an hour. One-half of the members of the work force were in the Great Lakes region and averaged $\$ 4.62$ an hour. Averages in the other five regions for which data were tabulated separately ranged from $\$ 3.83$ in the Middle West to $\$ 4.62$ in the Southeast.

Data were tabulated separately for three types of foundries, based on the primary casting method. ${ }^{2}$ Nationwide, workers in plants using primarily the die-casting processnearly one-half of the work force covered by the surveyaveraged $\$ 4.54$ an hour; those in sand-casting plants, \$4.38; and workers in permanent-mold plants, $\$ 4.47$. Employment by type of foundry varied considerably among the regions.

Among the occupations selected for separate study, averages ranged from $\$ 3.71$ for general foundry laborers and sprue-cutting press operators to $\$ 6.82$ for wood patternmakers. Chippers and grinders, numerically the most important group surveyed, averaged $\$ 4.08$ an hour.

Nearly all establishments provided paid holidays and paid vacations. Vacation provisions applying to a large majority of the production workers were: 1 week's vacation pay after 1 year of service, at least 2 weeks' after 3 years, and 3 weeks' or more after 10 years. Various health and insurance benefits were also available to a large majority of the production workers.

## Industry characteristics

Products and processes. Products of nonferrous foundriescastings of nonferrous metals and alloys-are, to a very large extent, produced for other manufacturers rather than for direct sales to the ultimate consumer. Automobile and automotive parts manufacturers are the chief customers. Many other manufacturers, however, are served by these foundries. Products of nonferrous foundries are usually determined by the precise requirements of the customer.

[^0]Establishments employing nearly nine-tenths of the production workers within the scope of the survey operated primarily on a job or order basis. Therefore, the castings produced varied considerably by size and shape, type of metal, and amount of finishing and fabrication required.

The method used to cast nonferrous metals depends on the metal, the size and shape of the product, and the volume of items to be produced. Individual establishments, however, usually employ only one casting method. Such establishments accounted for nearly seven-tenths of the production workers covered by the survey.

Diecasting was the principal forming method in foundries employing almost one-half of the workers. This is a machine process in which molten metal is forced under high pressure into steel dies from which the resulting castings are automatically ejected. It is particularly adaptable for producing a large quantity of identical items. Aluminum and zinc were the metals most commonly used in this casting process; lead, bronze, and copper were infrequently used. About one-fifth of the workers in this industry branch were in establishments employing a secondary method of casting, generally the permanent-mold method.

Sand casting was the chief process of establishments employing nearly two-fifths of the workers. In this method, sand is packed in a container (flask) around a pattern of the object to be cast; the pattern is then removed and molten metal is poured into the mold cavity and allowed to cool to form the desired shape. The sand mold can be used only once. Aluminum and copper-the latter including brass and bronze-were the most common metals used. About threetenths of the workers in this branch of the industry were in foundries also employing the permanent-mold casting method; almost one-tenth were in foundries using other secondary casting methods.

Permanent-mold casting was the principal method used by establishments employing slightly less than one-tenth of the workers. In this method, molten metal is induced into metal molds (which may be used repeatedly) either by force of gravity or by centrifugal force. Aluminum was most commonly used in this method. About one-fifth of the workers in this branch were in foundries also manufacturing sand castings, and another one-tenth were in foundries producing some die-cast items.

Only 6 percent of the production workers worked in foundries which did not use one of the three major casting methods.

Employment trends. Production worker employment in nonferrous foundries ( 54,432 in May 1975) ${ }^{3}$ had declined 12 percent since mid-1970, when the Bureau's last survey of the industry was conducted. ${ }^{4}$ Employment fell by 10 percent in die casting plants, by 12 percent in sand casting establishments, and by 25 percent in permanent-mold casting foundries. Regionally, the number of workers declined sharply in New England ( 35 percent), and in the Middle Atlantic ( 21 percent) and Great Lakes States ( 14 percent). Employment rose only moderately in the Southeast (9 percent) and the Middle West (3 percent). Employment in the Pacific region remained relatively constant between 1970 and 1975.

Location. In May 1975, the Great Lakes region employed one-half of the production workers; the Middle Atlantic States, just under one-fifth; and the Pacific region, onetenth. Each of the remaining regions accounted for less than one-tenth of total employment. Text table 1 presents the distribution by region of all production workers, and of production workers classified according to major casting method used.

Three-fourths of all workers were employed in metropolitan areas. ${ }^{5}$ Among the regions for which separate data are presented, the proportions ranged from two-fifths in the Southeast to virtually all in the Pacific region. The eight metropolitan areas studied separately accounted for threetenths of all production workers. As indicated in text table 2 , the distribution of production workers in establishments classified according to the predominent casting method varied considerably among these areas.

Establishment size. Nonferrous foundries are predominantly small establishments. Three-fourths of the 1,286 foundries estimated to be within the scope of the survey had fewer than 50 workers; one-sixth employed between 50 and 99 workers; and slightly less than one-tenth em-

[^1]Text table 1. Regional distribution of production workers by primary method of casting

| Region | Percent of workers in: |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | All <br> establishments | Die <br> casting | Sand <br> casting | Permanent- <br> mold <br> casting |
| United States ${ }^{\text {. }}$ | 100 | 100 | 100 | 100 |
| New England. . | 4 | 2 | 7 | - |
| Middle Atlantic | 19 | 16 | 19 | 16 |
| Southeast . . . | 6 | 8 | 4 | - |
| Great Lakes . . | 49 | 55 | 40 | 62 |
| Middle West .. | 5 | 5 | 8 | 4 |
| Pacific. . . . | 10 | 8 | 14 | 5 |

${ }^{1}$ Includes data for regions in addition to those shown separately.
NOTE: Dashes indicate data that do not meet publication criteria.
ployed between 100 and 249 workers. None had as many as 2,500 workers. Foundries with 100 workers or more however, accounted for about one-half of the industry's work force, and for at least the majority of the workers in the Middle Atlantic, Southeast, Great Lakes, and Middle West regions. Among the eight metropolitan areas studied separately, the proportion of workers employed in shops with 100 workers or more varied widely.

Percent of production workers in plants employing 100 or more
Chicago . . . . . . . . . . . . . . . . . . . . . . . . 33
Cleveland . . . . . . . . . . . . . . . . . . . . . . . 68
Detroit . . . . . . . . . . . . . . . . . . . . . 38
Los Angeles-Long Beach . . . . . . . . . . . . . 25
Milwaukee . . . . . . . . . . . . . . . . . . . . . . 69
Newark . . . . . . . . . . . . . . . . . . . . . . . . 52
New York . . . . . . . . . . . . . . . . . . . . . . 25
Philadelphia . . . . . . . . . . . . . . . . . . . . . 76

Text table 2. Distribution of production workers by method of casting in selected metropolitan areas

| Metropolitan area | Number of production workers ${ }^{1}$ | Percent of workers in: |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Die casting | Sand casting | Permanentmold casting |
| Chicago | 3,163 | 73 | 25 | - |
| Cleveland | 2,161 | 46 | 20 | 29 |
| Detroit | 1,441 | 82 | 11 | - |
| Los AngelesLong Beach. | 3,768 | 43 | 55 | 2 |
| Milwaukee | 1,713 | 27 | 53 | 17 |
| Newark | 1,291 | 40 | 19 | - |
| New York | 1,308 | 31 | 18 | 13 |
| Philadelphia . | 1,585 | 40 | 29 | 24 |

[^2]Union contract coverage. Nearly three-fifths of the industry's production workers were in establishments in which collective bargaining agreements covered a majority of the production workers. In regions for which data can be published, the proportions of workers in such foundries were: Two-thirds in the Great Lakes, three-fifths in the Middle Atlantic, about one-half in the Southeast and Middle West, two-fifths in the Pacific, and one-third in New England. The following tabulation illustrates the degree of unionization estimated in each of the eight metropolitan areas studied separately:

|  | Percent of production workers employed in plants with a majority of workers covered by union agreaments |
| :---: | :---: |
| Chicago | 60-70 |
| Cleveland | 70-80 |
| Detroit | 70-80 |
| Los Angeles-Long Beach | 10-20 |
| Milwaukee | 80-90 |
| Newark | 40-50 |
| New York | 50-60 |
| Philadelphia | . . . 70-80 |

Method of wage payment. Four-fifths of all workers were paid on a time-rate basis. (See table 20.) In all regions except New England, formal wage payment plans applied to a majority of the workers. In New England, individual rates were paid as often as formal wage plans. Regionally, the largest proportion of workers under incentive wage systems was found in the Middle Atlantic ( 26 percent), New England ( 23 percent), and Great Lakes ( 22 percent). Occupations for which a substantial proportion of workers (more than one-fourth) were paid under incentive plans included die casting machine operators (both setup and operate and operate only), permanent mold machine operators, metal polishers and buffers, and polishing and buffing machine operators.

## Average hourly earnings

Straight-time earnings of the 54,432 production and related workers covered by the study averaged $\$ 4.45$ an hour in May $1975 .{ }^{6}$ (See table 1.) Regionally, wage levels ranged from $\$ 3.83$ in the Middle West to $\$ 4.62$ in the Great Lakes and Southeast. Wage levels in New England (\$4.03) and the Pacific region ( $\$ 4.38$ ) fell below the national mean, while the average for the Middle Atlantic (\$4.59) was above the U.S. average.

The $\$ 4.45$ nationwide average was 38 percent above the $\$ 3.23$ level recorded in the June 1970 study. Average earn-

[^3]ings rose 39 percent in die-casting plants, 38 percent in sand-casting foundries, and 34 percent in permanent-mold foundries.

National averages in May 1975 were higher in nonmetropolitan areas than in metropolitan areas ( $\$ 4.64$ and $\$ 4.38$, respectively). This general relationship held in the Middle Atlantic, Southeast, Great Lakes, and Pacific regions, which together employed more than four-fifths of the work force. In the two other regions permitting comparison, New Eng. land and the Middle West, average wages in metropolitan areas exceeded those in nonmetropolitan areas by 5 percent and 21 percent, respectively.

Data for eight metropolitan areas are presented separately in tables 12 through 19. Average earnings for the four metropolitan areas in the Great Lakes region ranged from $\$ 4.40$ an hour in Detroit to $\$ 4.85$ in Milwaukee. In the other four metropolitan areas, average earnings ranged from $\$ 3.93$ in Los Angeles-Long Beach to $\$ 4.85$ in Philadelphia.

Among the three major methods of production studied separately, little wage variation was found nationwide-only a 4 -percent difference between the highest paying die-casting foundries and the lowest paying sand-casting foundries. As illustrated in text table 3, however, no one type of foundry was consistently highest paying or lowest paying for the regions permitting comparison.

Employees in establishments with 250 workers or more averaged $\$ 5.27$ an hour $-\$ 1.02$, or 24 percent more than workers in foundries with 100 to 249 workers, and $\$ 1.21$, or 30 percent more than those in plants with 8 to 99 workers. This general pattern held in three of the four regions where comparisons could be made. In the Southeast, the average for workers in shops with 8 to 99 workers exceeded that for workers in plants of 100 to 249 workers by 31 cents, or 9 percent and in the Pacific coast region, by 24 cents, or 6 percent.

Workers in establishments having union contracts averaged 18 percent more than workers in establishments not having such contracts ( $\$ 4.75$ compared with $\$ 4.04$ ). Among the six regions permitting comparisons, workers in union plants averaged from 6 percent (Great Lakes) to 57 percent (Southeast) more than workers in nonunion plants.

Text table 3. Average hourly earnings by primary method of casting and region

| Region | Die-casting <br> plants | Sand-casting <br> plants | Permanent <br> mold-casting <br> plants |
| :--- | :---: | :---: | :---: |
| United States ${ }^{1} . . . . .$. | $\$ 4.54$ | $\$ 4.38$ | $\$ 4.47$ |
| New England . . . . . . . | 4.08 | 4.05 | - |
| Middle Atlantic . . . . . | 5.05 | 4.21 | 4.68 |
| Southeast . . . . . . . . | 5.02 | 3.88 | - |
| Great Lakes . . . . . . | 4.58 | 4.77 | 4.66 |
| Middle West . . . . . . | 3.48 | 4.08 | 3.96 |
| Pacific. . . . . . . . . . | 4.24 | 4.42 | 4.86 |
|  |  |  |  |

[^4]NOTE: Dashes indicate data that do not meet publication criteria.

The basic survey tabulations did not attempt to isolate and measure any of the preceding characteristics as individual determinants of wage levels. Characteristics associated with higher pay levels in this industry, such as coverage by union agreement and location in the Great Lakes States, are highly interrelated. Appendix A of this bulletin, however, presents a brief technical note on the results of a multiple regression in which the effects of individual variables were isolated to a measurable degree. In several cases, there were marked differences between the average earnings differentials produced by cross-tabulation-simple regression (as discussed in this section of the report)-and those derived from multiple regression. For example, workers in union plants averaged 71 cents an hour more than those in nonunion foundries, but apparently only slightly more than half ( 39 cents) of this differential can be attributed solely to unionization. (See tables A-1 and A-2).

Individual earnings varied widely, with about 8 percent of the workers earning less than $\$ 3$ an hour and 11 percent earning $\$ 6$ or more. (See table 2) Workers in the middle half of the array earned between $\$ 3.62$ and $\$ 5.15$ an hour. Regionally, the proportions earning less than $\$ 3$ an hour ranged from 4 percent in the Great Lakes to 16 percent in the Middle West. Table 3 presents the distribution of individual earnings by the three major methods; earnings of the middle half of workers in die-casting plants fell between $\$ 3.57$ and $\$ 5.45$, between $\$ 3.66$ and $\$ 4.95$ in sand-casting foundries, and between $\$ 3.83$ and $\$ 4.99$ in permanent-mold casting foundries. Indexes of relative dispersion (the middle range divided by the median) show a wider spread of earnings in die-casting foundries than in those producing sand or permanent-mold castings.

## Occupational earnings

The 36 occupations for which average hourly earnings are presented in table 4 accounted for slightly more than three-fifths of the 54,432 production workers in establishments within the scope of the survey. Men constituted at least 95 percent of the workers in 26 of the categories. Women made up about one-half of the packers, two-fifths of the class C inspectors, one-third of the sprue-cutting press operators, core assemblers, and finishers, and onefourth of the filers (light).

Nationwide averages ranged from $\$ 6.82$ for wood patternmakers to $\$ 3.71$ for general foundry laborers and sprue-cutting press operators. Occupations with average earnings over $\$ 5.50$ included: Millwrights ( $\$ 6.35$ ), tool and die makers (\$6.23), maintenance electricians (\$5.99), and maintenance mechanics ( $\$ 5.76$ ). Chippers and grinders, numerically the most important job surveyed, averaged $\$ 4.08$ an hour. Approximately 5,200 workers tended die casting machines; workers who only are required to set up these machines averaged $\$ 5.02$, compared with $\$ 4.61$ for those who operate or set up and operate them. Earnings of the 3,800 molders in the survey averaged $\$ 4.76$ for floor

Text table 4. Average hourly earnings by primary method of casting and occupation

| Occupation | Die-casting plants | Sand-casting plants | Permanent mold-casting plants |
| :---: | :---: | :---: | :---: |
| Chippers and grinders | \$4.17 | \$4.11 | \$4.28 |
| Furnace tenders | 4.59 | 4.29 | 4.39 |
| Inspectors, class B | 4.66 | 4.74 | 4.75 |
| Inspectors, class C | 4.62 | 4.42 | 4.13 |
| Laborers, material handling | 4.01 | 4.02 | 3.87 |
| Maintenance workers, general utility | 4.66 | 4.59 | 4.72 |
| Permanent moldmachine operators. | 5.89 | 5.29 | 4.26 |
| Pourers, metal | 4.62 | 4.48 | 4.70 |
| Tool and die makers. | 6.26 | 6.39 | 5.52 |

and for machine molders and $\$ 4.64$ for hand-bench molders.
Among the 19 occupations for which data could be presented for all regions shown in table 4, earnings were generally highest in the Great Lakes region, and lowest in the Southeast. The highest regional averages exceeded the lowest by 20 to 40 percent in most of these jobs.

Occupational earnings data are provided separately for the three major types of foundries in tables 9,10 , and 11. Many of the occupations studied-with the notable excep. tion of those directly related to the casting processwere common to all types of establishments.

Text table 4 shows no discernable pattern of pay relationships by type of foundry for jobs found in all three production methods. Differences in nationwide job averages by type of foundry reflect, to some extent, differences in regional composition of the three industry branches. For example, more than three-fifths of the chippers and grinders in permanent-mold foundries were found in the relatively high-paying Great Lakes region, compared with only twofifths of those in sand-casting foundries.

Occupational earnings data were also tabulated by size of establishment, by size of community, by labor-management contract coverage, and by method of wage payment. (See tables 5-8.)

Earnings of individual workers usually varied considerably within the same job and metropolitan area. (See tables 12-19.) In many instances, hourly earnings of the highestpaid workers exceeded those of the lowest-paid workers in the same job and area by more than $\$ 2$ an hour. Thus, some workers in comparatively low-paid jobs (as measured by the average for all workers) earned more than some workers in jobs for which significantly higher average earnings were recorded.

## Establishment practices and supplementary wage provisions

Data were also obtained on shift differentials for production workers, work schedules, and selected supplementary benefits such as paid holidays; paid vacations; and health, insurance, and retirement plans for production and office workers.

Scheduled weekly hours. Weekly work schedules of 40 hours were in effect in foundries employing 95 percent of the production workers in May 1975. (See table 21.) Among the selected regions, the Southwest had the greatest proportion working longer schedules-14 percent. For office workers, 40 -hour schedules were predominant in each region, with shorter schedules applying to about 30 percent of the workers in the Middle Atlantic States and 14 percent of those in New England.

Shift differential provisions and practices. A large majority of the production workers were in foundries having formal provisions for late shifts. (See table 22.) Eighteen percent of the workers were actually employed on second shifts at the time of the study; they usually received 10 cents an hour above day shift rates. About 4 percent were employed on third shifts. (See table 23.)

Paid holidays. Virtually all production and office workers were employed in establishments providing paid holidays, usually 8 to 12 annually. (See table 24.) Holiday provisions varied widely among and within regions. For example, most production workers in the Southwest usually received 8 days, compared with 11 days in the Middle Atlantic States, and 14 days in the Southeast. No more than 50 percent of the production workers in any region received the same number of holidays. Similar patterns were noted for office workers.

Paid vacations. Nearly all production and office workers received paid vacations after qualifying periods of service. (See table 25.) Vacation provisions applying to a large majority of the production workers were: 1 week's vacation pay after 1 year of service, at least 2 weeks' after 3 years, and 3 weeks' or more after 10 years. Four weeks' vacation pay or more after 20 years of service was available to three-fifths of the workers. Vacations were slightly more liberal for office workers. For both groups, substantial differences were found from region to region. For example, after 20 years, more than seven-tenths of the production workers in the Great Lakes region could receive at least 4 weeks of vacation pay; in the Southwest region, the corresponding proportion was about one-eighth.

Health, insurance, and retirement plans. A large majority of the production and office workers were provided the following types of insurance financed at least in part by the employer: Life, hospitalization, surgical, basic and major medical, sickness and accident, and accidental death and dismemberment. (See table 26.) Slightly more than one-half of the office workers were covered by sick leave plans; such benefits rarely applied to production workers. The incidence of these benefits varied by region. Major medical plans, for example, covered more than nine-tenths of the production workers in the Pacific and Border States, compared with about two-thirds in Southeast and Great Lakes.

Pension plans, providing regular payments for the remainder of the retiree's life (in addition to Federal social security), were recorded in establishments employing twothirds of the production and seven-tenths of the office workers. Among the regions, the proportions of plant workers covered by pension plans ranged from slightly less than four-fifths in the Border States to slightly more than twofifths in the Pacific region. Plans providing a lump-sum payment at retirement applied to less than one-tenth of the workers.

In some instances, retirees were provided certain insurance benefits which were at least partly financed by their former employers. About one-third each of the production workers and office workers were in foundries extending life insurance, usually on a reduced basis, to retirees. Hospitalization, basic medical and surgical insurance, providing at least some coverage during retirement, applied to about three-tenths of the workers in each group. The incidence of such provisions varied substantially by region. (See table 27.)

Other selected benefits. Provisions for pay continuation while attending funerals of relatives or while serving as a juror applied to about seven-tenths of the production workers and to similar proportions of the office workers. Pay for separation from work because of technological changes or plant closings was available to nearly one-tenth of the production workers and to about one-eighth of the office workers. Provisions for unemployment payments in addition to State benefits applied to about one-eighth of the production workers, but rarely to office personnel. Cost-of-living pay adjustments applied to one-third of the production workers compared with one-fifth of the office workers. (See table 27.)

Table 1. Average hourly earnings: By selected characteristics
(Number and average straight-time hourly earnings' of production workers in nonferrous foundries by selected characteristics, United States and selected regions, May 1975)

| Itefn | United States ${ }^{2}$ |  | New England |  | Middle Atlantic |  | Southeast |  | Great Lakes |  | Middle West |  | Pacific |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { workers } \end{aligned}$ | Average hourly earnings | Number of workers | Average hourly earnings | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array} \\ \hline \end{array}$ | Average hourly earnings | Number of workers | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | $\begin{array}{\|c} \text { Average } \\ \text { hourly } \\ \text { earnings } \end{array}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { workers } \end{aligned}$ | Average hourly earnings | Number of workers | Average hourly earnings |
| all prodoction morkrbs. | 54, 432 | \$4.45 | 2,240 | \$4.03 | 10.261 | \$4.59 | 3,121 | \$4.62 | 26,548 | \$4.62 | 2,966 | \$3.83 | 5,503 | \$4.38 |
| н8M. | 48, 165 | 4.55 | 2,042 | 4.14 | 9.377 | 4.68 | 2,839 | 4.81 | 23,013 | 4.72 | 2,446 | 4.01 | 5,291 | 4.41 |
| Hosen. | 6,267 | 3.66 | 198 | 2.87 | 884 | 3.67 | 282 | 2.74 | 3,535 | 3.98 | 520 | 3.00 | 212 | 3.69 |
| BA JOR METHOD OP FEODUCTION: <br> DIE CASTIUG. | 26,354 | 4.54 | 588 | 4.08 | 4.347 | 5.05 | 2,109 | 5.02 | 14,395 | 4.58 | 1,209 | 3.48 | 2,070 | 4.24 |
| SAND Castimg. | 20,843 | 4.38 | 1,462 | 4.05 | 4.003 | 4.21 | 9 | 3.88 | 88.301 | 4.77 | 1, 614 | 4.08 | 2,981 | 4.42 |
| perbayrat-hold castiu | 3,974 | 4.47 |  | - | 626 | 4.68 | - | - | 2,456 | 4.66 | , |  | 188 | 4.86 |
| SIZE OF COBnOMTY: <br> GETROPOLITAM AREAS.3. | 41,074 | 4.38 | 1,904 | 4.06 | 8,306 | 4.44 | 1,318 | 3.62 | 19,941 | 4.59 | 1,350 | 4.22 | 5,286 | . 36 |
| MOMAET ROPOLITAM ARAS. | 13,358 | 4.64 | ${ }^{3} \mathrm{H}$ | 3.85 | 1,955 | 5.24 |  | 3.62 | 6,607 | 4.70 | 1,616 | 3.50 | 28 | - |
| SIEE OF ESTAbLISHMEYT: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 25,800 | 4.06 | 1.184 | 3.84 | 4,718 | 4.01 | 1.361 | 3.66 | 10.601 | 4.18 | 1,438 | 3.60 3.90 | 4,417 | 4.43 4.19 |
| 100-249 HORKBRS................... | 13,431 | 4.25 | 1,056 | 4.25 | 1,652 | 4.53 | 639 | 3.35 | 6,665 | 4.46 5 | 1,174 | 3.99 | 1,086 | 4.19 |
| 250 workrbs or morb.............. | 15,201 | 5.27 |  |  | 3,891 | 5.32 |  | - | 9, 282 | 5.24 | - |  | - | - |
| LABOR-BAMAGRARNT COMTRACTS: ESTABLISHEBTS MITH- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MAJORITY OF HORKBRS COVBRED..... | 30,780 | 4.75 | 744 | 4.52 | 6,464 | 4.89 | - | - | 17,331 | 4.72 | 1,388 | 4.16 | 2.149 | 5.01 |
| COVERED | 23,652 | 4.04 | 1,496 | 3.78 | 3,797 | 4.08 | 1,482 | 3.55 | 9,217 | 4.44 | 1,578 | 3.54 | 3,354 | 3.97 |

${ }_{2}$ - Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
${ }^{2}$ IIcludes data for resita A adition to thos
(tand Stistical Areas as defined by the U.S. Office of Management and Budget through February 1974.
NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Table 2. Eamings distribution: All estabilishments
(Percent distribution of production workers in nonferrous foundries by average straight-time hourly earnings, ${ }^{1}$ United States and selected regions, May 1975)

| Average hourly earnings' | United States ${ }^{2}$ |  |  | New England | Middle <br> Atlantic | Southeast | Great Lakes | Middie West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Men | Women |  |  |  |  |  |  |
| MOABER OF DORRERS. <br> average hodrli barmibgs. | $\begin{array}{r} 54 ; 432 \\ \$ 4.45 \end{array}$ | 48,165 $\$ 4.55$ | 6.267 $\$ 3.66$ | 2.240 $\$ 4.03$ | $\begin{array}{r} 10.261 \\ 84.59 \end{array}$ | 3,121 $\$ 4.62$ | $\begin{array}{r} 26,548 \\ \$ 4.62 \end{array}$ | $\begin{aligned} & 2,966 \\ & \$ 3,83 \end{aligned}$ | 5.503 $\mathbf{5 4 . 3 8}$ |
| тотиц......................... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| OMDER S2.10....................... | (3) | (3) |  |  |  |  | (3) |  | - |
| \$2.10 AMD OHDER \$2.20............. | 0.2 | (3) | 1.5 | 1.2 | 0.1 | 1.1 |  | 0.9 |  |
| \$2.20 A1D UHDER \$2.30............. | . 4 | 0.3 | 1.0 | 1.6 | - 2 | - 3 | 0.1 | - 8 | 0.1 |
| \$2.30 AND OXDER $\$ 2.40 \ldots \ldots \ldots .$. | - 3 | - 3 | -9 | 1.4 | -1 | . 9 | - 1 | . 3 | -3 |
| \$2.40 A D DHDER \$2.50............ | . 4 | . 4 | 1.1 | - 8 | . 2 | . 6 | .2 | -4 | . 9 |
| \$2.50 AMD OMDER \$2.60............ | 1.2 | 1.1 | 2.2 | 1.3 | . 7 | 2.6 | . 5 | 2.2 | 3.2 |
| \$2.60 AND DHDER S2.70.. | 1.0 | - 6 | 4.3 | 2.6 | -8 | 2.3 | . 2 | 3.5 | 1.3 |
| \$2.70 A MD UHDER \$2.80.. | 1.3 | 1.1 | 2.6 | 1.2 | 1.1 | 2.7 | . 5 | 2.1 | 2.4 |
| \$2.80 AHD Dider $\$ 2.90$. | 1.5 | 1.1 | 4.2 | 2.6 | 1.0 | 3.1 | 1.0 | 2.7 | 1.2 |
| \$2.90 AND UNDER \$3.00.. | 1.4 | 1.1 | 3.4 | 2.2 | . 9 | 1.6 | -9 | 2.7 | 2.3 |
| \$3.00 AMD URDRR \$3.10........... | 3.0 | 2.4 | 7.3 | 3.3 | 2.2 | 4.4 | 1.1 | 6.9 | 4.0 |
| \$3.10 AND UNDER $\mathbf{\$ 3 . 2 0 .}$ | 2.2 2.8 | 1.9 2.7 | 4.4 4.2 | 2.2 5.3 | 1.2 | 2.4 5 | 1.9 1.9 | 3.4 4.9 | 1.6 3.6 |
| \$3.30 A MD UHDER \$3.40............ | 2.5 | 2.4 | 3.1 | 2.8 | 2.1 | 4.1 | 2.4 | 2.0 | . 9 |
| \$3.40 AMD UHDER \$3.50............ | 2.3 | 2.1 | 3.6 | 4.1 | 1.8 | 3.7 | 1.8 | 2.6 | 2.6 |
| \$3.50 AND URDR | 3.8 | 3.6 | 5.4 | 3.9 | 3.3 | 3.7 | 3.7 | 3.1 | 4.7 |
| \$3.60 A MD Under $\$ 3.70 .$. | 2.9 3.5 | 2.9 3.4 | 3.3 4.3 | 2.1 2.8 | 3.5 2.9 | 1.2 | 2.5 3.8 | 5.3 | 1.7 |
| \$3.80 AMD D\#Der \$3.90............ | 3.8 | 3.2 | 8.6 | 5.3 | 4.9 | 1.2 | 4.2 | 3.6 | 2.8 |
| \$3.90 A AD OHDER S4.00............ | 3.2 | 3.1 | 4.7 | 3.7 | 4.0 | 1.0 | 3.0 | 3.1 | 4.4 |
| \$4.00 AMD Under \$4.10............. | 3.9 | 3.6 | 5.6 | 2.4 | 5.0 | 3.1 | 3.4 | 7.0 | 3.8 |
| \$4.10 AMD UTDER \$4.20............. | 3.2 | 3.5 | 1.1 | 6.9 | 3.9 | 1.9 | 3.2 | 3.8 | 1.5 |
| \$4-20 AND DIDER \$4.30............ | 4.2 | 4.4 | 3.1 | 4.7 | 3.1 | 3.2 | 4.5 | 9.3 | 3.2 |
| \$4.30 AND DIMDRE \$4.40............. | 3.5 | 3.5 | 3.1 | 2.9 | 4.2 | 1.7 | 3.8 | 2.7 | 3.8 |
| 54.40 AND OMDER \$4.50............. | 3.3 | 3.5 | 2.3 | 2.5 | 3.3 | . 8 | 4.0 | 2.2 | 3.0 |
| \$4.50 And DPDER \$4.60............ | 3.6 | 3.9 | 1.6 | 3.7 | 3.4 | 1.7 | 4.2 | 1.8 | 3.7 |
| \$4.60 A MD OEDBR \$4.70. | 4.4 | 4.4 | 4.4 | 1.6 | 6.5 | -6 | 4.7 | 3.0 | 4.1 |
| \$4.80 AMD VIDSER \$4.90.............. | 2.6 | 2.8 | 1.0 | 2.3 3.0 | 3.9 | . 5 | 3.3 | 4.7 | 3.3 |
| \$4.90 A1D DHDER \$5.00............. | 2.1 | 2.3 | 1.1 | 2.4 | 2.1 | .5 | 2.1 | 2.3 | 3.7 |
| \$5.00 And Undse \$5.10............ | 1.7 | 1.8 | . 5 | 3.2 | 1.2 | -9 | 1.8 | 1.3 | 2.7 |
| \$5.10 AND URDER \$5.20............ | 1.9 | 2.1 | . 3 | 1.9 | 2.1 | -1 | 2.4 | .9 | 2.0 |
| \$5.20 AMD UHDER \$5.30............. | 2.2 | 2.4 | . 3 | 1.3 | 1.6 | - 1 | 2.9 | . 4 | 3.4 |
| \$5.30 A DD DADER \$5.40............. | 1.5 | 1.7 | $\cdot 3$ | . 3 | 1.9 | . 1 | 2.0 | . 3 | 1.5 |
| \$5.40 AND UMDEE \$5.50............ | 1.1 | 1.3 | . 3 | 1.4 | . 8 | . 4 | 1.4 | .3 | 1.6 |
| \$5.50 AMD ORDEA \$5.60............. | 1.8 | 1.9 | . 7 | 1.3 | 1.0 | . 2 | 2.9 | . 4 | . 8 |
| \$5.60 AMD ORDER \$5.70............. | 1.7 | 1.9 | $\cdot 1$ | 1.7 | 1.4 | (3) | 2.4 | . 2 | . 5 |
| \$5.70 A MD OMDRR \$5.80............ | 1.4 | 1.5 | - 2 | 1.5 | 1.3 | $\cdot 6$ | 1.8 | -4 | - 8 |
| \$5.80 AMD Under s5.90............ | 1.9 | 2.1 | . 2 | 1. 2 | 1.2 | $\cdot 3$ | 3.0 | -4 | 1.3 |
| \$5.90 and duder \$6.00.. | 1.4 | 1.3 | 2.1 | . 7 | 1.1 | 1.5 | 1.8 | -1 | 1.5 |
| \$6.00 A MD UPDPR \$6.20............ | 4.3 | 4.8 | . 3 | 1.6 | 6.2 | 14.0 | 3.8 | . 3 | 4.2 |
| \$6.20 ABD UnDEE \$6.40............. | 2. 1 | 2.3 | . 2 | - 2 | 3.3 | 9.3 | 1.5 | - 1 | 1.5 |
| \$6.40 a MD OHDER \$6.60.. | -9 | 1.0 | . 2 | . 2 | 1.8 | 1.2 | . 9 | . 1 | 1.0 |
| \$6.60 A MD OMDER \$6.80... | - 5 | -5 | (3) | -1 | -4 | 1.2 | . 5 | -1 | . 9 |
| \$6.80 and UHDER \$7.00... | . 4 | . 4 | .1 | . 1 | - 3 | (3) | -4 |  | . 9 |
| S7.00 A MD UHDER S7.20............. | - 3 | . 3 | (3) | (3) | -3 | $\pm 1$ | - 3 | . 1 | -4 |
| 57.20 AHD OIDER 57.40............. | . 9 | -6 | $-\frac{1}{3}$ | (3) | 1.7 | 1.9 4.1 | . 7 | $\because$ | $\xrightarrow{-3}$ |
| \$7.60 A MD DUDER \$7.80............ | . 5 | . 6 | - | - | .6 | 2.5 | . 5 | (3) | . 1 |
| \$7.80 amd Undre se.00............ | - 1 | . 1 | - | .3 | - 1 | . 2 | (3) | - | . 4 |
| \$8.00 and ovbr............... | . 5 | . 5 | - | - | - 3 | . 6 | . 5 | . 7 | 1.1 |

[^5]Table 3. Earnings distribution: By method of production
(Percent distribution of production workers in nonferrous foundries by average straightitime hourly eamings,' and major method of production, United States and selected regions, May 1975)

${ }^{3}$ Less than 0.05 percent
NOTE: Because of rounding, sums of individual items may not equal 100.

| Occupation and sex ${ }^{2}$ | United States' |  | England |  | Middle Atantic |  | Southeast |  | Grat Lakes |  | Midde West |  | Paxitic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \begin{array}{l} \text { Number } \\ \text { ofters } \\ \text { workers } \end{array} \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { houriv } \\ & \text { nemmings } \end{aligned}$ | $\begin{aligned} & \text { Number } \\ & \text { orkers } \\ & \text { oork } \end{aligned}$ | $\begin{array}{\|l\|l} \text { Average } \\ \text { hourly } \\ \text { earnings } \end{array}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { workers } \end{aligned}$ vork | $\left.\begin{array}{\|c\|c\|} \hline \text { Average } \\ \text { heorly } \\ \text { earnings } \end{array} \right\rvert\,$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | $\begin{aligned} & \text { Average } \\ & \text { hourly } \\ & \text { earnings } \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline \begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Avergeg } \\ \text { Aevile } \\ \text { heamings } \end{gathered}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { workers } \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { hourly } \\ & \text { earnings } \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { Number } \\ \text { orkers } \end{array} \\ \text { or } \end{array}$ | $\begin{aligned} & \text { Average } \\ & \text { heorry } \\ & \text { hearrings } \end{aligned}$ |
| procrssing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chippres and grimitrs. | 3,793 | ${ }^{54} .08$ | 177 | 33.70 | 915 | 33.95 | 119 | 33. 52 | 1.432 | \$4.54 | $3 \mathrm{C8}$ | \$3.77 | 607 | 53.95 |
|  | 3.466 | 4.11 | 173 |  | 774 141 | 3.95 3.95 | 119 | 3.52 | 1.351 81 | 4.59 3.63 | 275 | 3.81 | 575 | 3.95 |
| Chippa | 346 | 4.49 |  |  | 26 | 3.78 | 26 | 3.79 | 197 | S.11 | 41 | ${ }^{3.79}$ | 26 | 4.01 |
| GRIMDE | $\begin{array}{r}318 \\ 2,030 \\ \hline\end{array}$ | 4.64 <br> 3.64 <br> 3.94 | 115 |  | 26 393 | -3.78 <br> 3.94 <br> 3. | ${ }_{28}^{26}$ | 3.79 <br> 3.41 | 7197 | 5.11 4.26 4.26 | 37 | ¢3.80 <br> 3.89 | ${ }^{26}$ | ${ }^{4.01}$ |
| ${ }_{\text {Hsm }}$ | 1,837 | 3.96 | 115 | 3.69 | 314 | 3.57 | 28 | 3.41 | 692 | ${ }_{4}^{4.26}$ | 171 | 3. ${ }^{3.69}$ | 376 | 3.88 |
| cripres | 1.993 | 3.72 4.17 |  |  |  |  |  |  | 70 473 | 3.61 4.84 4.84 |  | - 5 | 173 |  |
| s81.............. | 1,311 | 4.19 | 52 | 3.67 | 434 | 3.94 | 65 | 3.47 | 462 | 4.86 | 67 | 3.61 | 173 | 4.08 |
|  | (106 | 3.7.85 |  | 3.78 |  | 4.71 |  | - |  |  |  |  | 67 |  |
| msm...................... | 392 | 4.83 | 45 | 3.83 | 33 | 5. 19 |  |  | ${ }_{236}^{336}$ | 5.29 | 12 | 3.74 | 55 | ${ }_{4}^{3.08}$ |
|  | 175 | 4.64 4.662 |  |  |  |  |  |  | 140 | - $\begin{aligned} & 4.95 \\ & 5.12 \\ & 5.12\end{aligned}$ |  |  |  |  |
| cormankrs, machimi.- | 830 | 4.40 | 56 | 5.06 | 105 | 3.99 | 27 | 3.90 3.90 | 380 | 4.71 | 45 | 4.08 | 137 | 5.03 4.37 |
|  | 1,215 | 4.61 | 45 | 3.9 | 353 | 4.85 | 20 | 65 | 477 | . 80 | 52 | 3.84 | 173 | 4.71 |
| di e-casting inichisz opriators, | 3,415 | 4.61 | 81 | 4.59 | 447 | 4.88 | 377 | 4.75 | 1.970 | 4.61 | ${ }^{2}$ | 3.56 | 282 | 4.73 |
| dir-casting-bachine sti-0p |  |  | 14 |  |  |  |  |  |  |  |  |  |  |  |
|  | 397 | 4.03 | 4 | . 31 | 122 | 4.23 | 60 | 5.36 | 126 | -3.05 <br> 3 | ${ }^{23}$ | 4.38 | 65 | 4.7 |
| ninam............ | 297 100 | ${ }^{4.13}$ |  |  | 92 <br> 30 | - $\begin{array}{r}4.51 \\ 3.38 \\ \hline .38\end{array}$ |  | - | 90 | ${ }^{3.87}$ |  | - |  |  |
| filsms, heay (die cast | 82 | 4.57 | - | - | 47 | 4.98 |  | - |  | - |  | - |  |  |
|  | 1,804 | 4.85 | 37 | 4.19 | 942 | 4.37 |  |  |  |  |  |  |  |  |
| MOLDERS, PLoob. | -635 | 4.76 | 33 | 4.27 | 160 | 4.94 | 59 | 4.08 | 225 | 4.94 | 51 | ${ }_{4}^{3.88}$ | 59 | 4. 36 |
|  | 2, 2835 | 4.64 <br> 4.76 | $\begin{array}{r}34 \\ 205 \\ \hline 20\end{array}$ | 4.59 4.64 | 231 365 | 4.58 <br> 4.67 | 143 |  | ${ }_{933}^{322}$ |  | 12 18 | 5.09 4.48 | +120 | 5.56 <br> 4.95 <br> .95 |
| pattibilaners, pood | 199 | 6.82 | 25 | 4.87 | 27 | 5.47 | 19 | 6.40 | 67 | 7.31 |  |  | 30 | ${ }_{8}^{4.12}$ |
|  | 985 744 |  | - | - | 126 21 | 5.62 5.77 |  | - | 451 340 | ¢5.04 <br> 4.98 <br> .98 |  | - | 118 | ( $\begin{aligned} & 5.25 \\ & 5.35\end{aligned}$ |
| crurripgal castiug. | 92 | 4.21 | - | - |  | 5.7 |  | - | 36 | 4.97 |  | - | 1 |  |
|  | 149 382 | 5.78 | - | - | 45 | 5.01 |  | - | 321 | 4.83 |  | - | 三 | - |
| polishing- And butring-aichine |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opbrators | ${ }_{6}^{612}$ | 4.13 4.31 4.31 | - | - | 41 39 | - $\begin{aligned} & 4.17 \\ & 4.20 \\ & 4.52\end{aligned}$ |  |  | 440 | ${ }_{4}^{4.26}$ |  |  | 25 | 3.38 3.42 |
| wosmi........ | 131 | 3.49 | - |  |  |  |  |  | 106 |  |  |  |  |  |
|  | 997 | ${ }_{4}^{4.51}$ | 74 21 | 4.16 3.90 | (164 | 4.25 <br> 4.52 <br> 4.37 | 45 | ${ }^{3.47}$ | 560 105 | 4.72 <br> 4.23 <br> 4.23 | 42 | 4.04 | 58 | 4.60 |
|  | 206 322 | $\xrightarrow{4.06}$ | 22 | 3.78 | 436 | 4.37 3.76 | 17 | 3. 29 | 116 | 4.23 4.70 | 40 | 3.75 <br> 3.65 |  | 3.44 |
| Shakboпt nsi.................. | 892 | 3.84 | 38 | 3.55 | 136 | 4.04 | 62 | 3.15 | 390 | 4.23 | 111 | 3.58 | 76 | 3. 33 |
|  | 190 | 4.46 |  |  | 26 | 4.56 |  |  | 80 | 4.93 |  | 3.49 | 36 | 4.38 |
| Sproz-cutrimg priss opritcie | 1, 9887 | ${ }_{3}^{3.71}$ | 4 | 3.46 | $\stackrel{31}{28}$ | 4.58 4.62 | 153 | 4.41 4.77 | - 55 | 3.75 <br> 3 <br> 3 <br> 3 | 26 | ${ }^{3.30}$ | 156 156 15 | 3.10 3 3:10 |
| шонен...............................: | 536 | ${ }_{3.65}$ |  |  | 8 | 4.62 | 32 | 3.05 | 454 | 3.73 |  |  |  |  |
| spictios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| tusprctors, cliss | 336 310 | 4.84 | 8 | 4.89 | 121 | 4.67 | 6 | 3.96 | 139 | 5. 12 |  | 4.47 |  | 4.98 |
| Kirini. | 310 26 | 4.87 <br> 4.38 <br> 1.68 | - | 4.89 | 114 | 4.73 | 6 | ${ }^{3.96}$ | 125 <br> 14 | 5.17 <br> S. 14 <br> 4.96 | 15 | 4.49 | ${ }_{28}^{28}$ | 4.98 |
| inspictors, class | 720 | 4.51 | 21 | 4.00 | 91 | 4.68 |  | - | 354 | 4.57 | 51 | 4.03 | 76 | 4.47 |
|  | $\begin{array}{r}556 \\ 164 \\ \hline\end{array}$ |  | $\stackrel{20}{2}$ | 4.04 | ${ }_{18}^{73}$ | [ $\begin{aligned} & 4.83 \\ & 4.08 \\ & 4.08\end{aligned}$ |  |  | $\stackrel{281}{7}$ | 4.6.5 | 30 | 4.23 | 66 | 4.4.5 |
| Insprcrois, ciass | 1,646 | ${ }_{4}^{4.28}$ | - | - | 380 | 4.4 | 153 | 4.78 | 905 | 4. 35 |  | 3.33 | 77 | 3.15 |
| nonen....... | (985 | 4.53 3.91 | 13 | 2.93 | ${ }_{121}^{259}$ | 4.60 4.09 | 37 | 2.75 | 491 414 | - $\begin{aligned} & 4.50 \\ & 4.38\end{aligned}$ | $\stackrel{19}{-}$ | ${ }^{3.45}$ | $\stackrel{35}{-}$ | ${ }^{3.37}$ |
| matwremats: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| mirctrictans, min | 290 | 5.99 | 10 | 5.26 | 53 | 5.97 | - | - | 141 | 5.98 | 23 | 4.71 |  | - |
| 0тtury | 1,244 |  | 34 | 4.08 | 197 | 4.56 | 54 | 4.12 | 703 | 4.74 | 12 |  |  |  |
| hechamics, hatiminack.............. | ${ }^{395}$ | 5.76 | 23 | 4.83 | 76 | 5.95 |  |  | 166 | 5.86 | 10 | 4.09 | 14 | 6.30 |
|  | 4,162 <br> 154 | 6.35 6.23 | 55 | 5.32 | -55 | 6.15 | - | - | 64 74 | 6.34 6.19 | ¢3 | 5.06 | 93 | 7.17 |
| haterial movbaret: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| laborrbs, gempral podata | 2.082 | 3.71 | 60 | 3.34 | 645 | 3.52 | 158 | 3.43 | 748 | 4.11 | 51 | ${ }^{3.84}$ | 10 | 3.65 |
|  | 499 <br> 604 | 3.96 <br> 3.82 <br> 1.4 | 32 | 3.15 <br> 3.43 <br> 3.4 | +168 | 4.17 | 13 | 3.77 3.82 2 | 295 | 4.06 | 113 | 产3.63 <br> 3.76 | 18 | 4.91 |
| ${ }^{3} \mathrm{EH}$. | 306 | 4.16 | 20 | 3.58 | 90 | 4.22 |  | - | 142 | 4-43 | 12 | ${ }^{3.76}$ | 19 | 3.54 |
| yonzu. | 298 | 3.47 | 11 | ${ }^{3.16}$ | 35 | 3.30 |  |  | 205 | 3.61 |  |  |  |  |
|  |  | 4.28 <br> 4.12 <br> .12 | 16 | 3.85 4.01 | 93 39 | 4.12 4.13 | 19 | 3.96 | 215 51 | 4.43 <br> 4.16 <br> .05 | 18 | 4.7.04 | 27 | . 8 |
|  | 41 259 | 4.41 |  |  | $5{ }^{8}$ | 4. $\begin{aligned} & 3.89 \\ & 4.13\end{aligned}$ | 13 | 4.27 | $\begin{array}{r}22 \\ 142 \\ \hline\end{array}$ | 4.87 4.85 | - |  |  |  |
|  | 599 | 4.61 | 19 | 3.83 | 108 | 4.63 |  | a. | 377 | 4.62 | 19 | 3.71 | 21 | 4.88 4.94 |
|  | 529 70 | - $\begin{aligned} & \text { 4. } 69 \\ & 4.04\end{aligned}$ | 19 | ${ }^{3.83}$ | ${ }^{103}$ | 4.66 |  | - | $\stackrel{319}{-}$ | 4.74 | 19 | 3.71 | 18 | 4.62 |

Table 5. Occupational averages: By slze of establishments
(Number and average straight-time hourly earnings' of men in selected occupations in nonferrous foundries by size of establishment, United States and selected regions, May 1975)

| Occupation | United States ${ }^{2}$ |  |  |  |  |  | New | England | Middle Atlantic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Establishments with- |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 8 \text { to } 99 \\ & \text { workers } \end{aligned}$ |  | 100 to 249 workers |  | $\begin{gathered} 250 \text { workers } \\ \text { or more } \end{gathered}$ |  | 100 to 249 workers |  | $\begin{aligned} & 8 \text { to } 99 \\ & \text { workers } \\ & \hline \end{aligned}$ |  | 100 to 249 workers |  | $\begin{gathered} 250 \text { workers } \\ \text { or more } \\ \hline \end{gathered}$ |  |
|  | Number of workers | Average hourly earnings | Number of workers | Average hourly earnings | Number of workers | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { hourly } \\ \text { earnings } \end{array}$ | Number of workers | Average hourly earnings | Number of workers | Average hourly earnings | Number of workers | Average hourly earnings |  | Average hourly eamings |
| PROCBSSIMG: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CHIPPERS AND GEIMDERS. | 2.260 | \$3.85 | 787 | \$4.42 | 419 | \$4.93 | 48 | \$3.61 | 536 | 33.77 | 167 | \$4.10 | 71 | \$4.93 |
| chippres............................. | 2.113 | 3.89 | 26 | 4.24 | 179 | 5.17 |  |  |  |  |  |  |  |  |
| GRIMDBRS............................... | 1,218 | 3.87 | 413 | 3.94 | 206 | 4.60 | 28 | 3.47 | 145 | 3.72 | - | $5 \cdot$ | 58 | 5.14 |
| CBIPPERS AME GBIMDERS.............. | 929 | 3.84 3.89 | 348 | 5.01 5.38 |  | - |  | - | 381 | 3.79 4.18 | 53 | 5.03 | - |  |
|  | 172 588 | 3.89 4.38 4.30 | 78 | 5.38 5.33 | 161 | 5. | 19 | 4.58 | 12 173 | 4.18 4.16 |  | - | - | - |
| corbakbrs, घactins..................... | 570 | 4.30 | 133 | 4.59 | 96 | 4.93 | 6 | 3.78 | 76 | 3.87 | 16 | 4.09 | - | - |
| DIE-CASTIMG-BLCHIEI CPREATORS, <br> (SET-UP AMD OPERATE). | 640 | 4.26 | 385 | 4.75 | 189 | 5.50 | 33 | 4.27 | 120 | 4.35 | 136 | 4.85 | - | - |
| DIE-CASTKMG-HACBIEE OPERAYORS, | 1,510 | 4.17 | 858 | 4.32 | 988 | 5.60 | 75 | 4.68 | 212 | 3.70 | - | - | 213 | 6.03 |
| dioprite ohly)....................... | 1,517 |  | 858 | 4.32 | 988 | 5.60 |  |  | 212 |  |  |  |  |  |
| Horkbrs....... | 210 | 4.75 | 180 | 4.63 | 208 | 5.62 | 14 | 4.31 | 26 | 5.06 | - | - | 33 | 5.73 |
| FILERS, Light (die castirg) ......... | 176 | 3.70 | 71 | 4.15 | 50 | 5.62 |  |  |  |  | - | - |  |  |
| Pilibrs, heaty (dir castimg)......... | 1,063 | 4.17 | 15 357 | 4.17 4.18 | 381 | 5.39 | 12 | 4.18 | 222 | 4.04 | 39 | - 4.71 | 80 | 5.15 |
| HOLDERS, FLOOR... | ${ }^{553}$ | 4.70 | 50 | 4.79 | 32 | 5.68 | 12 | . 1 | 142 | 4.87 | 11 | 5.32 | 7 | 5.88 |
| holders, hand, biHCB. | 722 | 4.71 | 67 | 4.12 |  |  | 9 | 5.64 | 207 | 4.53 |  |  |  |  |
| molders, gachirm. | 1.846 | 4.57 | 317 | 5.65 | 178 | 5.21 | 28 | 5.45 | 303 | 4.50 | 49 | 5.50 |  |  |
| Pattrimakirs, Hood.................. | 144 | 6.74 | 36 | 6.37 |  |  | - | 5.87 | 23 | 5.83 |  |  |  |  |
|  | 369 331 | 4.11 4.14 | 305 209 | 5.08 4.91 | 303 | 5.84 5.96 |  |  |  |  | - | - | 113 | 5.64 |
| Cehtrifugal castimg. | 31 | 3.85 | 21 | 3.99 | - | - | - | - | $\rightarrow$ | - | - | - | - | - |
| POLISHERS AHD botiens, hetal....... | 72 | 4.31 | 177 | 4.73 | 122 | 5.21 | - | - | - | - | 35 | 5.31 | - | - |
| POLISRIMG- AMD BuFtig-hichine | 148 | 4.17 | 121 | 3.76 | 212 | 4.72 | $-$ | - | - | - | - | - | - | - |
| POURERS, METAL............. | 553 | 4.08 | 230 | 4.83 | 214 | 5.27 | 27 | 4.36 | 123 | 4.36 | - | - | - |  |
| SAnd- of Shot-blast opzrators...... | 101 | 3.44 | 36 | 4.13 | 61 | 5.05 |  |  | 12 | 3.67 | 9 | 4.72 | 10 | 4.94 |
|  | 224 | 3.68 | 62 | 4.76 | 30 | 4.77 | 10 | 3.78 | 33 | 3.44 | 7 | 4.75 | - |  |
| sharbout abl........................... | 608 | 3.46 | 156 | 4.44 | 128 | 4.87 | 16 | 3.82 | 117 | 3.90 | - |  | 14 | 4.70 |
| SBELL-HOLD hacbine opzertobs....... | 102 | 4.19 | 58 | 4.40 | 29 | 5.54 | - |  | 18 | 4.33 | - | - | - |  |
| sprob-cuttiag press ophritors....... | 614 | 3.37 | 249 | 3.87 | 124 | 5.41 | 29 | 3.51 | 18 | 4.57 | - | - | - |  |
| imspection and testimg |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IMSPECTORS, CLISS 1. | 57 | 4.72 | 119 | 4.40 | 134 | 5.36 | 8 | 4.89 | 10 | 5.03 | - | - | 49 | 5.43 |
| IMSPECTORS, CLISS B. | 130 | 4.21 | 186 | 4.26 | 240 | 5.27 | 20 | 4.04 | 16 | 4.68 |  | - |  |  |
| IMSPECTORS, CLISS C.. | 225 | 3.79 | 219 | 4.29 | 541 | 4.93 |  |  | 30 | 3.75 | - | - | 212 | 4.74 |
| matwrinance: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ELECTRICIAMS, HAIMTEMABCE. | 39 | 5.07 | 82 | 5.27 | 169 | 6.56 | 10 | 5.26 |  | - | 17 | 5.3.1 | 31 | 6.52 |
| virimy | 589 | 4.41 | 375 | 4.64 | 280 | 5.12 | 15 | 4.13 | 87 | 4.26 | 41 | 4.73 | 69 | 4.83 |
| hechitics, hatife himee............... | 117 | 4.88 | 109 | 5.03 | 169 | 6.84 | 15 | 5.13 | 19 | 4.84 | 21 | 5.28 |  |  |
| amilatghts.-n.......................... | 4.17 | 5.45 5.96 |  |  | 145 600 | 6.50 6.76 |  |  |  |  |  |  | 145 | 6.24 6.56 |
| TOOL AIID DIE HakERS................... | 417 | 5.96 | 337 | 5.59 | 600 | 6.76 | 43 | 5.36 | 57 | 5.76 | 23 | 5.76 | 145 | 6.56 |
| matrrial hoveneit: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LABORERS, GRHEREL, FOUMDEY.......... | 1.438 | 3.58 | 362 | 3.57 | 221 | 5.02 | 13 | 3.73 | 515 | 3.46 | 48 | 3.81 | 49 | 4.26 |
| Laborers, matraial maindimg......... |  | 3.84 | 213 | 3.64 | 173 | 4.54 | 18 | 3.28 | 20 | 3.51 | 28 | 4.42 | 28 | 4.38 |
| Packres, SEIPPIMG..................... | 78 | 3.79 | 82 | 3.89 | 146 | 4.52 | 20 | 3.58 | 28 | 3.83 | 8 | 5.17 | 54 | 4.28 |
|  | 204 | 4.25 | 120 | 4.03 | 78 | 4.81 |  | 3.79 | 65 | 4.06 | 15 | 3.82 | 11 | 4.88 |
| SAIPPIIG CLBRES..................... | 50 | 4.07 | 46 | 4.05 | 9 | 5.10 | - | - | 24 | 4.13 | - | - | - | - |
|  |  |  | 14 | 4.11 | 23 | 4.72 | - | - |  |  |  |  | $\div$ |  |
| SHIPPIMG AMD RECEIVING CIEEXS.... | 153 88 | 4.31 4.16 | 108 | 4.00 3.99 | $\begin{array}{r}46 \\ 394 \\ \hline\end{array}$ | 4.80 4.90 | $\overline{7}$ | - 3.68 | 41 14 | 4.01 3.95 | 16 | 4.19 4.60 | 78 | 4.75 |
| Porkitpt............................ | 72 | 4.09 | 105 | 4.00 | 343 | 5.94 | 7 | 3.68 | 13 | 3.97 | 16 | 4.60 | 74 | 4.79 |

See footnotes at end of table.

Table 5. Occupational averages: By size of estabilshments-continued
(Number and average straight-time hourly earnings' of men in selected occupations in nonferrous foundries by size of establishment, United States and selected

| Occupation | Great Lakes |  |  |  |  |  | Pacific |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Establishments with- |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \hline 8 \text { to } 99 \\ & \text { workers } \end{aligned}$ |  | 100 to 249 workers |  | $\begin{gathered} 250 \text { workers } \\ \text { or more } \\ \hline \end{gathered}$ |  | 8 to 99workers |  | 100 to 249 workers |  |
|  | Number of workers | Average hourly earnings | Number of workers | Average houriy earnings | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Number } \\ \text { of } \\ \text { workers } \end{array} \end{array}$ | Average hourly earnings | Number of workers | Average hourly earnings | Number of workers | Average hourly earnings |
| PROCBSSIMG: |  |  |  |  |  |  |  |  |  |  |
| Chippers and grimders. | 658 | \$4.11 | 409 | \$4.87 | 284 | \$5.31 | 557 | \$3.94 | 18 | \$4.23 |
| CHIPPERS......... | 31 | 3.95 |  |  |  |  | 26 | 4.01 |  |  |
| Grindres.. | 434 | 4.11 | 170 | 4.18 | 88 | 5.20 | 374 | 3.88 | - | - |
| Chippres and griminis............. | 193 | 4.14 | 235 | 5.34 | - |  | 157 | 4.06 | - | - |
| COAR ASSRABLERS AID FIMISBBRS...... | 62 | 3.83 | 53 | 5.65 | - | - | 55 | 4.05 | - | - |
| CORRARKERS, EAMD..................... | 135 | 4.62 | 23 | 6.77 | 131 | 5.46 | 124 | 5.03 | - | - |
| CORBMAKERS, HACAIME................ | 212 | 4.57 | 94 | 4.77 | - |  | 128 | 4.38 | - | - |
| (SBT-UP AMD OPBRATB)......... | 274 | 4.36 | 119 | 5.26 | - | - | 122 | 4.73 | 51 | 4.67 |
| DIR-CASTIUG-HACBIMB OFERATORS, |  |  |  |  |  |  |  |  |  |  |
| (OPEEATE OMLY) SIE-CASTIMG-HACEIMESET-OP | 892 | 4.22 | 511 | 4.53 | 553 | 5.32 | 179 | 5.03 | 103 | 4.20 |
| norkers............................... | 110 | 4.84 | 92 | 4.75 | 141 | 5.40 | 42 | 4.72 | - | - |
| furkice triders.. | 462 | 4.37 | 187 | 4.31 | 214 | 5.38 | 148 | 4.36 | 21 | 4.38 |
| HOLDERS, PLOOR. . . . . . . . . . . . . . . . . . | 200 | 4.75 | - | - | - |  | 59 | 5.33 |  |  |
|  | 309 | 4.66 | - | $\square$ | 13 | 5.30 | 120 | 5.56 | - | - |
| holders, mackitm...... | 643 | 4.80 | 158 | 6.14 | 123 | 5.53 | 303 | 4.94 | - | - |
| pattrenuakers, mood.................. | 53 | 7.33 |  |  |  |  | 30 | 8.12 | - | - |
|  | 106 | 4.07 | 246 | 5.22 | 94 | 5.72 | 101 | 5.11 | - | - |
| graytry casting.e................. | 90 | 4.12 | 153 | 5.04 | 94 | 5.72 | 94 | 5.22 | - | - |
|  |  |  |  |  | 122 | 5.21 |  |  | - | - |
| opbrators............................ | 91 | 4.36 | - | - | 211 | 4.73 | 21 | 3.42 | - | - |
| podrebs, hetal............... | 251 | 4.05 | 152 | 5.05 | 177 | 5.41 | 46 | 4.64 | - | - |
| SAMD- OR Shot-blasi opirators. ...... | 53 | 3.23 | 11 | 4.06 | 40 | 5.56 | - |  | - | - |
| SAMD MITERS, HALD AKD HACBIMR....... | 65 | 4.25 | 28 | 5.58 | 18 | 5.29 | 50 | 3.44 | - | - |
| Shakroit heh. ................ | 185 | 3.50 | 100 | 4.75 | 105 | 5.01 | 64 | 3.22 | - | - |
| Shbll-mold bachine ofreators.. | 27 | 4.65 | 30 | 4.56 | - |  | 36 | 4.38 | - | - |
| Sproz-cottilug press opiritors | 350 | 3.47 | 154 | 4.17 | 51 | 4.63 | 130 | 3.04 | - | - |
| ihspection and tbsting: |  |  |  |  |  |  |  |  |  |  |
| IHSPECTORS, CLASS A.. | 23 | 4.53 | 20 | 4.90 | 82 | 5.37 | 11 | 5.48 |  |  |
| InSPECTORS, CLISS B................... | 66 | 3.85 | 68 | 4.38 | 147 | 5.13 | 41 | 4.70 | 25 | 4.04 |
| Insprctors, cliss c... | 102 | 3.91 | 161 | 4.51 |  |  | 17 | 3.50 | 18 | 3.24 |
| matitemaice: |  |  |  |  |  |  |  |  |  |  |
|  | 22 | 5.16 | 34 | 5.44 | 85 | 6.40 | - | - | - | - |
| 0тILIry.............................. | 273 | 4.42 | 246 | 4.66 | 184 | 5.32 | 77 | 4.86 |  | 5.61 |
| mbCHIMICS, MAIMESAMCP... | 63 | 5.09 | 24 | 5.36 | 79 | 6.62 | - |  | 9 | 6.19 |
| hill mights........ |  |  |  |  | 62 | 6.42 | - |  |  |  |
| tool and die hakers. | 188 | 5.84 | 175 | 5.57 | 378 | 6.64 | 65 | 7.38 | 28 | 6.69 |
| material hovbhemt : |  |  |  |  |  |  |  |  |  |  |
| Laborers, grheral, youmbit......... | 452 | 3.86 | 144 | 3.83 | 134 | 5.39 | 280 | 3.72 | 30 | 3.05 |
| laboreas, haterial haidling......... | 50 | 4.01 | 118 | 3.61 | 117 | 4.58 | - |  |  |  |
| PaCKBrs, Shippimg................... | 20 | 4.01 | 34 | 3.97 | 88 | 4.70 | 18 | 3.58 | - | - |
| SEIPPIMG AHD RECEIVIMG CLERKS ${ }^{3}$..... | 90 | 4.35 | 64 | 4.22 | 57 | 4.81 | 18 | 5.09 | 7 | 4.33 |
| Shipring cliriks................... |  |  | 35 | 4.09 | 5 | - | - |  | 7 |  |
|  | 83 | 4.40 | 24 | 4.30 | 35 | 4.69 | 16 | 5.12 | 7 | 4.33 |
| TROCKERS, PORKIIPT, | 37 27 | 4.05 4.09 | 58 55 | $\begin{aligned} & 4.00 \\ & 4.02 \end{aligned}$ | 273 228 | $\begin{aligned} & 4.85 \\ & 5.02 \end{aligned}$ | 12 <br> 9 | 5.44 4.98 | - | - |

${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
I Includes data for regions in addition to those shown separataly.
Includes data for regions in addition to those shown separately.
NOTE: Dashes indicte no dite reported or deta thet do not mas

Table 6. Occupational averages: By size of community
(Number and average straight-time hourly earnings' ${ }^{1}$ of men in selected occupations in nonferrous foundries in metropolitan and nonmetropolitan areas, United States and selected regions, May 1975)

| Occupation | United States ${ }^{2}$ |  |  |  | New England <br> Metropolitan areas |  | Middle Atlantic |  |  |  | Great Lakes |  |  |  | $\underset{\substack{\text { Nonnnetropolitan } \\ \text { areas }}}{\text { Middie West }}$ |  | $\xrightarrow[\substack{\text { Matropoolitan } \\ \text { areas }}]{\text { Pacific }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Metropolitan } \\ \text { areas } \end{gathered}$ |  | Nonmetropolitanareas |  |  |  | $\begin{gathered} \text { Metropolitan } \\ \text { areas } \end{gathered}$ |  | Nonmetropolitanareas |  | $\begin{gathered} \text { Metropolitan } \\ \text { areas } \end{gathered}$ |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Nontmetropolitan } \\ \text { areas } \end{array} \\ \hline \end{array}$ |  |  |  |  |  |
|  | 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 | $\left\lvert\, \begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}\right.$ | Average hourly earnings | $\begin{gathered} \begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array} \end{gathered}$ | Average hourly earnings | Number of workers | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Average } \\ \text { hourly } \\ \text { earnings } \end{array} \\ \hline \end{array}$ |
| Processing: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chipprrs and grinders. | 2,891 | \$4.12 | 575 | \$4.07 | 140 | \$3.84 | 695 | \$3.93 | 79 | \$4.09 | 998 | \$4.69 | 353 | \$4.31 | 74 | \$3.36 | 561 | \$3.94 |
| Chiprbrs........... | 230 | 4.77 | 88 | 4.29 |  |  | 14 | 3.66 |  |  |  |  |  |  |  |  | 26 | 4.01 |
| grindars............................. | 1,535 | 3.97 | 302 | 3.96 | 100 | 3.78 3 | 307 | 3.96 | - | - | 477 | 4.33 | 215 | 4.12 | 9 | 3.28 | 362 | 3.86 |
| CHIPPRRS AMD GRINDERS............. | 1.126 | 4.20 | $\begin{array}{r}185 \\ 58 \\ \hline\end{array}$ | 4.14 <br> 4 <br> 4 <br> 10 | 34 | 3.90 | 374 | 3.92 | - | - | 375 210 | 4.94 <br> 5.38 |  |  |  | --67 | $\begin{array}{r}173 \\ 55 \\ \hline\end{array}$ | 4.08 4.05 |
| CORE ASSBMBL RRS AHD PIMISHRRS....... | 334 674 | 4.96 4.61 | $\begin{array}{r}58 \\ \hline 150 \\ \hline\end{array}$ | 4.10 4.80 | 52 | 4.52 | +28 | 5.22 4.20 | - | - | 210 214 | 5.38 5.15 | - | - | 11 | 3.67 | 55 112 | 4.05 4.93 |
| COREHAKBRS, MACHIMB.................... | 618 | 4.44 | 181 | 4.37 | 55 | 5.08 | 96 | 3.99 | - | - | 215 | 4.98 | 140 | 4.47 |  | - | 137 | 4. 37 |
| dib-CAStimg-machinf Cprators, <br> (SBT- DP ABD OPBEATB)..................... | 1,103 | $4.63^{\circ}$ | 111 | 4.41 | 45 | 3.93 | 352 | 4.85 | - | - | 422 | 4.74 | 55 | 5.24 | - | - | 173 | 4.71 |
| di e-CASTIMG-aACBIME OPERATORS, <br> (OPERATE ONLT) | 2,199 | 4.46 | 1,164 | 4.96 | 81 | 4.59 | 263 | 4.58 | 184 | 5.30 | 1,419 | 4.47 | 537 | 4.99 | 67 | 3.47 | 282 | 4.73 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HORKRRS.................... | 426 | 4.93 4.28 | 172 60 | 5.22 <br> 3.54 <br> 8 | 14 | 4.31 | 59 92 | 5.57 4.51 | 12 | 5.02 | 253 38 | 4.96 4.19 | 90 | 5. 30 | 12 | 4.03 | 65 | 4.77 |
| FILPRS, HEAVY (DIB CaStug) .......... | 42 | 4.11 |  |  |  |  | 13 | 5.23 |  |  |  |  | - |  |  | - | - | - |
| foruace tempres....................... | 1,316 | 4.31 | 485 | 4.75 | 26 | 4.35 | 274 | 4.21 | 67 | 5.06 | 627 | 4.53 | 236 | 4.81 | 60 | 3.54 | 166 | 4.35 |
| HOLDERS, PLOOR. ..... | 551 | 4.82 | 84 | 4.37 | 29 | 4.27 | 147 | 4.91 |  |  | 187 | 4.86 |  |  |  |  | 59 | 5. 33 |
| holders, havd, brych.................. | 761 | 4.68 |  |  | 22 | 5.26 | 231 | 4.57 |  | - 6 | 271 | 4.77 | - 67 |  | 105 |  | 112 | 5.58 |
| moldrbs, machine. .................... | 1,939 | 4.82 | 402 | 4.51 | 177 | 4.74 | 308 | 4.67 | 57 | 4.62 | 757 | 5.17 | 167 | 4.96 | 105 | 4. 10 | 326 30 | 4.97 |
| Pattermeakbis, mood.................. | 159 | 6.74 | $\begin{array}{r}40 \\ 258 \\ \hline\end{array}$ | 7.14 5.70 | 19 | -5.10 | 27 49 | 5.47 5.19 |  | - | 57 378 | 7.57 <br> 5.01 | 68 | 5.28 | 17 | 3.72 | 118 | 8. 12 5.25 |
|  | 719 559 | 4.68 4.60 | 258 180 | 5.70 5.63 |  | - | 49 21 | 5.19 5.77 | - | - | 269 | 4.91 | 68 | 5. 28 | 15 | 3.76 | 111 | 5.35 |
| CRETRI PJGAL CASTIMG... | 78 | 4.22 |  | - | - | - |  |  |  | - | 34 | 3.93 |  |  |  |  | - |  |
| polishers and bupfbes, hbtal........ | 254 | 5.07 | 117 | 4.23 | - | - | 45 | 5.01 |  | - | 203 | 5.14 | 107 | 4.32 | - | - | - | - |
| POLISHIRG- And borpirg-bachine |  | 4.27 | - | - | - | - | 39 | 4.20 | - | - | 212 | 4.50 | - | - | - | - | - | - |
| POURERS, hbtal............... | 670 | 4.39 | 327 | 4.75 | 59 | 4.29 | 155 | 4.46 | - | - | 319 | 4.56 | 261 | 4. 92 | 22 | 3.94 | 52 | 4.68 |
| SAmD- or shot-blast opreators. | 141 | 3.93 | 57 | 4.40 | 21 | 3.90 | 25 | 4.38 |  |  | 69 | 3.95 | 35 | 4.72 |  |  |  |  |
| Samd bixbes, bamd and hachine...... | 250 | 4.06 | 66 | 3.78 | 13 | 4.22 | 42 | 3.73 |  |  | 85 | 4.90 | 26 | 4.29 | 21 | 3.33 | 75 | 3.44 |
| SHAKEOTT MEM............... | 629 | 3.83 | 263 | 3.84 | $\stackrel{37}{-}$ | 3.54 | 78 25 | 4. 4.4 4.49 | - | - | 261 | 4.20 5.20 | 129 | 4.27 | 14 | 3.06 3.38 | 76 | 3.33 4.38 |
| Sp moz-Cuttivg pazis opgators....... | 699 | 3.55 | 288 | 4.24 |  | - | 25 | 4.70 |  | - | 439 | 3.74 | 116 | 3.87 |  |  | 156 | 3.10 |
| InSPection and testimg |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inspgctors, CLASS 1. | 258 | 4.82 | 52 | 5.14 | - | $-$ | 102 | 4.77 | - | - | 99 | 4.99 | 26 | 5.72 | - | - | 26 | 4.79 |
| InSpictors, CLASS B................... | 384 | 4.49 | 172 | 5.13 | 14 | 4.10 | 58 | 4.83 | - |  | 209 | 4.60 | 72 | 4.79 | - |  | 60 | 4.38 |
| inspactors, Class c........... | 681 | 4.30 | 304 | 5.02 |  |  | 177 | 4.38 | 82 | 5.09 | 403 | 4.45 | 88 | 4.71 | 16 | 3.38 | 35 | 3.37 |
| MAImemance: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 135 | 5.52 | 155 | 6.40 | 8 | 5.28 | 33 | 5. 17 | - | - | 73 | 5.80 | 68 | 6.16 | 18 | 4.54 | - | - |
| סTILITY...................... | 924 | 4.70 | 320 | 4.47 | 29 | 4.05 | 174 | 4.58 | - | - | 510 | 4.80 | 193 | 4.58 | 52 | 4.25 | 90 | 4.97 |
| нвCHAMICS, | 242 | 5.20 | 153 | 6.66 | 13 | 5.07 | 48 | 5.10 | - | - | 120 | 5.43 |  |  |  | - | 14 | 6.30 |
| Billarights.......... | 71 854 | 5.44 5.98 | 91 500 | 7.06 6.65 |  |  | 27 13 | 5.13 5.62 | - | - | 479 | 6.01 | 262 | 6.52 | 27 | 4.74 | 93 | 7.17 |
| tool hid dit makris.................... | 854 | 5.98 | 500 | 6.65 | 40 | 5.27 | 133 |  |  |  |  |  |  |  |  |  |  | 7.17 |
| haterial hoveheyt: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LABORERS, GEMERAL, FOUMDRY..-....... | 1.712 | 3.74 | 309 | 3.71 | 55 | 3.29 | 595 | 3.57 | - | - | 661 | 4. 16 |  | 3.88 | - |  | 258 | 3.46 |
| laborbrs, matraili haxdityg......... | 354 | 3.96 | 123 | 4.14 | 21 | 3.17 | ${ }_{88}^{88}$ | 4.06 | - |  | 209 | 4.15 |  | 3.86 4.59 | 8 | 3.52 | 19 | 3.54 |
| PLCRERS; SBIPPIMG..................... | 248 328 | 4.13 4.33 | 58 74 | 4.33 4.12 | 19 | 3.57 3.85 |  | 4.24 4.09 |  | - | 169 | 4.37 4.50 | 42 | 4.59 4.18 | 7 | 3.72 3.35 |  | 3.54 4.90 |
|  | 328 91 | 4.33 <br> 4.19 | 14 | 4.12 | ${ }_{9}^{9}$ | 4.01 | 32 | 4.12 | - | - | 36 | 4.26 | 11 | 3.93 | - | - | - | - |
| GECEIVIMg clerks..................... | 31 | 4.66 | 7 | 3.67 |  | - | 6 | 3.89 |  | - | 20 | 4.98 |  |  | - | - | - |  |
| SHIPPIMG and bichiving ciriks.... | 206 | 4.35 | 53 | 4.26 |  | - | 48 | 4.10 | - |  | 113 | 4.49 | 29 | 4.30 | - |  | 22 | 4.91 |
| TRDCKERS, POHRR........................ | 315 | 4.31 <br> 4.32 | 275 230 | 4.98 5.18 | 111 | 4.19 4.19 | 68 | 4.35 4.38 | 40 | 5.10 5.10 | 190 | 4.33 4.36 |  | 4.96 | - |  | 18 | 4.94 4.62 |
|  | 290 25 | 4.32 4.19 | 230 |  | 1 |  | 63 |  |  |  |  | 4.36 |  | - | - | - |  | 4.62 |

[^6]NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Table 7. Occupational averages: By labor-management contract coverage
(Number and average straight-time hourly earnings' of men in selected occupations in nonferrous foundries by labor management contract coverage, United States and selected regions, Mav 1975)

| Occupation | United States ${ }^{2}$ |  |  |  | Middle Atlantic |  |  |  | Great Lakes |  |  |  | Middle West |  |  |  | Pacific |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Establishments with- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Majority covered |  | None or minority covered |  | Majority covered |  | None or minority covered |  | Majority covered |  | None or minority covered |  | Majority covered |  | None or minority covered |  | Majority covered |  | None or minority covered |  |
|  | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right\|$ | Average hourly eamings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\left.\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered} \right\rvert\,$ | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\left.\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered} \right\rvert\,$ | Average hourly earnings | Number of workers | $\begin{aligned} & \text { Average } \\ & \text { hourly } \\ & \text { earnings } \end{aligned}$ | $\begin{array}{\|l\|} \begin{array}{l} \text { Number } \\ \text { of } \\ \text { workers } \end{array} \end{array}$ | Average hourly earnings | Number of workers | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | $\begin{array}{\|l\|} \hline \text { Average } \\ \text { hourly } \\ \text { earnings } \end{array}$ |
| PROCBSSIMG: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CGIPPRES AMD Grimdirs. | 1.442 | \$4.29 | 2.024 | \$3.98 | 359 | \$4.21 | 415 | \$3.73 | 540 | \$4.54 | 811 | \$4.63 | 116 | \$3.98 | 159 | \$3.69 | 268 | \$4.59 | 307 | \$3.39 |
| Chipress............. | 108 | 4.64 | 210 | 4.64 |  |  |  |  |  |  |  |  |  |  | 33 | 3.79 |  |  | 16 | 3.48 |
| Grimbers........................... | 853 | 4.26 | 984 | 3.71 | 96 | 4.55 | 218 | 3.72 | 382 | 4.39 | 310 | 4.11 | - | - 77 | 109 | 3.75 | 184 | 4.45 | 192 | 3.34 |
| CEIPRERS AMD GRIMDERS............. | 481 | 4.28 | 830 | 4.15 | 246 | 4.09 | 188 | 3.75 3.72 | 81 37 | 4.95 4.68 4 | 381 | 4.84 | 50 | 3.77 | - |  | 74 16 | 4.91 4.44 | 99 39 | 3.46 3.89 |
|  | 116 419 | 4.60 4.82 | 276 405 | 4.93 4.47 | 27 113 | 5.52 4.45 | 77 | 3.72 <br> 4.02 | 37 171 | 4.68 5.06 | 118 | 5.34 | 45 | 4.48 | 15 | 3.84 | 16 57 | 4.44 5.40 | 39 67 | 3.89 4.72 |
|  | 355 | 4.61 | 444 | 4.28 | 60 | 4.25 | 40 | 3.70 | 121 | 4.75 | 234 | 4.79 |  | . | 15 | 3.53 | 61 | 4.86 | 76 | 3.97 |
|  (SET-UP AKD OPEBATE) .................... | 635 | 4.88 | 579 | 4.31 | 327 | 4:86 | - | - | 217 | 5.01 | 260 | 4.62 | 37 | 4.01 | - | - | 42 | 5.38 | 131 | 4.50 |
| DIE-CASTIMG-BACBIEP CPERITORS. (OpErate OMLI) | 1,777 | 5.09 | 1,586 | 4.11 | 211 | 5.69 | 236 | 4.15 | 1,194 | 4.92 | 762 | 4.13 | - | - | 58 | 3.34 | 47 | 5.20 | 235 | 4.63 |
| di b-CASTIMG-HACHIME SET-0P |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MORKBRS.-............................. | 372 147 | 5.11 4.56 | 226 150 | 4.86 3.71 | 36 78 | 5.66 4.83 | $\stackrel{35}{-}$ | 5.28 | $\begin{array}{r}251 \\ \hline 38\end{array}$ | 4.98 4.19 | $\stackrel{92}{-}$ | 5.22 | - | - | 9 | 3.76 | 20 | 4.33 | 45 | 4.96 |
| FILERS, | 35 | 6.02 |  | 3.7 |  | 4.83 | - | - |  |  |  | - | - |  |  |  | - | - |  |  |
| FURMCE TEADERS........................ | 1. 103 | 4.67 | 698 | 4.05 | 245 | 4.58 | 96 | 3.86 | 562 | 4.75 | 301 | 4.34 4.69 | 64 | 4.00 | 54 | 3.75 | 73 | 4.80 5.38 | 96 | 4.02. 5.29 |
| MOLDERS, FLOOR........... | 244 | 4.99 | 391 | 4.62 | 83 | 5.07 | 77 | 4.80 <br> 4.74 | ${ }^{88}$ | 5.08 | 137 | 4.69 |  |  |  |  | 27 96 | 5.38 5.86 | $\pm 2$ | 5.29 |
| HOLDERS, 日AMD, BEMCH.................. | 432 942 | 4.84 4.76 | 403 1,399 | 4.43 <br> 4.77 | 154 <br> 144 <br> 1 | 4.48 <br> 4.64 | 77 221 | 4.74 4.69 | 104 432 | 5.28 4.98 | 218 492 | 4.40 5.26 | 12 93 | 5.09 4.27 | 91 | 4.68 | 96 112 | 5.86 5.01 | 217 | 4.94 |
| patrbemakebs, wood...................... | 100 | 7.41 | $\begin{array}{r} \\ \hline\end{array}$ | 6.23 | 12 | 5.60 | 15 | 5.36 | 29 | 7.73 | 38 | 7.00 |  |  |  |  | 28 | 8.34 |  | - |
|  | 583 | 5.30 | 394 | 4.43 | 125 | 5.64 |  | - | 249 | 4.81 | 197 | 5.36 | - | - | - | - | 93 | 5.49 | - | - |
| GRAVITY CASTIMG...................... | $\begin{array}{r}435 \\ 81 \\ \hline 1\end{array}$ | 5.36 4.29 | 304 | 4.12 | $\stackrel{21}{2}$ | 5.77 | - | - | $\begin{array}{r}215 \\ 34 \\ \hline\end{array}$ | 4.95 <br> 3.93 | 122 | 5.05 | - | - | - | - | 93 | 5.49 | - | - |
| CBMPRIPDGLL CASTIMG..................... <br> polishbrs mid bufphes, hetal........ | $\begin{array}{r}81 \\ 294 \\ \hline\end{array}$ | 4.29 4.91 |  | 4.40 | 25 | 4.89 | - | - | 34 262 | 3.93 4.96 |  | - | - | - | - | - | - | - | - | - |
| polishbrs mid burpibs, betal........ <br> polishimg and bupfigg-baceing | 294 | 4.91 | 77 | 4.40 | 25 | 4.89 |  | - | 262 | 4.96 |  | - | - | - |  | - |  | - |  |  |
| oprritors............................. | 350 | 4.54 | 131 | 3.69 | 37 | 4.22 | - | - | 276 | 4.65 | - |  |  | - | - |  | $-$ |  | - | - |
| POURERS, METAL. ........................ | 528 | 4.66 | 469 | 4.35 | 92 | 4.63 | 72 | 4.38 | 356 | 4.76 4.60 | 224 | 4.66 | 14 | 3.94 | 28 | 4.09 | 30 | 5.01 | 28 | 4.17 |
| SAMD- or Shot-blast oprrators....... | 101 <br> 138 <br> 139 | 4.40 3.91 | $\begin{array}{r}97 \\ 178 \\ \hline\end{array}$ | 3.71 <br> 4.06 | 24 30 | 4.42 3.61 | 15 | 4.27 4.05 | 59 59 | 4.60 <br> 4.16 <br> 4 | 45 52 | 3.70 <br> 5.43 <br> .48 | 31 | 3.75 | 9 | 3.30 | 10 | 4.09 | 40 | 3.28 |
| SEARzovt hell........................... | 339 | 4.03 | 553 | 3.72 | 59 | 4.08 |  | 4.05 | 188 | 4.27 | 202 | 4.18 | 40 | 3.60 | 71 | 3.58 | , | 4.04 | 69 | 3.26 |
| Still-hold hichine oexrators........ | 96 | 4.65 | 93 | 4.27 | 24 | 4.57 |  | - | 46 | 4.77 | 34 305 | 5.09 3.34 |  | - | 14 | ${ }^{3.38}$ | - | - | 142 |  |
| Sprdi-cottimg prass opirators....... | 399 | 4.49 | 588 | 3.25 | 13 | 4.77 | 15 | 4.48 | 250 | 4.29 | 305 | 3.34 |  | - |  |  | - | - | 142 | 3.02 |
| Inspactioy and misting: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IMSpECTORS, CLASS A.................. | 180 | 5.20 | 130 | 4.42 | 63 | 5.19 | - | - | 84 | 5.38 | 41 | 4.64 | 11 | 4.71 | - | - | 8 | 5.99 | 20 | 4.57 |
| INSPBCTORS, CLASS B.................. | 420 | 4.80 | 136 | 4.31 | 64 | 4.87 | - | - | 221 | 4.60 | 60 | 4.82 | 26 | 4.29 | - | - | 33 | 5.01 | 33 | 3.88 |
| Insprctors, class c................... | 763 | 4.67 | 222 | 4.03 | 206 | 4.69 | 53 | 4.28 | 403 | 4.50 | 88 | 4.45 | 11 | 3.65 | - | - |  |  | 28 | 3.25 |
| hamerinace: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 204 | 6.28 | 86 | 5.32 | 36 | 6.36 | 17 | 5.12 | 101 | 6.11 | 40 | 5.64 | - | - | 10 | 4.78 | - | - | - | - |
| 0¢timpr.............................. | 753 | 4.75 | 491 | 4.47 | 93 | 4.64 | 104 | 4.49 | 493 | 4.75 | 210 | 4.71 | 57 | 4.55 | 45 | 4.36 | 63 | 5.16 | 27 | 4.52 |
| hachanics, MAIMTIAMCB................ | 266 | 6.18 | 129 | 4.89 | 74 | 5.98 |  | - | 113 | 6.16 | 53 | 5.20 | - | - |  | . | - | - | 12 | 5.95 |
|  | 158 865 | 6.40 6.29 | 489 | 6.12 | -553 | 6.15 6.35 | 42 | 5.95 | 64 513 | 6.34 6.18 | 228 | 6.21 | 21 | 5.62 | 32 | 4.69 | - | - | 76 | 7.52 |
| matbrial hovbhert: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| laborers, gembril, poukdry.......... | 1,213 | 3.96 | 808 | 3.39 | 341 | 3.61 | 271 | 3.48 | 486 | 4.25 | 244 | 3.91 | 48 | 3.80 | - | - | 155 | 4.43 | 155 | 2.88 |
| hiborers, batbrial hamdlimg......... | + 379 | 4.11 | 98 | 3.59 | 70 | 4.21 | 6 | 3.60 | 251 | 4.04 | 34 | 4.34 | 10 | 3.75 | - | - | 18 | 4.91 | - | - |
| PaCkERS, SHIPPIMG.-.................. | 192 | 4.17 | 114 | 4.15 |  | - | 44 | 4.36 | 109 | 4.36 | 33 | 4.66 | 12 | 3.76 | 7 | - | 7 |  | 15 | 3.30 |
| SHIPPIIG All Recritimg clibis...... | 243 | 4.46 | 159 | 4.04 | 67 | 4.22 | 24 | 3.82 <br> 3.59 | 127 | 4.51 | 84 | 4.32 | 9 | 4.44 | 7 | 3.71 | 17 | 5.26 | 8 | 4.05 |
| SHIPPIMG CLERKS....................... | 64 | 4.22 | 41 | 4.03 | ${ }^{26}$ | 4.27 | 7 | 3.59 | 28 82 | 4.11 4.61 | 60 | 4.24 | - | - | - | - | 15 | 5.32 | $\overline{8}$ | ${ }_{4}^{-05}$ |
|  | 156 | 4.51 4.56 | 106 | 4.41 4.00 | 38 | 4.17 | 13 | 4.04 | 82 | 4.61 | 60 | 4.24 | - | - | - | - | - | 5. | - | - |
|  | 498 | 4.75 | 92 | 3.95 | 92 | 4.67 | 16 | 4.40 | 337 | 4.69 | 31 | 4.04 | - | - | - | - | 11 | 5.67 | 10 | 4.15 |
| ronklift.............................. | 443 | 4.83 | 77 | 3.95 | 92 | 4.67 |  | - | 289 | 4.81 | 21 | 4.09 | - | - | - | - | 8 | 5.22 | 10 | 4.15 |

[^7]Table 8. Occupational averages: By method of wage payment
(Number and average straight-time hourly earnings² of men in selected occupations in nonferrous foundries by method of wage payment. United States and selected regions, May 1975)

Table 9. Occupational averages: Die-casting establishments
(Number and average straight-time hourly earnings ${ }^{1}$ of men in selected occupations in nonferrous die castings establishments,
United States and selected regions, May 1975)

| Occupation | United States ${ }^{\text {a }}$ |  | Middle Atlantic |  | Great Lakes |  | Pacific |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { workers } \end{gathered}$ | Average hourly earnings | $\left\{\begin{array}{c} \text { Number } \\ \text { of } \\ \text { workers } \end{array}\right.$ | Average hourly earnings |
| Proctssimg: |  |  |  |  |  |  |  |  |
| Chippers and grinders. | 215 | \$4.17 | 75 | \$4.62 | - | - | 42 | \$3.35 |
| GRINDEBS.............. | 64 | 3.98 |  |  |  | - |  |  |
| CHIPPERS AHD GrImpres. | 151 | 4.26 | 60 | 4.43 |  | - | 32 | 3.22 |
| DI B-CASTIMG-HACBIEI OPIRATORS, <br> (SET-UP AYD OPERATE).................... | 1,132 | 4.57 | 325 | 4.85 | 425 | 54.74 | 173 | 4.71 |
| di b-Castimghachise opriators, |  |  |  |  |  |  |  |  |
| (oprratb ohly) ...................... | 3,308 | 4.64 | 446 | 4.88 | 1,941 | 4.61 | 259 | 4.77 |
| DIE-CASTIMG-EACBIIF SET-0P | 595 |  |  | 5.47 |  |  |  |  |
| fILERS, Ligkt (DIE CISTIMG) ......... | 221 | 4.23 | 56 | 4.77 | 52 | 4.07 |  |  |
| filetas, meaty (die casting)......... | 63 | 4.79 |  | - |  | - |  |  |
| pormace tenders....................... | 714 | 4.59 | 112 | 4.61 | 379 | 4.64 | 62 | 4.14 |
| persahent-mold- haceine ofrrators.3.- | 190 | 5.89 |  |  | 16 | 4.80 |  |  |
| gravity castig.................... |  |  |  |  | 16 | 4.80 |  | - |
| polisabrs amd buffrbs, ubtal ....... | 285 | 4.80 | - | - | 264 | 4.79 | - | - |
|  |  |  |  | - |  |  | - | - |
| POPRERS, | 240 | 4.05 | 10 | 3.72 | 150 | 4.79 | - | - |
| Samd- or shot-blast opbrators. | 33 | 4.94 |  |  |  |  | - | - |
|  | 10 | 4.02 |  | - | $5{ }^{-}$ |  |  |  |
| spbue-cutting press opreatcrs...... | 902 | 3.72 | - | - | 533 | 3.73 | 148 | 3.09 |
| IMSPECtIon lyd tesithg: |  |  |  |  |  |  |  |  |
| IMSPRCTORS, CLASS A.. | 177 | 5.05 | 41 | 5.51 | 98 | 5.13 | 18 | 4.65 |
| ImSPBCTORS, CLASS B.................... | 382 | 4.66 |  |  | 213 | 4.48 | 31 | 4.34 |
| IMSPBCTORS, CLass c.................. | 677 | 4.62 | 201 | 4.67 | 316 | 4.46 | 23 | 3.19 |
| maimenamce: |  |  |  |  |  |  |  |  |
| bligctricians, haimitialicr. | 199 | 6.33 | - | - | 108 | 6.04 | - | - |
| haIbTEIAYCB morkbrs, GEHERAL <br> otility. | 563 | 4.66 |  | 4.65 | 352 | 4.77 |  |  |
| mbchamics, пиimtbiamer................ | 268 | 6.11 | 53 | 6.44 | 117 | 5.99 | 7 | 6.89 |
| billithights........................... | 120 | 6.78 |  |  | 55 | 6.51 |  |  |
| tool amd die hakbrs................... | 1. 175 | 6.26 | 223 | 6.28 | 643 | 6.13 | 77 | 7.58 |
| haterial movehert : |  |  |  |  |  |  |  |  |
| Laboakrs, grnzral, foumpay.......... | 541 | 3.61 | 131 | 3.24 | 210 | 4.21 | 84 | 2.70 |
| laborers, gaterial bahdilmg......... | 304 | 4.01 | 36 | 4.23 | 193 | 4.11 |  |  |
| PACKBES, SHIPPIMG.................... | 170 | 4.16 | 65 | 4.28 | 81 | 4.21 |  |  |
| Shippirg and rbcsiting clerks...... | 218 | 4.14 | 37 | 4.27 | 125 | 4.18 | 12 | 4.75 |
| Shipping Clerks.................... | 45 | 3.85 |  |  | 31 | 3.79 |  | - |
| biceriving clibris.................... | 20 | 4.49 | - | - |  |  |  | - |
| SHIPPIMG AMD RBCEIVIMG CLERKS.... | 153 | 4.18 | 26 | 4.20 | 80 | 4.24 | 11 | 4.80 |
| TRUCKRRS, PORKIIfr PORRE | $\begin{array}{r}402 \\ 360 \\ \hline\end{array}$ | 4.81 4.92 | 61 61 | 5.02 5.02 | 284 242 | 4.74 4.89 | - | - |

[^8]Table 10. Occupational averages: Sand-casting establishments
(Number and average straight-time hourly earningst of men in selected occupations in nonferrous sand casting establishments, United States and selected regions,
May 1975)

| Occupation | United States ${ }^{2}$ |  | Middle Atlantic |  | Great Lakes |  | Middle West |  | Pacific |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of workers | Average hourly earnings | Number of workers | Average hourly earnings | Number of worker | Average hourly earnings |  | Average hourly earnings | Number of workers | Average hourly earnings |
| Processimg |  |  |  |  |  |  |  |  |  |  |
| こhtprers alf grimdrrs. | 2,885 | 54. 11 | 552 | \$3.86 | 1.177 | \$4.57 | 227 | 53.94 | 495 | 53.96 |
| Chipreas.. | 264 | 4.64 | 23 | 3.93 |  |  | 37 | 3.80 | 26 | 4.01 |
| grimders.............................. | 1,559 | 3.96 | 171 | 3.87 | 631 | 4.27 | 148 | 3.99 | 336 | 3.85 |
| CHIPPERS And grimders | 1,062 | 4.22 | 358 | 3.85 | 400 | 4.80 |  |  | 133 | 4.22 |
| core assemblers and pimishbrs....... | 381 | 4.83 | 26 | 5.23 | 232 | 5.30 | 12 | 3.74 | 55 | 4.05 |
| Corbmikers, hamp..................... | 705 | 4.61 | 183 | 4.30 | 206 | 5.17 | 60 | 4.32 | 112 | 4.93 |
| coremarers, hachike.................. | 759 | 4.43 | 99 | 4.03 | 336 | 4.80 | 45 | 4.08 | 124 | 4.32 |
| pilers, light (die Castimg) ......... | 40 | 3.60 |  | - |  | - |  |  |  |  |
| pormacr tenders........................ | 903 | 4.29 | 212 | 4.16 | 362 | 4.58 | 83 | 3.95 | 103 | 4.49 |
| holdith, PLOOR........ | 591 | 4.80 | 159 | 4.94 | 207 | 4.81 | 51 | 4.81 | 59 | 5.33 |
| holdias, hind, bBach.................. | 720 | 4.76 | 207 | 4.62 | 277 | 4.83 | 12 | 5.09 | 108 | 5.49 |
| HOLDBES, hactine...................... | 2,230 | 4.77 | 365 | 4.67 | 823 | 5.17 | 181 | 4.48 | 326 | 4.97 |
| Pattramakibs, mood................... | 193 | 6.86 | 27 | 5.47 | 63 | 7.48 |  |  | 30 | 8.12 |
| permanimp-hold-hachine opbrators.3. | 363 | 5. 29 | 19 | 5.06 | 210 | 5.66 | - | - | 82 | 5.09 |
| gravity casting. | 270 | 5.24 | - | - | 13.5 | 5.54 | - | - | 82 | 5.09 |
| ceytripugal Cistimg. | 18 | 3.73 | - | $-$ |  | - |  | - |  |  |
|  | 26 | 4.58 | - | - | - | - | - | - | - | - |
| opratozs....................... | 108 | 4.45 | - |  | 73 | 4.62 | - | - | - | - |
| podrbis, mbtal. ......................... | 618 | 4.48 | 70 | 4.81 | 321 | 4.72 | 41 | 4.07 | 44 | 4.84 |
| SIED- OR SHOT- ${ }^{\text {dLast }}$ OPREATCES....... | 132 | 3.85 | 21 | 4.32 | 56 | 3.90 |  |  |  |  |
|  | 298 | 3.98 | 45 | 3.75 | 94 | 4.81 | 40 | 3.65 | 50 | 3.44 |
| SHAKBOTT HEM. | 784 | 3.78 | 125 | 4.02 | 302 | 4.17 | 111 | 3.58 | 76 | 3.33 |
| SHBLl-bold machine oferators........ | 168 | 4.47 | 23 | 4.60 | 72 | 4.85 |  |  | 36 | 4.38 |
| Sprub-cotitig priss opiratcrs | 35 | 4.17 | 20 | 4.36 |  |  |  | - | - |  |
| inspbetion and testing: |  |  |  |  |  |  |  |  |  |  |
| IMSPBCTORS, Class a. | 47 | 4.81 | 18 | 4.68 | 10 | 5.19 | - | - | - | - |
| inspbctors, class b..................... | 125 | 4.74 |  |  | 59 | 5.19 | - | - | 24 | 4.14 |
| IVSPBCTORS, Class c................... | 203 | 4.42 | 16 | 4.26 | 121 | 4.79 |  | - |  |  |
| haintbunces: |  |  |  |  |  |  |  |  |  |  |
| blbctaiciams, marmibinack........... | 67 | 5.29 | 15 | 4.90 | 30 | 5.79 | - | - | - | - |
| haiktemate morkers, grheral |  |  |  |  |  |  |  |  |  |  |
| 0TILITY............................... | 486 | 4.59 | 82 | 4.36 | 231 | 4.73 | 63 | 4.59 | 51 | 4.79 |
| archaics, mathtenames................ | 97 | 5.10 6.39 | 15 | 4.73 | 44 | 5.54 |  |  |  |  |
| tool hild dit hakers.................... | 92 | 6.39 |  |  |  |  |  | - | - | - |
| haterial hoveheut: |  |  |  |  |  |  |  |  |  |  |
| laborsts, grysral, foumpay......... | 1,287 | 3.75 | 445 | 3.59 | 440 | 4.19 | 49 | 3.86 | 167 | 3.82 |
| labobris, batrrial handiimg......... |  | 4.02 4.23 |  |  |  |  |  |  |  |  |
| PACKBRS, SBIPPIMG..................... | $\begin{array}{r}82 \\ \\ 142 \\ \hline\end{array}$ | 4.23 | 18 | 4.13 3.92 | 33 | 4.81 4.93 | 8 | 4.64 | 112 | 3.80 5.06 |
| SHIPPIMG AHD RECBIVIMG CLEEXS........ | 142 | 4.48 4.36 | 43 <br> 21 | 3.92 3.96 3.96 |  | 4.93 <br> 4.94 | 8 | 4.64 | 12 | 5.06 |
| becbiving Clemks.................... | 15 | 4.56 |  | - | 6 | 5.50 | - | - | - |  |
| Shipping and beceivikg Clerks.... | 75 | 4.55 | 18 | 3.96 | 39 | 4.84 | - | - | 11 | 5.02 |
| trockrrs, POUBR....................... | 124 | 4.21 | 30 | 4.05 | 45 | 4.22 | - | - | 17 | 5.16 |
| rorklift.............................. | 106 | 4.19 | 29 | 4.06 | 35 | 4.30 | - | - | 14 | 4.80 |
| Othza that fobklift................ | 18 | 4.33 |  | - |  | - |  | - |  | - |

[^9]Table 11. Occupational averages: Permanent-mold casting establishments

Number and average straight-time hourly earnings ${ }^{1}$ of men in selected occupations in nonferrous permanent-mold casting establishments, United States and selected; regions, May 1975)

| Occupation | United States ${ }^{2}$ |  | Great Lakes ${ }^{\text {- }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { workers } \end{aligned}$ | Average hourly earnings | Number of workers | Average hourly earnings |
| processing: |  |  |  |  |
| CHIPPERS And grimdzrs. | 195 | \$4.28 | 118 | 54.56 |
| Gbiudbrs........................... | 61 | 4.61 |  | 4.24 |
| Caippers and ghimders.............. | 80 | 3.78 |  |  |
| Corblakrbs, hacainm................. | 27 | 4.42 | 19 | 4.33 |
| DIECASTIMG-BACHIHE OPBRATORS. (OPERITE OHLT) | 42 | 4.31 |  |  |
| pornace temders....................... | 120 | 4.39 | 71 | 4.60 |
|  | 412 | 4.26 | 208 | 4.55 |
| gEavity casting.. | 346 | 4.23 | 186 | 4.60 |
| ceintaifugal castivg................. | 59 | 4.48 |  |  |
| poliseras amd bupfers, betal........ | 51 | 5.19 |  |  |
| PODRBES, HETAL....................... | 141 | 4.70 |  |  |
| Samb- or shot-blast opirators...... | 16 | 4.89 | 16 | 4.89 |
| Samd hixbrs, hall and hachirg....... | 12 | 4.76 | 12 | 4.76 |
| Sprot-cottimg press oprentors ...... | 28 | 3.85 |  |  |
| IfSPbetion and testing: |  |  |  |  |
| Inspactors, CLASS h................... | 23 | 5.17 | - |  |
| Itispectors, Class | 19 | 4.75 | - |  |
| HMSPECTORS, CLass C.................. | 69 | 4.13 | 45 | 4.10 |
| Haime bhance: |  |  |  |  |
|  | 14 | 4.80 | - | - |
| HAIMPBEABCE MORKEES, GEMERIL | 127 | 4.72 | 94 | 4. 72 |
|  | 21 | 4.75 | - |  |
| ailimbights........................... | 21 | 4.77 |  |  |
| tool alid die hakers.................. | 66 | 5.52 | 37 | 5.79 |
| hatemill hovenemt |  |  |  |  |
| laborers, gzizral, poumdry.......... | 56 | 3.70 | 31 | 4.09 |
| Laborers, materili baindilmg......... |  | 3.87 |  |  |
| packirs, stipping.................... | 49 | 4.12 | 25 | 4.73 |
| Shipping and beceivimg clerks 3..... | 25 | 4.50 | 20 | 4.55 |
| Stippimg amd receivimg cleaks.... | 18 | 4.64 | 18 | 4.64 |
|  | 51 48 | 4.36 | 30 27 | 4.56 4.52 |

${ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late stifts. ${ }^{2}$ Includes data for regions in addition to those shown separately

MOTE: Dashes indicate no data reported or data that do not meet


Table 13. Occupational earnings: Cleveland, Ohio ${ }^{1}$
(Number and average straight-time hourly earnings2 of workers in selected occupations, May 1975)


- The Cleveland Standard Metropolitan Statistical Area consists of Cuyahoga, Geauga, Lake, and Medina Counties
 previous studies may not reflect expected wage movements because of ehange in the sample composition, avd shins in employment among estabilishment
ments increased wages between periods being compared. Sixty-two percent of the production workers covered by the survey were paid on a time basis
${ }_{3}$ Insufficient data to warrant publication of separate earnings data by method of wage payment: workers are paid predominantly on a time basis.
${ }^{-}$IAll timeworkers.
Workers paid on a time and incentive basis were equally divided.

Table 14. Occupational earnings: Detroit, Michigan ${ }^{1}$
(Number and average straight-time hourly earnings ${ }^{2}$ of workers in selected occupations, May 1975)

${ }^{5}$ 'The Detroit Standsrd Metropolitan Statistical Area consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties.



Table 15. Occupational earnings: Los Angeles-Long Beach, Calff. ${ }^{1}$
(Number and average straight-time hourly earnings ${ }^{2}$ ot workers in selected occupations, May 1975)

${ }^{1}$ The Los Angeles-Long Beach Standard Metropolitan Statistical Area consists of Los Angeles County.

 ${ }_{3}$ Includes data for workers in classification in addition to those shown separately.
${ }^{4}$ Workers were at $\$ 7.20$ to $\$ 7.60$.
${ }^{5}$ Workers were at $\$ 6.80$ to $\$ 7.20$. 11 at $\$ 6.80$ to $\$ 7.20$ : and 6 at $\$ 7.20$ to $\$ 7.60$.

 previcus studies may not reflect expected wage movements because of change in the sample composition, and shifts in employment among establishments with different pay levels. Such shifts, for example, could deccresse an occupational average, even though most establishnots incresesed wages between periods being compared.
${ }^{3}$ Insufficient data to warrant pubtication of separate aarnings data by method of wage payment; workers are paid predominantly onia time basis
Includess data for workers in classification in addition to those shown separately

Table 17. Occupational earnings: Newark, N.J.'

${ }_{2}^{1}$ Excludes premium pay for overtime, and for work on weekends, holidays, and late shifts. These surveys, bat
 previous studies may yot reflect expected wage movements bechtys our percent of the production workers covered by the survey were paid on a time basis.
ments increased wages between periods being compared. Eighty
${ }_{3}$ Includes data for workers in classification in addition to those shown separately.
Ancludes data for workers in classification in adition to to the warrant publication of separate earnings data by method of wage payment; workers are paid predominantly on an incentive basis.
sAll timeworkers.

Table 18. Occupatlonal earnings: New York, N.Y.-N.J.'
(Number and average straight-time hourly earnings ${ }^{2}$ of workers in selected occupations, May 1975)

${ }_{2}^{2}$ The New York Standard Metropolitan Statistical Area consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockiand, and Westchester Counties, N.Y.; and Bergen County, N.J.
${ }^{2}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. These surveys, based on a representative sample of establishments, are designed to measure the level of occupational earnings at a particular time. Thus, comparisons made with
 ments increased wages between periods being compared. Ninety-three percent of the production workers covered by the survey were paid on a time basis.

- All timeworkers.
${ }^{\text {a }}$ Insufficient data to warrant publication of separate earnings data by method of wage payment; workers are paid predominantly on an incentive basis.

Table 19. Occupational earnings: Philadelphia, Pa.-N.J. ${ }^{1}$
(Number and average straight-time hourly earnings² of workers in selected occupations, June 1975)

${ }^{1}$ The Philadelphia Standard Metropolitan Statistical Area consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; and Burlington, Camden, and Gloucester Counties, N.J.

 ments increased wages between periods being compared. Seventy-one percent of the production workers covered by the survey were paid on a time basis.
3 Inclues data for workers in classification in addition to those shown separately.
${ }^{3}$ Includes data for workers in classification in addition to those shown separately.
Insufficient data to warrant publication of separate earnings data by method of wage payment; workers are paid predominantly ona time basis.

## Table 20. Method of wage payment

(Percent of production workers in nonferrous foundries by method of wage payment.' United States and selected regions, May 1975)

| Method of wage payment | United States ${ }^{2}$ | $\stackrel{\text { New }}{\text { England }}$ | Middle Atlantic | Southeast | Great Lakes | Middle West | Racific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All workers. | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Time-rated workers | 82 | 77 | 74 | 95 | 78 | 92 | 97 |
| Formal plans.. | 69 | 39 | 61 | 67 | 73 | 77 | 77 |
| Single rate. | 36 | 6 | 28 | 40 | 47 | 25 | 24 |
| Range of rates | 33 | 33 | 33 | 27 | 26 | 52 | 53 |
| Individual rates .................................................................. | 13 | 38 | 13 | 27 | 5 | 14 | 20 |
| Incentive workers. | 18 | 23 | 26 | 5 | 22 | 8 | 3 |
| Individual piecework .............................................................................................. | 6 | 15 | 7 | 5 | 5 | 2 | (3) |
| Group piecework ............................................. | 1 | 1 | 2 | (3) | 2 | - |  |
| Individual bonus ............ Group bonus | 8 3 | 6 2 | 11 6 | - | 11 | 3 | 3 |

1 For definition of method of wage payment, see appendix $B$.

- Includes data for regions in addition to those shown separately

Less than 0.5 percent
NOTE: Because of rounding, sums of individual items may not equal totals.

## Table 21. Scheduled weekly hours

(Percent of production and office workers in nonferrous foundries by scheduled weekly hours.' United States and selected regions, May 1975)

| Weekly hours | United States ${ }^{2}$ | $\begin{gathered} \text { New } \\ \text { England } \end{gathered}$ | Middle Atlantic | Southeast | Great Lakes | Middie West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production workers |  |  |  |  |  |  |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 40 hours <br> 40 hours <br> Over 40 hours | 3 95 9 1 | 6 94 - | 1 99 - | 5 95 - | 4 94 2 | 10 90 - | ${ }_{100}^{-}$ |
|  | Office workers |  |  |  |  |  |  |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 35 hours |  |  |  |  |  |  |  |
| 35 hours .......... |  | -7 | 9 | - | 2 | - 3 | - |
|  | 5 | 6 | 10 | - | 4 |  | - |
| 38-3/4 hours. | 2 | - | 9 | - | - |  | - |
| 39 hours | (:3) | 2 | - | - | - | - | - |
| 40 hours ...... | 89 | 86 | 71 | 96 | 93 | 97 | 100 |
| Over 40 hours | (3) | - | - | - | (3) | - | - |

1 Data relate to the predominant schedule for full-time day-shift workers in each establishment.
2 Includes data for regions in addition to those shown separately.
3 Less than 0.5 percent
NOTE: Because of rounding, sums of individual items may not equal totals.

Table 22. Shift differential provisions
(Percent of production workers in nonferrous foundries by shift differential provisions.' United States and selected regions. May 1975)

| Shift differential | United States ${ }^{2}$ | New England | Middie Atlantic | Southeast | Great Lakes | Middie West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Secoud shift |  |  |  |  |  |  |  |
| Workers in establishments with second-shift provisions | 79.3 | 56.3 | 75.3 | 70.0 | 84.6 | 83.5 | 73.4 |
| With shift differential ........................................................... | 77.3 | 56.3 | 70.0 | 67.8 | 83.1 | 83.5 | 73.4 |
| Uniform cents per hour .................................................... | 64.8 | 34.7 | 50.5 | 31.9 | 74.6 | 77.5 | 61.5 |
| 5 cents .............................................................................. | 1.7 | 6.2 | . 9 | - | 1.7 | 2.4 | 1.1 |
| Over 5 and under 10 cents .................................................... | 4.2 | 3.8 | 1.5 | 5.2 | 5.1 | 3.5 | 1.5 |
| 10 cents .................................................................... | 25.6 | 2.8 | 10.0 | 18.2 | 27.5 | 59.9 | 22.5 |
| 11 cents ............................................................................ | . 1 | - | - | - | . 2 | - | - |
| 12 cents ............. | 2.4 | - | 1.3 | - | 4.2 | - | . 3 |
| 13 cents ........................................... | 5.9 | - | 9.0 | - | 8.7 | - | - |
| 14 cents .................................................................. | 1.3 | - | - | - | 2.6 | - | - |
| 15 cents ................................................. | 8.9 | 11.4 | 17.6 | 5.4 | 7.4 | - | 8.8 |
| Over 15 and under 20 cents ......................................... | 4.3 | - | 1.3 | - | 6.8 | - | 7.1 |
| 20 cents ................................................................... | 7.3 | 6.9 | 2.6 | - | 9.9 | 7.1 | 13.2 |
| Over 20 and under 25 cents ................. | 1.0 | - | 5.1 | - | - | - | - |
| 25 cents ......... | 1.3 | 3.6 | 1.1 | - | - | 4.6 | 5.4 |
| Over 25 cents ........................................................ | . 8 | - | . 4 | 3.0 | . 5 | - | 1.7 |
| Uniform percentage ......................................................... | 11.6 | 21.6 | 19.5 | 35.9 | 8.5 | 6.0 | 2.9 |
| 5 percent ........... | 7.8 | 9.8 | 8.8 | 35.9 | 7.5 | - | - |
| 10 percent .................................................................. | 3.6 | 11.8 | 10.7 | - | . 9 | 6.0 | 2.9 |
| 15 percent ..................................................................... | . 2 | - | - | - | - | - | - |
| Other formal paid differential ........................................................ | . 9 | - | - | - | - | - | 9.1 |
| Third or other late shift |  |  |  |  |  |  |  |
| Workers in establishments with thirdor other late shift provisions | 66.3 | 29.9 | 57.4 | 62.7 | 73.5 | 80.3 | 58.9 |
| With shift differential .................................................................................... | 66.2 | 29.9 | 56.7 | 62.7 | 73.5 | 80.3 | 58.9 |
| Uniform cents per hour .......................................................... | 53.9 | 12.0 | 39.8 | 21.3 | 65.9 | 74.3 | 42.7 |
| Under 10 cents .......................................................... | . 5 | - | - | - | . 5 | 2.4 | 1.1 |
| 10 cents ................................................................... | 7.9 | - | - | 5.2 | 12.1 | 6.6 | 1.9 |
| 12 cents ............................................................................... | 3.3 | - | 1.5 | - | 5.5 | 3.5 | - |
| 13 cents .................................................................. | . 4 | - | - | - | - | 3.3 | - |
| 15 cents ................................................... | 22.3 | - | 23.5 | 10.4 | 22.3 | 41.9 | 16.8 |
| 16 cents ................................................................... | 1.3 | - | - | - | 2.8 | - | - |
| 17 cents ................................................................... | . 1 | - | - | - | . 1 | - | . 3 |
| 20 cents ................................................................. | 9.0 | 2.8 | 5.0 | 5.7 | 12.1 | 9.4 | 10.2 |
| Over 20 and under 25 cents ......................................... | 3.1 | - | 5.1 | - | 4.4 | - | - |
| 25 cents ............................. | 4.2 | 9.1 | 4.7 | - | 4.0 | 2.6 | 7.1 |
| Over 25 cents ................. | 1.9 | - | 5 | - | 2.3 | 4.5 | 5.4 |
| Uniform percentage ............. | 9.9 | . 8 | 15.1 | 38.9 | 7.7 | 6.0 | . 8 |
| 5 percent ................................................................. | . 8 | - | 10 | 35 | 1.7 | - | - |
| 10 percent | 7.4 | 9.8 | 10.4 | 35.9 | 5.5 | 6.0 | - |
| 13 percent. | 1 | - | - | - | . 3 | - | - |
| 15 percent ... | 1.0 | - | 4.7 | - | - | - | . 8 |
| 20 percent. | . 3 | - | - | - | . 2 | - | 15 |
| Other formal paid differential | 2.4 | 8.2 | 1.8 | 2.5 | - | - | 15.4 |

1 Refers to policies of establishments currently operating late shifts or having provisions covering late shifts.
" Includes data for regions in addition to those shown separately.
NOTE: Because of rounding, sums of individual items may not equal totals.

Table 23. Shift differential practices
(Percent of production workers in nonferrous foundries employed on late shifts by amount of pay differential, United States and selected regions, May 1975)

| Shift differential | United States ${ }^{1}$ | New England | Middle Atlantic | Southeast | Great <br> Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second shift |  |  |  |  |  |  |  |
| Workers employed on second shift | 18.2 | 10.2 | 16.1 | 20.5 | 22.2 | 11.5 | 9.8 |
| Receiving differential ..................................................................... | 17.8 | 10.2 | 15.3 | 19.8 | 21.8 | 11.5 | 9.8 |
| Uniform cents per hour ......................................................... | 14.8 | 7.3 | 11.1 | 8.6 | 19.4 | 11.0 | 8.0 |
| 5 cents ................................................................................. | . 4 | - | ${ }^{(2)}$ | - | . 5 | . 3 | . 3 |
| Over 5 and under 10 cents ...................................... | . 9 | . 3 | - | 2.0 | 1.3 | - | - |
| 10 cents ................................................................... | 4.9 | - | 2.0 | 4.2 | 5.7 | 7.7 | 3.0 |
| 11 cents ....................................................................... | ( ${ }^{\text {a }}$ | - | - | - | ${ }^{(2)}$ | - | - |
| 12 cents ....................................................................... | . 6 | - | . 1 | - | 1.2 | - | - |
| 13 cents .......................................................................... | 2.0 | - | 2.1 | - | 3.4 | - | - |
| 14 cents .................................................................. | . 5 | - | - | - | 1.0 | - | - |
| 15 cents. | 2.2 | 4.1 | 4.6 | 2.0 | 1.8 | - | 1.3 |
| Over 15 and under 20 cents .......................................... | 1.2 | - | . 1 | - | 2.2 | - | 1.0 |
| 20 cents ........ | 1.4 | 2.2 | . 1 | - | 2.2 | 2.1 | 1.5 |
| Over 20 and under 25 cents .......................................... | . 3 | - | 1.8 | - | - | - | - |
| 25 cents ............................................................... | . 2 | . 7 | . 3 | - | - | 1.0 | 5 |
| Over 25 cents ........................................................ | . 1 | - | - | 4 | . 2 | - | 4 |
| Uniform percentage ............ | 2.9 | 2.9 | 4.2 | 11.3 | 2.4 | 5 | - |
| 5 percent ......... | 2.2 | 1.0 | 2.6 | 11.3 | 2.1 | - | - |
| 10 percent | . 6 | 2.0 | 1.7 | - | . 3 | . 5 | - |
| 15 percent ...... | . 1 | - | - | - | - | - | - |
| Other formal paid differential .............................................. | . 2 | - | - | - | - | - | 1.8 |
| Third or other late shift |  |  |  |  |  |  |  |
| Workers employed on third or other late shift. $\qquad$ | 4.4 | 1.2 | 2.5 | 12.7 | 5.1 | 2.3 | 1.8 |
| Receiving differential ........................................................................................... | 4.4 | 1.2 | 2.4 | 12.7 | 5.1 | 2.3 | 1.8 |
| Uniform cents per hour ........................................................... | 3.4 | . 2 | 2.4 | 2.0 | 4.7 | 2.2 | . 5 |
| Under 10 cents .......................................................... | ${ }^{(2)}$ | - | - | - | ${ }^{(2)}$ | . 2 | 1 |
| 10 cents ............................................................... | . 6 | - | - | . 3 | 1.1 | - | - |
| 12 cents .................................................................. | . 3 | - | - | - | . 7 | - | - |
| 13 cents ................................................................... | ${ }^{(2)}$ | - | - | - | - | 1 | - |
| 15 cents ................................................................. | 1.4 | - | 1.4 | 1.8 | 1.4 | . 4 | . 2 |
| 16 cents ................................................................... | - | - | - | - | - | - | - |
| 17 cents ................................................................................. | - | - | - | - | - | - | - |
| 20 cents | . 4 | - | . 4 | - | . 5 | 1.3 | 1 |
| Over 20 and under 25 cents .......................................... | . 2 | - | 3 | - | . 3 | - | - |
| 25 cents ............................ | . 2 | . 2 | . 3 | - | . 2 | - | - |
| Over 25 cents ................................ | 2 | - |  | - | . 5 | - | . 2 |
| Uniform percentage .................................. | . 9 | 1.0 | . 1 | 10.6 | . 4 | 2 | - |
| 5 percent ................................................................. | . 2 | - | - | - | . 3 | - | - |
| 10 percent .......... | . 7 | 1.0 | - | 10.1 | (2) | . 2 | - |
| 13 percent ............................................... | - | - | - | - | - | - | - |
| 15 percent ...................................................... | (*) | - | . 1 | - | - | - | - |
| 20 percent ............................................... | . 1 | - | - | - | - | - | - |
| Other formal paid differential ...................... | . 1 | - | - | - | - | - | 1.3 |

' Includes data for regions in addition to those shown separately.

- Less than 0.05 percent.

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

Table 24. Paid holidays
(Percent of production and office workers in nonferrous foundries with formal provisions for paid holidays. United States and selected regions. May 1975)

| Number of paid holidays | United States ${ }^{1}$ | New England | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production workers |  |  |  |  |  |  |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing paid holidays 3 days <br> 4 days <br> 5 days <br> 5 days plus 1 half day <br> 6 days <br> 6 days plus 1 or 2 half days <br> 7 days <br> 7 days plus 1 or 2 half days $\qquad$ <br> 8 days <br> 8 days plus 1 or 2 half days <br> 9 days <br> 9 days plus 1 half day <br> 9 days plus 2 half days <br> 10 days <br> 10 days plus 1 or 2 half days <br> 11 days <br> 12 days <br> 13 days <br> 14 days | $\begin{array}{r} 99 \\ \left({ }^{2}\right) \\ \left(^{2}\right) \\ 1 \\ 1 \\ \left(^{2}\right) \\ 9 \\ 1 \\ 1 \\ 7 \\ 2 \\ 13 \\ 1 \\ 12 \\ 1 \\ 1 \\ 1 \\ 21 \\ \left({ }^{2}\right) \\ 13 \\ 7 \\ \left({ }^{2}\right) \\ 9 \end{array}$ | 100 - $\qquad$ <br> $-4$ <br> - 8 5 <br> 11 <br> 7 13 <br> 10 <br> $\begin{array}{r}9 \\ 24 \\ \hline\end{array}$ <br> ${ }_{-}^{24}$ <br> ${ }_{8}^{-}$ <br> - | $\begin{array}{r} 100 \\ - \\ - \\ 1 \\ -4 \\ 4 \\ 1 \\ 2 \\ 3 \\ 2 \\ 2 \\ 9 \\ 1 \\ 2 \\ 15 \\ 2 \\ 24 \\ 14 \\ 2 \\ 17 \end{array}$ | $\begin{array}{r}100 \\ 2 \\ - \\ 6 \\ - \\ 17 \\ 3 \\ 5 \\ - \\ 12 \\ - \\ \hline\end{array}$ | $\begin{array}{r} 100 \\ - \\ - \\ - \\ - \\ 6 \\ \left.r^{2}\right) \\ 4 \\ 1 \\ 16 \\ 16 \\ \left(r^{2}\right) \\ 10 \\ 1 \\ \hline 27 \\ \hline- \\ 18 \\ 8 \\ \hline 8 \end{array}$ | $\begin{array}{r} 100 \\ 2 \\ - \\ - \\ \hline 22 \\ 1 \\ 16 \\ 1 \\ 7 \\ 2 \\ 20 \\ - \\ \hline \end{array}$ | $\begin{array}{r} 100 \\ - \\ -1 \\ \hline 20 \\ - \\ 19 \\ 4 \\ 17 \\ 2 \\ 26 \\ - \\ 1 \\ 10 \end{array}$ |
|  | Office workers |  |  |  |  |  |  |
| All workers ........................................................................ | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments <br> providing paid holidays | 99 $\left({ }^{\prime}\right)$ <br> ( ${ }^{2}$ ) <br> (2) <br> 7 <br> 1 5 <br> 2 13 <br> 2 13 <br> 1 <br> 21 <br> 1 12 <br> 12 <br> ( ${ }^{2}$ | 100 -- <br> 12 <br> 13 <br> 18 13 15 19 $-$ $-$ | $\begin{array}{r} 100 \\ \text { (2) } \\ - \\ \hline 3 \\ - \\ 1 \\ 2 \\ 2 \\ 1 \\ 9 \\ 1 \\ 2 \\ 16 \\ 2 \\ 24 \\ 21 \\ 1 \\ 10 \end{array}$ | 100 <br> - <br> 3 <br> - <br> 14 <br> 5 <br> 6 <br> - <br> 10 <br> 19 <br>  <br> 12 <br> - <br> 5 <br> 2 | $\begin{array}{r} 100 \\ - \\ - \\ - \\ 5 \\ \left(x^{2}\right) \\ 2 \\ 2 \\ 15 \\ \hline 12 \\ 1 \\ \hline \end{array}$ | $\begin{array}{r} 100 \\ - \\ - \\ - \\ 8 \\ 3 \\ 16 \\ 2 \\ 9 \\ 1 \\ 19 \\ - \\ \hline 39 \\ - \\ 3 \\ - \\ - \end{array}$ | 100 - - - 16 - 14 2 22 6 28 - 12 |

1 Includes data for regions in addition to those shown separately.
${ }^{2}$ Less than 0.5 percent
NOTE: Because of rounding. sums of individual items may not equal totals

Table 25. Paid vacations
(Percent of production and office workers in nonferrous foundries with formal provisions for paid vacations after selected periods of service. United States and selected regions, May 1975)

| Vacation policy | United States ${ }^{1}$ | New England | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All workers ....................................................................... | Production workers |  |  |  |  |  |  |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Method of payment |  |  |  |  |  |  |  |
| Workers in establishments providing paid vacations | 99 | 96 | 100 | 100 | 100 | 100 | 100 |
| Length-oftime payment ............................................ | 80 | 82 | 75 | 95 | 72 | 98 | 98 |
| Percentage payment ......................................................................................................... | 20 | 14 | 25 | 5 | 28 | 2 | 2 |
| Amount of vacation pay ${ }^{2}$ |  |  |  |  |  |  |  |
| After 1 year of service: |  |  |  |  |  |  |  |
| 1 week .................... | 75 | 86 | 63 | 55 | 75 | 95 | 88 |
| Over 1 and under 2 weeks | 8 | - | 14 | 2 | 9 | 5 | 3 |
| 2 weeks ......................... | 11 | 10 | 14 | 42 | 8 | - | 10 |
| Over 2 and under 3 weeks ........ | 6 | - | 9 | - | 8 | - |  |
| After 2 years of service: |  |  |  |  |  |  |  |
| 1 week ........................................................................ | 48 | 33 | 31 | 47 | 54 | 79 | 36 |
| Over 1 and under 2 weeks | 20 | 37 | 23 | 3 | 22 | 12 | 18 |
| 2 weeks | 25 | 26 | 35 | 47 | 16 | 8 | 44 |
| Over 2 and under 3 weeks ........................................................... | 6 | - | 11 | - | 8 | - | 2 |
| 3 weeks ................................................................................ | (3) | - | - | 2 | - | - | - |
| After 3 years of service: |  |  |  |  |  |  |  |
| Over 1 and under 2 weeks | 16 | 30 | 17 | 3 | 22 | 6 | 2 |
| 2 weeks ..... | 52 | 51 | 44 | 32 | 47 | 49 | 87 |
| Over 2 and under 3 weeks ................................................. | 16 | - | 26 | 36 | 17 | 16 | 2 |
| 3 weeks ........................................................................... | 1 | - | 2 | 2 | - | - | - |
| After 5 years of service: |  |  |  |  |  |  |  |
| 1 week ............................................................................. | 2 | - | 3 | 1 | 1 | 7 | - |
| Over 1 and under 2 weeks ..................................................... | 1 | 4 | 3 | - | - | 13 | - |
| 2 weeks .................... | 68 | 84 | 53 | 58 | 68 | 56 | 90 |
| Over 2 and under 3 weeks ................................................. | 12 | 8 | 17 | 3 | 14 | 19 | 1 |
| 3 weeks .................................................................... | 11 | - | 16 | 38 | 9 | 5 | 9 |
| Over 3 and under 4 weeks .................................................. | 6 | - | 9 | - | 8 | - | - |
|  |  |  |  |  |  |  |  |
| 1 week ....................................................................................... | (a) | - | ${ }^{(3)}$ | 1 | (3) | 4 | - |
| Over 1 and under 2 weeks .............................................................. | (3) | 51 | $\overline{17}$ | 31 | - | 33 | - |
| 2 weeks ........................................................................... | 20 | 51 | 17 | 31 | 12 | 33 | 38 |
| Over 2 and under 3 weeks ........................................................... | 7 5 | 10 34 | 11 | 5 | 8 | 4 54 | 1 |
| 3 weeks ................................................................................. | 52 | 34 | 46 | 22 | 57 | 54 | 59 |
| Over 3 and under 4 weeks $\qquad$ 4 weeks $\qquad$ | 17 | - | 23 3 | 38 2 | 21 | 5 | 1 |
| After 15 years of service: |  |  |  |  |  |  |  |
| 1 week ....................... | 1 | - | (3) | 1 | (3) | 4 | - |
| Over 1 and under 2 weeks | (3) | - | - | - | - | - | - |
| 2 weeks .......................... | 11 | 19 | 10 | 21 | 5 | 14 | 24 |
| Over 2 and under 3 weeks | 1 | - | 2 | 2 | - | ${ }^{2}$ | 1 |
| 3 weeks ................................................................................. | 46 | 51 | 42 | 26 | 41 | 53 | 66 |
| Over 3 and under 4 weeks ............................................................ | 12 | 8 | 9 | 6 | 17 | 10 | 2 |
| 4 weeks ..................................................................................... | 28 | 17 | 30 | 41 | 35 | 16 | 7 |
| Over 4 and under 5 weeks .............................................................. | (3) | - | 7 | - | 2 | - | - |
| After 20 yeers of service: | ${ }^{(3)}$ | - | - | 2 | - | - | - |
| 1 week .................................................................................. | 1 | - | (3) | 1 | (3) | 4 | - |
| Over 1 and under 2 weeks ............................................................. | (3) | $\overline{19}$ | - | - | - | - | - |
| 2 weeks ............................................................................. | 10 | 19 | 8 | 21 | 5 | 14 | 23 |

See footnotes at end of table.

Table 25. Paid vacations-Continued
(Percent of production and office workers in nonterrous foundries with formal provisions for paid vacations after selected periods of service, United States and selected regions, May 1975)

| Vacation policy | United States ${ }^{1}$ | $\begin{gathered} \text { New } \\ \text { England } \end{gathered}$ | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production workers-Continued |  |  |  |  |  |  |
| Amount of vacation pay'-Continued |  |  |  |  |  |  |  |
| After 20 years of service: |  |  |  |  |  |  |  |
| 3 weeks ........................... | 26 | 19 | 22 | 22 | 20 | 41 | 49 |
| Over 3 and under 4 weeks | 3 | $\stackrel{7}{7}$ | 6 | - | 2 | 4 | 4 |
| 4 weeks ............................................................................................................... | 42 | 57 | 40 | 13 | 52 | 32 | 19 |
| Over 4 and under 5 weeks ... | 6 | - | 5 | - | 10 | $-$ | - |
| 5 weeks ............................. | 11 | - | 16 | 38 | 11 | 5 | 5 |
| 6 weeks ................................................................................ | 1 | - | 3 | 2 | - | - | - |
| After 25 years of service:1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Over 1 and under 2 weeks ........................................ | (3) | - | - | $\overline{1}$ | - | - | $\bar{\square}$ |
|  |  |  |  |  |  |  |  |
| Over 2 and under 3 weeks ..... | (3) | $\stackrel{-}{10}$ | 1 | 2 | - | $\stackrel{-}{1}$ | 1 |
|  |  |  |  |  |  |  |  |
| Over 3 and under 4 weeks .................................................. | 2 | $-$ | 5 | - | 2 | 4 | 2 |
|  |  |  |  |  |  |  |  |
| Over 4 and under 5 weeks <br> 5 weeks | 11 | - | 11 | $-$ | 18 | - | - |
|  | . 17 | 11 | 23 | 41 | 18 | 5 | 5 |
| Over 5 and under 6 weeks $\qquad$ <br> 6 weeks $\qquad$ | 2 | - | - | - | 3 | - | - |
|  | 2 | - | 8 | - | 1 | - | - |
| Over 6 weeks .................................................................................................................................. | 1 | - | 3 | 2 | - | - | - |
|  | Office workers |  |  |  |  |  |  |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|  |  |  |  |  |  |  |  |
| Workers in establishments |  |  |  |  |  |  |  |
| Length-of-time payment. | 95 | 100 | 87 | 97 | 98 | 98 | 97 |
| Percentage payment ......................................................................................................... | 4 | - | 12 | 3 | 2 | 2 | - |
| Amount of vacation pay ${ }^{2}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1 week ...................................................................................... | 47 4 | 55 | 33 11 | 70 | 39 2 | 79 | 74 |
|  | 4 | $\overline{45}$ | 11 56 | $\overline{30}$ | \% ${ }^{2}$ | -7 | 1 |
| Over 2 and under 3 weeks .................................................................................................. | 1 | 4 | - | - | - | 14 | - |
| After 2 years of service: |  |  |  |  |  |  |  |
| 1 week ....................................................................................... | 23 | 20 | 13 | 49 | 20 | 68 | 19 |
| Over 1 and under 2 weeks ................................................................................................... | 10 | 15 | 13 | - | 7 | . 10 | 10 |
| 2 weeks ........................................................................... | 64 | 56 | 71 | 40 | 71 | 8 | 67 |
| Over 2 and under 3 weeks ..................................................... | 1 | - | - | - | 2 | 14 | 1 |
| 3 weeks ...................................................................... | 2 | 9 | 3 | 11 | - | - | - |
| After 3 years of service: |  |  |  |  |  |  |  |
| 1 week ......................... | 7 | - | 4 | 16 | 8 | 24 | 3 |
| Over 1 and under 2 weeks | 6 | 18 | 10 | - | 5 | 7 | - |
| 2 weeks .......................... | 72 | 72 | 66 | 49 | 73 | 56 | 93 |
| Over 2 and under 3 weeks ......................................................... | 6 8 | -9 | 12 | $\overline{35}$ | 5 9 | 14 | 1 |
| After 5 years of service: |  |  |  |  |  |  |  |
| 1 week ........................................................................... | 1 | - | (3) | - | 1 | 9 | - |
| Over 1 and under 2 weeks ................................................... | 1 | 6 | 1 | - | - | 6 | - |

[^10]Table 25. Paid vacations-Continued
(Percent of production and office workers in nonferrous foundries with formal provisions for paid vacations after selected periods of service, United States and selected regions, May 1975)

| Vacation policy | United States | New England | Middle Atlantic | Southeast | Great <br> Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Office workers-Continued |  |  |  |  |  |  |
| Mmount of vacation pay ${ }^{2}$-Continued |  |  |  |  |  |  |  |
| After 5 years of service: |  |  |  |  |  |  |  |
| 2 weeks .................... | 67 | 78 | 56 | 53 | 67 | 69 | 81 |
| Over 2 and under 3 weeks ........ | 8 | 7 | 17 | - | 6 | 16 | 1 |
| 3 weeks ........................................................................ | 22 | 9 | 25 | 47 | 25 | - | 15 |
| 4 weeks ................................................................................ | (3) | - | - | - | - | - | - |
| After 10 years of service: |  |  |  |  |  |  |  |
| 1 week ............................................................................. | 1 | - | - | - | 1 | - | - |
| Over 1 and under 2 weeks .................................................. | (3) | $\overline{-}$ | $\overline{-}$ | $\bar{\square}$ | - | $\bar{\square}$ | - |
| 2 weeks ........................................................................... | 21 | 70 | 18 | 30 | 12 | 34 | 30 |
| Over 2 and under 3 weeks .................................................. | 4 | 9 | 8 | 1 | 3 | 3 | 1 |
| 3 weeks ........................................................................................... | 58 | 21 | 57 | 45 | 62 | 62 | 65 |
| Over 3 and under 4 weeks .................................................. | 5 | - | 12 | - | 5 | - | - |
| 4 weeks ........................................................................... | 11 | - | 5 | 24 | 18 | - | 1 |
| After 15 years of service: |  |  |  |  |  |  |  |
| 1 week .-....................... | 1 | - | - | - | 1 | - | - |
| Over 1 and under 2 weeks .................................................... | ${ }^{(3)}$ | $\overline{-}$ | - | 19 | - | - | - |
| 2 weeks .......................................................................... | 11 | 30 | 10 | 19 | 4 | 7 | 25 |
| Over 2 and under 3 weeks .................................................. | 1 | - | 1 | 1 | 2 |  | 1 |
| 3 weeks ....... | 48 | 49 | 44 | 37 | 47 | 41 | 60 |
| Over 3 and under 4 weeks ................................................. | 6 | 7 | 10 | 5 | 4 | 20 | - |
| 4 weeks .................................................................................... | 32 | 14 | 29 | 38 | 42 | 32 | 11 |
| Over 4 and under 5 weeks .................................................. | 1 | - | 5 | - | - | - | - |
| After $\mathbf{2 0}$ years of service: |  |  |  |  |  |  |  |
| 1 week ....................... | 1 | - | - | - | 1 | - | - |
| Over 1 and under 2 weeks .................................................... | ${ }^{(3)}$ | $\overline{3}$ | - | - | - | - | - |
| 2 weeks .......................................................................... | 10 | 30 | 8 | 19 | 4 | 7 | 19 |
| Over 2 and under 3 weeks .................................................. | (3) | - | 1 | 1 | - | - | 1 |
| 3 weeks .......................................................................... | 27 | 24 | 26 | 32 | 22 | 26 | 50 |
| Over 3 and under 4 weeks ............................................................ | 3 | 46 | 6 | 2 | 2 | 20 | , |
| 4 weeks ............................................................................ | 43 | 46 | 42 | 22 | 52 | 48 | 21 |
| Over 4 and under 5 weeks ............................................................. | 1 | - | 4 | - | 1 |  |  |
| After 25 yeeks ....................................................................... | 13 | - | 12 | 26 | 18 |  | 6 |
|  | 1 | - | - | - | 1 |  | - |
| Over 1 and under 2 weeks .................................................. | (3) | - | - | - | - | - | - |
| 2 weeks .................................................................................... | 10 | 30 | 8 | 19 | 4 | 7 | 19 |
| Over 2 and under 3 weeks .................................................. | (3) | 16 | 1 | 1 |  | - | 1 |
| 3 weeks ........................................................................... | 24 | 16 | 18 | 31 | 21 | 26 | 43 |
| Over 3 and under 4 weeks .................................................. | 2 | - | 6 | - | (3) | 6 | - |
| 4 weeks .......................................................................... | 39 | 50 | 30 | 11 | 48 | 61 | 25 |
| Over 4 and under 5 weeks ........................................................... | 1 | 5 | 1 | 38 | 2 | - | - |
| 5 weeks ........................................................................................ | 21 | 5 | 28 | 38 | 23 | - | 9 |
| 6 weeks ......................................................................................................................................................... | 1 | - | 4 | - | - | - | - |
| Over 6 weeks ...................... |  | - |  | - | - | - | - |

Includes data for regions in addition to those shown separately.

- Vacation payments, such as percent of annual eamings, were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily refiect individual establishment provisions for progression. For example, changes indicated at 10 years may include changes that occurred between 5 and 10 years.
${ }^{3}$ Less than 0.5 percent.
- Vacation provisions were virtually the same after longer periods of service.

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

Table 26. Health, Insurance, and retirement plans
(Percent of production and office workers in nonferrous foundries with specified health. insurance, and retirement plans,' United States and selected regions, May 1975)

| Type of plan | United States ${ }^{2}$ | New England | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | duction wor |  |  |  |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing: |  |  |  |  |  |  |  |
| Life insurance | 96 | 97 | 96 | 99 | 98 | 94 | $92$ |
| Noncontributory plans ......................................................... | 78 | 76 | 82 | 79 | 81 | 79 | 88 |
| Accidental death and dismemberment insurance $\qquad$ | 86 | 77 | 83 | 84 | 91 | 94 79 | 69 65 |
| Noncontributory plans .................................................................... | 70 | 59 | 70 | 69 | 76 |  |  |
| Sickness and accident insurance or sick leave or both ${ }^{3}$ | 77 | 83 | 65 | 67 | 95 | 83 | 24 |
| Sickness and accident insurance | 74 | 80 | 55 | 64 | 95 | 83 | 16 |
| Noncontributory plans ...................................................................................... | 60 | 67 | 51 | 55 | 77 | 70 | 13 |
| Sick leave (full pay, <br> no waiting period) | 7 | 17 | 14 | - | 6 | 6 | 6 |
| Sick leave (partial pay or waiting period) | 1 | 4 | -18 | 3 | 14 | - | 2 |
| Long-term disability insurance ................................................... | 13 | 4 | 18 | 44 | 14 | - | - |
| Noncontributory plans .................................................. | 13 |  | 18 | 38 | 14 | - | $\stackrel{\rightharpoonup}{7}$ |
| Hospitalization insurance ............................................................. | 98 | 96 59 | 99 | 99 | 99 | 98 | 95 |
| Noncontributory plans ...... | 98 | 96 | 99 | 99 | 99 | 98 | 98 |
| Surgical insurance $\qquad$ Noncontributory plans | 75 | 59 | 82 | 68 | 77 | 72 | 92 |
| Medical insurance ......................................................... | 98 | 96 | 96 | 99 | 99 | 96 | 98 |
| Noncontributory plans .................................................. | 75 | 59 | 80 | 68 | 77 | 72 | 92 |
| Major medical insurance ...................................................... | 73 | 79 | 71 | 63 | 68 | 80 | 94 |
| Noncontributory plans ........................................................ | 53 | 48 | 56 | 32 | 49 | 64 | 88 |
| Retirement plans ${ }^{\mathbf{+}}$............. | 67 | 60 | 78 | 60 | 73 | 54 | 42 |
| Pensions .............................................................................. | 64 | 60 | 76 | 60 | 68 | 54 | 42 |
| Noncontributory plans .............................................................. | 58 | 46 | 71 | 60 | 64 | 45 | 27 |
| Severance pay | 4 1 | - | 5 1 | $-1$ | (5) | -2 | $\frac{1}{2}$ |
|  | Office workers |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| All workers . | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing: |  |  |  |  |  |  |  |
| Life insurance .............................................................................. | 9676 | 9580 | 9875 | 10070 | 9778 | 9478 | 9289 |
| Noncontributory plans .......................................................... |  |  |  |  |  |  |  |
| Accidental death and dismemberment insurance | 8870 | $\begin{aligned} & 65 \\ & 53 \end{aligned}$ | $\begin{aligned} & 87 \\ & 71 \end{aligned}$ | $\begin{aligned} & 88 \\ & 59 \end{aligned}$ | 9475 | 94 | 77 |
| Noncontributory plans ..... |  |  |  |  |  |  |  |
| Sickness and accident insurance or sick leave or both ${ }^{3}$ | 807055 | 86 | 75 | 77 |  |  |  |
|  |  | 65 | 56 | 65 | 90 | 66 | 20 |
| Noncontributory plans .................................................... |  | 46 | 50 | 54 | 70 | 48 | 19 |
| Sick leave (full pay. no waiting period) $\qquad$ | 50 | 51 | 49 | 28 | 67 | 18 | 11 |
| Sick leave (partial pay | 1 | 7 | 1 |  | - |  |  |
| or waiting period) .... |  |  |  | 15 |  | - | 1 |
| Long-term disability insurance .................................................. | 2215 | 9 | 3023 | 53 | 26 | 14 | (5) |
| Noncontributory plans .......................................................... |  | 9 |  | 35 | 15 | 14 | (3) |
| Hospitalization insurance ................................................................. | 97 | 93 | 99 | 100 | 98 | 100 | 93 |
| Noncontributary plans .................................................................. | 749874 | $\begin{array}{r} 56 \\ 100 \\ 63 \end{array}$ | 809980 | $\begin{array}{r} 46 \\ 100 \\ 46 \end{array}$ | $\begin{aligned} & 75 \\ & 98 \\ & 75 \end{aligned}$ | 74100 | 899792 |
|  |  |  |  |  |  |  |  |
| Noncolu-ibutory plans ......................................... |  |  |  |  |  |  |  |

Table 26. Health, insurance, and retirement plans-Continued
(Percent of production and office workers in nonferrous foundries with specified heaith, insurance, and retirement plans,' United States and selected regions, May 1975)

| Type of plan | United States ${ }^{2}$ | New <br> England | Middle Atlantic | Southeast | Great <br> Lakes | Middie West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Office workers-Continued |  |  |  |  |  |  |
| Medical insurance | 97 | 100 | 96 | 100 | 98 | 99 | 97 |
| Noncontributory plans .............................................................................................. | 74 | 63 | 77 | 46 | 75 | 74 | 92 |
| Major medical insurance ....................................................................................................... | 89 | 96 | 93 | 100 | 87 | 84 | 93 |
| Noncontributory plans ...................................................... | 65 | 59 | 68 | 46 | 63 | 66 | 88 |
| Retirement plans ${ }^{+}$.............................................................. | 71 | 58 | 79 | 54 | 77 | 63 | 50 |
| Pensions ........................................................................ | 67 | 58 | 77 | 54 | 70 | 63 | 49 |
| Noncontributory plans ................................................... | 63 | 50 | 76 | 54 | 67 | 56 | 34 |
| Severance pay .................................................................. | 5 | - | 2 | - | 9 | - | 1 |
| Mo plans ................... | 2 | - | 1 | - | 2 | - | 3 |

[^11]Table 27. Other selected benefits
(Percent of production and office workers in nonferrous foundries with formal provisions for specified benefits. ${ }^{1}$ United States and selected regions, May 1975)

| Type of benefit | United States ${ }^{2}$ | New England England | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production workers |  |  |  |  |  |  |
| Workers in establishments with provisions for: |  |  |  |  |  |  |  |
| Funeral leave . | 73 | 89 | 81 | 68 | 81 | 76 | 26 |
| Jury duty leave | 68 | 38 | 70 | 71 | 76 | 83 | 35 |
| Technological severance pay | 7 | - | 8 | - | 12 | - | - |
| Cost-of-living adjustments | 33 | 10 | 39 | 38 | 39 | 13 | 28 |
| Based on BLS Consumer Price Index | 32 | 5 | 34 | 36 | 39 | 13 | 28 |
| Based on other measure .......... | 1 | 4 | 5 | 2 | - | - | - |
| Supplemental unemployment benefits ..... | 13 | - | 19 | 36 | 15 | 3 | 1 |
| Extended vacation plans $\qquad$ Insurance benefits for retirees: | 2 | - | - | - | 4 | - | 2 |
| Life insurance: <br> No provisions | 68 | 100 | 55 | 57 | 60 | 100 | 96 |
| Provisions same for retirees and active workers $\qquad$ | 5 | - | 12 | - | 5 | - | - |
| Provisions less for retirees than for active workers | 27 | - | 33 | 43 | 36 | - | 4 |
| Hospitalization insurance: <br> No provisions | 72 | 97 | 71 | 57 | 63 | 100 | 96 |
| Provisions same for retirees and active workers $\qquad$ | 17 | 3 | 25 | 40 | 19 | - | - |
| Provisions less for retirees than for active workers | 11 | - | 5 | 3 | 18 | - | 4 |
| Surgical insurance: <br> No provisions | 72 | 100 | 71 | 57 | 63 | 100 | 96 |
| Provisions same for retirees and active workers | 17 | - | 25 | 40 | 19 | - | - |
| Provisions less for retirees than for active workers $\qquad$ | 11 | - | 5 | 3 | 18 | - | 4 |
| Medical insurance: <br> No provisions | 72 | 100 | 71 | 57 | 63 | 100 | 96 |
| Provisions same for retirees and active workers $\qquad$ | 17 | - | 25 | 40 | 19 | - | - |
| Provisions less for retirees than for active workers | 11 | - | 5 | 3 | 18 | $\sim$ | 4 |
|  | Office workers |  |  |  |  |  |  |
| Workers in establishments with provisions for: |  |  |  |  |  |  |  |
| Funeral leave ..................................................................................... | 68 | 91 | 65 | 70 | 78 | 68 | 28 |
| Jury duty leave ....................................................................... | 67 | 45 | 62 | 61 | 79 | 89 | 37 |
| Technological severance pay .................................................... | 12 | - | 19 | 1 | 17 | 12 | - |
| Costof-living adjustments ...................................................... | 17 | 11 | 14 | 35 | 15 | 12 | 27 |
| Based on BLS Consumer Price Index ............................ | 16 | 9 | 14 | 24 | 15 | 12 | 27 |
| Based on other measure ...................................................... | 1 | 2 | - | 11 | - | - | - |
| Supplemental unemployment benefits .......................................... | 4 | - | 9 | - | 3 | - | 1 |
| Extended vacation plans $\qquad$ insurance benefits for retirees: | 1 | - | - | - | 3 | - | - |
| Life insurance: <br> No provisions | 64 | 95 | 54 | 62 | 54 | 100 | 98 |
| Provisions same for retirees and active workers $\qquad$ | 11 | - | 18 | - | 14 | - | - |
| Provisions less for retirees than for active workers | 25 | 5 | 28 | 38 | 32 | - | 2 |
| Hospitalization insurance: <br> No provisions $\qquad$ | 70 | 87 | 69 | 62 | 60 | 100 | 98 |

Table 27. Other selected benefits-Continued
(Percent of production and office workers in nonferrous foundries with formal provisions for specified benefits, ' United States and selected regions, May 1975)

| Type of benefit | United States ${ }^{2}$ | New England | Middle Atlantic | Southeast | Great Lakes | Middle West | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Office workers-Continued |  |  |  |  |  |  |
| Provisions same for retirees <br> and active workers $\qquad$ | 19 | 9 | 28 | 1 | 25 | - | - |
| Provisions less for retirees than for active workers | 11 | 5 | 3 | 37 | 15 | - | 2 |
| Surgical insurance: <br> No provisions $\qquad$ | 71 | 95 | 69 | 62 | 60 | 100 | 98 |
| Provisions same for retirees and active workers $\qquad$ | 18 | - | 28 | 1 | 25 | - | - |
| Provisions less for retirees <br> than for active workers | 11 | 5 | 3 | 37 | 15 | - | 2 |
| Medical insurance: <br> No provisions $\qquad$ | 71 | 95 | 69 | 62 | 60 | 100 | 98 |
| Provisions same for retirees <br> and active workers $\qquad$ | 18 | - | 28 | 1 | 25 | - | - |
| Provisions less for retirees than for active workers | 11 | 5 | 3 | 37 | 15 | - | 2 |

: For definition of items, see appendix 8.

- Includes data for regions in addition to those shown separately

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

## Appendix A. Regression Analysis

Conventional methods of analyzing wage variations using cross-tabulations (simple regression) of data typically stop short of measuring the independent influence on wage levels of such factors as size of establishment, location, and union contract status. The independent effect of establishment size, for example, may be obscured by earnings differentials associated with labor-management contract coverage, a characteristic found more often in large than in small establishments.

One method of isolating the independent effect on wages of various establishment and worker characteristics is multiple regression. By this method, the estimated wage differential for a given variable is determined independently. The variables included in table A-1 are defined, where necessary, in appendix B-Scope and Method of Survey.

In the regression equation, one category of each of the variables is not shown explicitly, but its influence is embodied in the constant term. In table A-1, therefore, the categories represented by the constant term are: Nonmetropolitan, small employment size ( 8 to 99 workers), nonunion, foundries using other than one of the three major casting methods, Middle West region, and, for a number of the selected occupations, female workers and payment on a time basis. The average wage level relating to this set of suppressed characteristics is represented by the value of the constant term. The coefficients of the explicit variables represent the differentials associated with categories of these characteristics differing from the basic set embodied in the constant.

The effects of the coefficients on average wage levels are determined by the substitution of the values of the new variables in table A- 1 for those suppressed in the constant term. For example, for production workers in a union shop, estimated average hourly earnings are higher by 39 cents, or \$3.51, when other factors are held constant. Further, if these workers are located in the Great Lakes region, another

57 cents is added to the constant term, which raises the average hourly earnings to $\$ 4.08$.

Wage differences found by simple cross-tabulation may be labeled gross differentials; those isolated by regression techniques are net differentials. As illustrated in table A-2, net differentials are generally smaller than gross differentials, which is to be expected, because, as stated previously, characteristics associated with higher wages, such as labor-management contract coverage and location in the Great Lakes States, tend to be highly interrelated. Regression techniques, then, permit a more precise measurement of the impact of individual factors on the wage structure of an industry.

Regression results substantiate survey findings concerning the relative importance of certain wage-determining factors on foundry pay levels. As suggested in table A-1, for example, size of establishment appears to be far more important as a wage determinant than coverage by labormanagement agreements. A net wage differential of $\$ 1.14$ is associated with establishments of 250 workers or more, when compared with those employing 8 to 99 workers; however, union establishments have only a 39 -cent advantage over nonunion foundries.

It should be emphasized that the regression analysis is not sufficiently complete to state with certainty that all of the independent effects of employee and establishment characteristics on wage levels have been measured. As table A- 1 shows, the regression analysis left unexplained about 56 percent of the variation in average earnings levels for all production workers, and from 43 to 82 percent of the variation in earnings for the six selected occupations. (See adjusted coefficient of determination, $\mathbf{R}^{\mathbf{2}}$.) This could mean that other factors, beyond the scope of the survey, influenced the estimates, or that part of the variation is subject to random movement. However, by holding constant those characteristics within the survey scope, a definite improvement in the estimates for specified characteristics was obtained.

Table A-1. Regression analysis of average hourly earnings for production workers and selected occupations in nonferrous foundries, May 1975

| Variable | All production workers | Selected occupations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Chippers and grinders | Diecasting machine operators (operate only) | Molders, machine | Inspectors (Class C ) | Maintenance workers, general utility | Laborers, general foundry |
| Constant | \$3.12 | \$2.95 | \$1.70 | \$2.86 | \$2.96 | \$3.92 | \$2.71 |
|  | ( .23) | ( .28) | (1.46) | ( .99) | ( .45) | ( .31) | ( .46) |
| Male employees | (1) | . 42 | . 65 | -. 04 | . 33 | (1) | . 24 |
|  | (1) | ( .14) | ( .54) | $($. 89) | ( .11) | (1) | ( .29) |
| Metropolitan area | -. 02 | . 26 | -. 31 | . 55 | -. 58 | . 35 | . 05 |
|  | ( .09) | ( .11) | ( .17) | ( .18) | ( .14) | ( .12) | ( .16) |
| 100-249 workers. | . 26 | . 39 | -. 18 | . 97 | . 27 | . 26 |  |
|  | ( .09) | ( .11) | ( .17) | ( .21) | ( .15) | ( .12) | ( .13) |
| 250 workers or more | 1.14 | . 93 | 1.07 | . 72 | 1.05 | . 86 | 1.26 |
|  | ( .10) | ( .14) | ( .18) | ( .27) | ( .14) | ( .14) | ( .18) |
| Union foundry. | . 39 | . 27 | . 78 | . 02 | . 29 | . 17 | . 48 |
|  | ( . 08 ) | ( .08) | ( .15) | ( .12) | ( .14) | ( .11) | ( .09) |
| Incentive | (1) | . 72 | . 19 | . 55 | . 18 |  |  |
|  | (1) | ( .12) | ( .15) | ( .16) | ( .21) | ( . 25 ) | ( .18) |
| Regions: |  |  |  |  |  |  |  |
| New England. |  |  | . 90 | . 02 |  |  |  |
| Middle Atlantic | ( .24) | $(.22)$ | ( .61) | ( . 30 ) | ( .51) | $\text { (. } .35 \text { ) }$ | ( .39) |
|  | . 53 | -. 02 | . 61 | -. 13 | . 63 | -. 07 | . 26 |
|  | ( .18) | ( .16) | ( .47) | ( .27) | ( .43) | ( .23) | ( .31) |
| Southeast. | . 61 | -. 17 | . 48 | -. 43 | . 88 | -. 07 | $.30$ |
|  | ( .22) | ( .25) | 1.461 | ( .32) | ( .44) | ( .30) | (.34) |
| Great Lakes | . 57 | . 50 | . 52 | . 36 | . 88 | +.13 | . 68 |
|  | ( .17) | ( .15) | ( .44) | ( .24) | $(\mathrm{H3)}$ | $($ (19) | ( . 30 ) |
| Pacific. | . 78 | . 27 | 1.47 | . 31 | . 36 | . 54 |  |
|  | ( .20) | ( .16) | ( .50) | ( .28) | ( .49) | ( .26) |  |
| Industry branch: |  |  |  |  |  |  |  |
| Die casting |  | $-.17$ | $1.17$ | $-1.08$ | -. 03 | $.01$ | $-.48$ |
|  | ( . 16 | ( .22) | (1.32) | $(.81)$ | $\left(\begin{array}{l}\text { ( } 221 \\ \hline 31\end{array}\right.$ | $(.23)$ | $(.20)$ |
| Sand casting | $\begin{gathered} .42 \\ (.16) \end{gathered}$ | (.10 $(18)$ | 1.30 (2.16) | 1.09 ( 68$)$ | ( 31 ( 27 ) | $\begin{aligned} & \left({ }^{(2)}\right) \\ & (.23) \end{aligned}$ | $\begin{gathered} .01 \\ (.19) \end{gathered}$ |
| Permanent-mold casting | . 07 | -. 20 | 1.03 | 1.25 | -. 19 | -. 07 | -. 64 |
|  | ( .20) | ( .25) | (1.45) | ( .79) | ( .30) | ( .28) | ( .34) |
| Statistical information: |  |  |  |  |  |  |  |
| Adjusted coefficient of determination $\left(\mathrm{R}^{2}\right)$ | . 44 | . 53 | . 54 | . 45 | . 57 | . 18 | . 55 |
| Standard error of the estimate | \$ . 69 | \$ . 58 | \$ . 69 | \$ . 71 | \$ . 60 | \$ . 69 | \$ . 54 |
| Mean ( Y ) | \$4.45 | \$4.08 | \$4.61 | \$4.76 | \$4.28 | \$4.64 | \$3.71 |
| Number of observations ( N ) | 367 | 255 | 122 | 155 | 153 | 201 | 160 |
| Number of establishments (S) | 367 | 205 | 116 | 151 | 121 | 201 | 153 |

${ }^{1}$ Not applicable.
${ }^{2}$ Less than $\$ 0.005$.
NOTE: Numbers in parentheses are standard errors. Since the regression coefficients are based on a sample, they may differ from a figure obtained from a complete census of the industry. The chances are about 2 out of 3 that an estimate from the sample would differ from a total census-derived value by less than the
standard error, and about 19 out of 20 that the difference would be less than twice the standard error. $Y$ is the mean of the earnings (dependent) variable waighted by production workers. N is the number of observations used in each regression equation: time and incentive workers and subclassifications of jobs in a firm as separate observations. S represents the number of establishments in the sample or with employees in the occupations shown.

Table A-2. Earnings differentials associated with selected characteristics, nonferrous foundries, May 1975

| Characteristic | Selected occupations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All production workers | Chippers and grinders | Diecasting machine operators (operate only) | Molders, machine | Inspectors (Class C ) | Maintenance workers, general utility | Laborers, general foundry |
| Great Lakes to Middle West region: Gross differential Net differential |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | \$0.79 | \$0.77 | \$1.05 | \$0.63 | \$1.02 | \$0.27 | \$0.27 |
|  | . 57 | . 50 | . 52 | . 36 | . 88 | . 13 | . 68 |
|  | ( .17) | ( .15) | ( .44) | ( .24) | ( .43) | ( .19) | ( .30) |
| Establishments with more than 250 workers to those with 8 to 99 workers: |  |  |  |  |  |  |  |
| Gross differential | 1.21 | 1.08 | 1.43 | . 64 | 1.14 | . 71 | 1.44 |
| Net differential | 1.14 |  |  |  |  |  | $1.26$ |
|  | ( .10) | $(.14)$ | (.18) | ( .27) | $(.14)$ | $(.14)$ | (. 18) |
| Union to nonunion establishments: Gross differential . . . Net differential $\square$ | . 71 | . 31 | . 98 | -. 01 | . 64 | . 28 | . 57 |
|  | . 39 | . 27 | . 78 | . 02 | . 29 | . 17 | . 48 |
|  | ( . 08 ) | ( .08) | ( .15) | ( .12) | ( .14) | ( .11) | ( .09) |

NOTE: Standard errors of net differentials are shown in parentheses.

# Appendix B. Scope and Method of Survey 

## Scope of survey

The survey included establishments primarily engaged in manufacturing castings and die castings of aluminum, brass, bronze, and other nonferrous metals (SIC 336 as defined in the 1967 edition of the Standard Industrial Classification Manual, prepared by the U.S. Office of Management and Budget). Foundry departments of establishments producing castings for their own use were not included. Separate auxiliary units such as central offices were excluded.

Establishments studied were selected from those employing eight workers or more at the time of reference of the data used in compiling the universe lists. Table $\mathrm{B}-1$ shows the number of the establishments and workers estimated to be within the scope of the survey, as well as the number actually studied by the Bureau.

## Products

Classification of establishments by product was based on the principal type of casting manufactured. For example, if 40 percent of the total value of an establishment's production was die castings, 30 percent was sand castings, and 30
percent was permanent-mold castings, all workers in that establishment were considered as producing die castings.

## Method of study

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

## Establishment definition

An establishment is defined for this study as a single physical location where manufacturing operations are performed. An establishment is not necessarily identical with a company, which may consist of one establishment or more.

Table B-1. Estimated number of establishments and employees within scope of survey and number studied, nonferrous foundries, May 1975

| Region' ${ }^{\text {a }}$ and area ${ }^{2}$ | Number of establishments ${ }^{3}$ |  | Workers in establishments |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Withinscope ofstudy | Actually studied | Within scope of study |  | Actually studied |
|  |  |  | Total ${ }^{\text {a }}$ | Production workers |  |
| United Statess | 1,286 | 367 | 67.976 | 54,441 | 38.845 |
| New England | 88 | 24 | 2.926 | 2,246 | 1.700 |
| Middle Attantic | 242 | 77 | 13.045 | 10,267 | 8.661 |
| New York, N.Y. | 46 | 12 | 1,664 | 1,308 | 632 |
| Philadelphia ...... | 30 | 11 | 2,049 | 1,585 | 1,682 |
| Newark, N.J. | 22 | 9 | 1.722 | 1,297 | 1,200 |
| Southeast ................................................................................... | 70 | 24 | 3,789 | 3,121 | 2.870 |
| Great Lakes .................................................................................................................................. | 503 | 120 | 33,001 | 26,545 | 17,391 |
| Chicago, III | 98 | 26 | 4,043 | 3,165 | 2,277 |
| Cleveland, Ohio | 41 | 14 | 2,765 | 2.161 | 1.841 |
| Detroit, Mich. ....................................................................... | 42 | 11 | 1,858 | 1,440 | 1.005 |
| Milwaukee, Wis. ................................................................... | 27 | 14 | 2,337 | 1,712 | 2,002 |
| Middle West ............................................................................ | 71 | 25 | 3,645 | 2.966 | 2.327 |
| Pacific .................................................................................... | 202 | 61 | 6,867 | 5,503 | 3,296 |
| Los Angeles-Long Beach, Calif. | 122 | 36 | 4,552 | 3,768 | 2,028 |

[^12]
## Employment

Estimates of the number of workers within the scope of the study are intended as a general guide to the size and composition of the industry's labor force, rather than as precise measures of employment.

## Production workers and office workers

The terms "production workers" and "production and related workers," used interchangeably in this bulletin, include working supervisors and all nonsupervisory workers engaged in nonoffice activities. Administrative, executive, professional, and technical personnel, and force-account construction employees, who are used as a separate work force on the firm's own properties, are excluded.
"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 account of interestablishment and interarea variations in duties within the same job. (See appendix $C$ for these descriptions.) The criteria for selection of the occupations were: The number of workers in the occupation; the usefulness of the data in collective bargaining; and appropriate representation of the entire job scale in the industry. Working supervisors, apprentices, learners, beginners, trainees, and handicapped, parttime, temporary, and probationary workers were not reported in the data for selected occupations but were included in the data for all production workers.

## 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 workers' regular pay. Nonproduction bonus payments, such as Christmas or yearend bonuses, were excluded.

Average (mean) hourly rates or earnings for each occupation or category of workers, such as production workers, were calculated by weighting each rate (or hourly earnings) 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 straight-time salary by normal rather than actual hours.

The middle range is defined by two rates of pay such that one-fourth of the employees earned less than the lower of these rates and one-fourth earned more than the higher

## Size of community

Tabulations by size of community pertain to metropolitan and nonmetropolitan areas. The term "metropolitan areas," as used in this bulletin, refers to the Standard Metropolitan Statistical Areas as defined by the U.S. Office of Management and Budget through February 1974.

Except in New England, a Standard Metropolitan Statistical Area is defined as a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more. Counties contiguous to the one containing such a city are included in a Standard Metropolitan Statistical Area if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, where the city and town are administratively more important than the county, they are the units used in defining Standard Metropolitan Statistical Areas.

## Labor-management agreements

Separate wage data are presented, where possible, for establishments that had (1) a majority of the production workers covered by labor-management contracts, and (2) none or a minority of the production workers covered by labor-management contracts.

## 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 structure 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 worker. 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.) An experienced worker 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, maximum, or both of these 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 these. 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 for production in excess of 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 benefits

Supplementary benefits in an establishment were considered applicable to all production (office) workers if they applied to half of such workers or more in the establishment. 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 and exclude 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, 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 severance plans for which the employer pays all or a part of the cost, excluding programs required by law such as workmen's compensation and social security. Among 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, ${ }^{1}$ plans are included only if the employer (1) contributes more than is legally required, or (2) provides the employees with benefits which exceed the 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 for (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. Such 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 or catastrophe 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.

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 pay (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 pensions and retirement severance plans; however, establishments having optional plans providing employees a choice of either retirement severance payments or pensions were considered as having only retirement pension benefits.

Paid funeral and jury-duty leave. Data for paid funeral and jury-duty leave relate to formal plans which provide at least partial payment for time lost as a result of attending funerals of specified family members or serving as a juror.

Technological severance pay. Data relate to formal plans providing for payments to employees permanently separated from the company because of a technological change or plant closing.

Supplemental unemployment benefits. Data refer to formal plans which supplement benefits paid under State unemployment systems.

Cost-of-living pay adjustments. Provisions for cost-of-living pay adjustments relate to formal plans whereby wage rates are adjusted periodically, in keeping with changes in the Consumer Price Index or on some other basis.

[^13]
## Appendix C. 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 are instructed to exclude working supervisors, apprentices, learners, beginners, trainees, and handicapped, part-time, temporary, and probationary workers.

## Chipper and grinder

(Air hammer man; bench grinder; chipper; disc grinder; face grinder operator; portable-grinder operator; powerchisel operator; shaft grinder; snagger; stand grinder; swing-frame grinder)
Operates one or more types of chipping or grinding equipment in removing undesirable projections or surplus metal (fins, burrs, gates, risers, weld seams) from sand- or diecastings, forgings, or welded units. The more common types of equipment employed for such operations include pneumatic chisels, portable grinding tools, stand grinders, and swing-frame grinders. A variety of hand tools including hammers, cold chisels, hand files and saws may also be utilized by the operator in his work.

For wage study purposes, workers are to be classified according to whether they specialize in either chipping or grinding or perform both operations as follows:

## Chipper <br> Grinder <br> Chipper and grinder

## Core assembler and finisher

## (Core Paster)

Pastes or sticks together sections of baked sand cores to form completed cores which are used in molds to produce holes or hollows in castings. Fills in any cracks or seams on core with a paste of silica powder and water. Brushes a graphite facing on the surface of the core.

## Coremaker, hand

Shapes by hand (on bench or floor) varying types of sand cores placed in molds to form hollows and holes in
metal castings. Work involves most of the following: Selec̀ting appropriate core boxes and work sequence; cleaning core boxes with compressed air or hand bellows, and dusting parting sand over inside of core box to facilitate removal of finished core; packing and ramming core sand solidly into box, using shovels, hands, and tamping tools; selecting and setting vent wires and reinforcing wires into cores; determining appropriate sand blends and moisture content of sand required for a particular core; removing core box from core and repairing damage to impressions; baking cores to harden them; assembling cores of more than one section.

## Coremaker, machine

Shapes sand cores, used in molds to produce hollows and holes in castings, using a turn-over-draw machine to compact the sand and to facilitate the removal of the finished core from the core boxes. Work involves most of the following: Selecting the appropriate core box and setting it up on machine table; filling core box with sand of appropriate blend and moisture content; operating machine to compress sand in the core box; stripping box from core; and smoothing core and repairing damages to impressions.

## Die-casting-machine operator

Operates a die-casting machine which makes zinc, aluminum or magnesium alloyed castings. Work involves most of the following: Charging furnace with slabs of metal and adding specified quantities of alloy; transferring molten alloy to heated reservoir of machine with a crane or hand ladle; removing metal fragments from the die surfaces and brushing cavities with a compound to prevent the casting from adhering to the die; regulating valves to heat the furnace, to circulate water through the die, and to force hot metal into the die; moving levers to open and close the two halves
of the water-cooled die; hooking completed casting from the die with a steel wire and cooling it in water. Operators of die-casting machines designed to perform one or more of the above operations automatically are to be included.

For wage study purposes, die-casting-machine operators are classified as follows:

> Die-casting-machine operator (set-up and operate) Die-casting-machine operator (operate only)

## Die-casting-machine, set-up worker

Sets up die-casting machines that make nonferrous castings. Work involves most of the following: Lifting specified die sections into machine; securing die sections in position, and adjusting stroke of ram; connecting water hoses to cooling system; preheating die sections; turning valves and setting dials to regulate flow of water circulating through die, timing cycle, and operating speed of machine. May perform minor maintenance on machine and dismantle dies for repair. Maintenance mechanics who may do some set-up of die-casting machines are excluded.

## 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.

## Filer, light (die castings)

Removes excess metal and surface defects from small metal die castings, performing simple repetitive finishing operations. Work involves: Receiving instructions for finishing procedures; fastening castings in holding devices; and removing burrs, ejector pin marks, and flash, using files and scrapers. May also break flash and gates from castings, using mallets, and remove flash from holes with hand punches.

## Filer, heavy (die castings)

Works to close tolerances in removing excess metal and surface defects from a variety of large and intricately shaped die castings, using files and scrapers. May also knock off gates and flash or pound castings into alinement, using mallets, and remove excess metal from holes, using hand punches.

## Furnace tender

## (Furnace operator)

Fires and charges a furnace in which various metals or alloys are melted to be used in making castings. Regulates the temperature of the furnace; charges with pig or scrap metal; removes molten metal from furnace when metal is at proper pouring temperature. May transport and pour molten metal into molds.

## Inspector

Inspects parts, products and/or processes. Performs such operations as examining parts or products for flaws and defects, checking their dimensions and appearances to determine whether they meet the required standards and specifications.

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 or products, rejecting units having obvious deformities or flaws.

## Laborer, general, foundry

## (General laborer)

Performs a variety of unskilled tasks involved in production operations, such as handling sand, castings, scrap, coal, and oil; cleaning tanks, floors, and around machines; and removing debris. May handle cores and straighten rods, wires, pipes, etc. Exclude workers performing the duties of Material Handling Laborers, as well as those employed as helpers, who are learning skilled jobs such as molders and coremakers.

## Laborer, material handling

(Loader and unloader; handler and stacker; shelver; trucker; stockman or stock helper; warehousemen 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. Longshoremen, who load and unload ships, are excluded.

Excludes Foundry Laborer (General Helper) assisting in the production operations, such as "shifter" in floor-mold department and "core-transfer-man" in core making department.

## Maintenance worker, general utility

Keeps the machines, mechanical equipment and/or structure of an establishment (usually a small plant where specialization in maintenance work is impractical) in repair. Duties involve the performance of operations and the use of tools and equipment of several trades, rather than specialization in one trade or one type of maintenance work only. Work involves a combination of the following: Planning and laying out of work relating to repair of buildings, machines, mechanical and/or electrical equipment; repairing electrical and/or mechanical equipment; installing, alining and balancing new equipment; repairing building, floors, stairs, as well as making and repairing bins, cribs, and partitions.

## 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 hand-tools
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 machines; and making all necessary adjustments for operation. 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.

## Millwright

Installs new machines or heavy equipment and dismantles and installs machines or heavy equipment when changes in the plant layout are required. Work involves most of the following: Planning and laying out of the work; interpreting blueprints or other specifications; using a variety of handtools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity; alining and balancing of equipment; selecting standard tools, equipment, and parts to be used; installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the millwright's work normally requires a rounded training and experience in the trade acquired through a formal apprenticeship or equivalent training and experience.

## Molder, floor

Shapes large molds or mold sections by hand on the foundry floor or in a pit, by ramming or packing sand around patterns placed in flasks. Work involves most of the following: Selecting and assembling appropriate flasks and patterns and positioning patterns in flasks for a variety of molds; determination of appropriate sand blends, and moisture content of sand required for different molds; packing and ramming sand or loam around patterns; drawing patterns and smoothing molds; selecting and setting in position appropriate cores; determination of appropriate gating, venting, reinforcing and facing required for particular mold; assembling mold sections to form complete molds, using such molder's handtools as riddles, rammers, trowels, slicks, lifters, bellows and mallets in compacting and smoothing of molds; directing the pouring of the molten metal into molds; operating a crane in lifting and moving of molds or mold sections.

## Molder, hand, bench

Shapes small and medium-sized molds (or component sections of a mold that are assembled into complete units)
by hand on a bench, by ramming and packing sand around patterns placed in flasks. Work involves most of the following: Selecting and assembling appropriate flasks and patterns for varying molds; determination of appropriate sand blends and moisture content of sand required for different types of molds; packing and ramming green sand, dry sand or loam around patterns; drawing patterns and smoothing molds; selecting and setting cores in position; determination of the types of gating necessary for the molds; finishing molds by performing such operations as facing, venting, and reinforcing; assembling mold sections to form complete molds; selecting and using such molder's handtools as riddles, trowels, slicks, lifters, bellows and mallets in packing and smoothing of molds or mold sections; directing the pouring of the molten metals.

## Molder, machine

Shapes molds or mold sections on any of several types of molding machines, such as rollover, jarring, and squeeze machines. Work involves most of the following: Selecting and assembling appropriate flasks and patterns and positioning patterns in flasks; filling flasks with sand and ramming of sand around pattern with ramming tool or by mechanical means; determination of appropriate sand blends and moisture content of sand required for particular molds; preparing molds for drawing of patterns, and repairing damage to mold impressions in sand; selecting and setting in position appropriate cores; determination of appropriate venting, gating, reinforcing and facing required; assembling upper and lower sections of molds, and guiding or assisting in the pouring of the molten metal into the mold.

## Patternmaker, wood

Builds wooden patterns, core boxes or match plates. Work involves most of the following: Planning and laying out of work from blueprints, drawings, or models; making standard shop computations relating to dimensions of work; using a variety of patternmaker's handtools such as saws, planes, chisels, gauges, and mallets; operating various woodworking machines such as band saws, circular saws, borers, routers, lathes, planers, drill presses, sanders, and shapers; checking work with calipers, rules, protractors, squares, straight-edges, and other measuring instruments; assembling patterns and sections of patterns by gluing, nailing, screwing, and doweling; working to required tolerances and allowances; selecting the materials for the construction of a particular pattern. May also make sweeps (templates) for making molds by the sweep-molding method. In general, the work of the patternmaker requires a rounded training and experience usually acquired through a format apprenticeship or equivalent training and experience.

## Packer, shipping

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers and may involve one or more of the following: Knowledge of various items of stock in order to verify content; selection of appropriate type and size of container; inserting enclosures in container; using excelsior or other material to prevent breakage or damage; closing and sealing container; applying labels or entering identifying data on container. Packers who also make wooden boxes or crates are excluded.

## Permanent-mold-machine operator

Makes castings using a permanent mold casting machine in which the casting metal is subjected to the force of gravity or centrifugal force. Die-casting-machine operators are to be excluded from this classification. (See job description for die-casting machine operator.)

For wage survey purposes, workers in this occupation are to be classified by method of casting, as follows:

> Permanent-mold-machine operator, gravity casting
> Permanent-mold-machine operator, centrifugal casting Permanent-mold-machine operator, combination of methods

## Polisher and buffer, metal ${ }^{1}$

Polishes various metal objects in order to produce a smooth surface or a high luster by holding against rapidly rotating wheels made of such materials as muslin, paper, leather, sheepskin, felt and/or block-wheels made of wood and/or straps and belts made of canvas, leather, rubber, etc., and/or flexible shafts and disc wheels. Work involves any combination of the following: The attainment of a smooth surface and the removal of flaws and machine marks on a variety of objects involving the maintenance of contours, radii, and uniformity of shape; polishing to close tolerances; selection of proper wheels, shafts, belts, abrasives and polishing compounds; setting up of equipment and maintaining of wheels. In general, polishers and buffers included in this classification are required to perform operations which involve a rounded knowledge of the trade such as is usually acquired through a formal apprenticeship or equivalent training and experience.

## Polishing-and-buffing-machine operator ${ }^{1}$

Polishes metal objects to produce a smooth surface and/or high luster by holding against rapidly rotating

1 In distinguishing between these two jobs, it should be noted that polishers and buffers, metal, are required to perform operations which involve a high degree of skill and working to close tolerances, whereas polishing-and-buffing-machine operators perform specialized operations on a repetitive basis.
wheels, belts or straps on a machine set up to achieve a specialized phase of polishing on a repetitive basis. Work involves one of the following: Setting up and operating machine where wheels and abrasives and polishing compounds are prescribed; polishing involving the maintenance of contours, radii and uniformity of shape on machines set up by others; selection of polishing compounds and abrasives on machines set up by others.

## Pourer, metal

Pours molten metal into molds. Work involves any combination of the following: Controlling the pouring of molten metal at a rate compatible with the size and structure of the casting; skimming slag from surface of molten metal; transporting metal from furnace to molds; pouring metal into molds, and dumping slag from ladle after pouring operation.

## Sand-or-shot-blast operator

(Tumbler operator, tumblast barrel operator, wheelabrator operator)

Operates a tumbling type machine that smooths, polishes, and cleans dirt, scale, and other materials from castings with a blast of abrasive, such as steel shot, sand, and steel grit. Work involves one or more of the following: Dumping or shoveling castings into tumbler; starting tumbler exposing surfaces of castings to blast of abrasive and tumbling action; stacking castings on racks; placing racks in chamber and starting blast of abrasive; placing castings on moving conveyor that carries castings under a blast of abrasive. May also pour abrasive material into feed hopper when indicated by gauge on equipment to replenish supply of abrasive in tumbler.

## Sand mixer, hand and machine

Mixes sand, binders, and water by hand or machine to prepare sand for molders or coremakers. Work involves any combination of the following: Transporting sand and binders from storage to mixing area; removing scraps of metal from used molding sand; mixing ingredients according to instructions by hand or machine; and testing samples of prepared sand, adding ingredients as necessary to obtain proper mixture.

## Shakeout worker

Removes castings from the molds in which they were cast. Work involves one or more of the following: Releasing clamps holding sections of flask together, separating the sections and breaking the sand mold from the castings, using a steel bar or sledge hammer, or removing castings from the sand with the aid of metal hooks; operating a vibrating
shake-out screen in removing sand and castings from flasks; using a pneumatic shaker which, when attached to the flask, jars or jolts it until the mold has crumbled; using a vibratory air-hammer to remove the sand and castings; shaking loosely adhering sand from castings; shoveling sand shaken from molds into a pile.

## Shell-mold machine operator

Operates machine which makes shell molds (or cores) by baking a resin and sand mixture on a heated pattern. Work involves some combination of the following: Starting and stopping machine; installing pattern in machine; preparing or supervising the preparation of the mixture of sand and resin; determining proper curing temperature and timing; removing cope and drag and pasting together to form mold.

## Shipping and receiving clerk

Prepares merchandise for shipment, or receives and is responsible for incoming shipments of merchandise or other materials. Shipping work involves: A knowledge of shipping procedures, practices, routes, available means of transportation and rates; and preparing records of the goods shipped, making up bills of lading, posting weight and shipping charges, and keeping a file of shipping records. May direct or assist in preparing the merchandise for shipment. Receiving work involves: Verifying or directing others in verifying the correctness of shipments against bills of lading, invoices, or other records; checking for shortages and rejecting damaged goods; routing merchandise or materials to proper departments; maintaining necessary records and files.

For wage study purposes, workers are classified as follows:

## Shipping clerk <br> Receiving clerk <br> Shipping and receiving clerk

## Sprue-cutting press operator

(Trim-press operator, "gater")
Tends one or more power presses that trim surplus metal (gates, flash, sprues) from castings between preset dies. Work involves: Placing casting against fixture or stops on machine bed or positioning it under die and starting press; removing trimmed parts from press and placing in trays or boxes. May inspect parts visually or with measuring devices.

## Tool and die maker

(Die maker; jig maker; tool maker; fixture maker; gauge maker)

Constructs and repairs machine-shop tools, gauges, jigs, fixtures or dies for forgings, punching and other metalforming 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 of 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.

## Trucker, power

Operates a manually controlled gasoline- or electricpowered truck or tractor to transport goods and materials of all kinds about a warehouse, manufacturing plant, or other establishment.

For wage study purposes, workers are classified by type of truck as follows:

Trucker, power (forklift)
Trucker, power (other than forklift)

## 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

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Fertilizer Manufacturing, 1971. BLS Bulletin 1763
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Iron and Steel Foundries, 1967. BLS Bulletin $1626^{1}$
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Men's and Boys' Suits and Coats, 1973. BLS Bulletin 1843
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Motor Vehicles and Parts, 1973-74. Bulletin 1912
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[^0]:    ${ }^{1}$ See appendix B for scope and method of survey, and also for definition of terms as used in this study.
    ${ }^{2}$ Data for establishments primarily using other casting methods are included in the all-nonferrous-foundry estimate.

[^1]:    ${ }^{3}$ The estimate of the number of production workers within scope of the study is intended only as a general guide to the size and composition of the labor force included in the survey. It differs from the number published in the monthly series ( 59,600 in May 1975) by the exclusion of establishments employing fewer than eight workers, and by the fact that the advance planning necessary to make the survey requires the use of lists of establishments assembled considerably in advance of data collection. Thus, establishments new to the industry are omitted, as are establishments originally classified as nonferrous foundries, but found to be in other industries at the time of the survey. Also omitted are establishments casting nonferrous metals products, but classified incorrectly in other industries at the time the lists were compiled.
    ${ }^{4}$ See Industry Wage Survey: Nonferrous Foundries, June 1970, BLS Bulletin 1726 (1972). Since the May 1975 study, employment has risen steadily in the industry, up 15 percent, according to production worker counts in the Bureau's Employment and Earnings series as of September 1976.
    ${ }^{5}$ Standard Metropolitan Statistical Areas, as defined by the U.S. Office of Management and Budget through February 1974.

[^2]:    ${ }^{1}$ May include workers in establishments using primary casting methods other than those shown separately.

    NOTE: Dashes indicate data that do not meat publication criteria.

[^3]:    ${ }^{6}$ The straight-time average hourly earnings in this bulletin differ in concept from the gross average hourly earnings published in the Bureau's monthly hours and earnings series ( $\$ 4.81$ in May 1975). Unlike the latter, the estimates presented here exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Average earnings were calculated by summing individual hourly earnings and dividing by the number of individuals; in the monthly series, the sum of the hours reported by establishments in the industry was divided into the reported payroll totals.
    ${ }^{7}$ Op. cit., BLS Bulletin 1726.

[^4]:    ${ }^{1}$ Includes data for regions in addition to those shown separataly.

[^5]:    Excludes premium pay for overtime and for work on weekends, holidays, and late shifts
    Includes data for regions in addition to those shown separately.
    Less than 0.05 percent.
    NOTE: Because of rounding, sums of individual items may not equal 100 .

[^6]:    ${ }^{1}{ }^{1}$ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    ncludes data for regions in addition to those shown separately.
    ncludes data for workers in classification in addition to those shown seperately.

[^7]:    Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    Includes data for regions in addition to those shown separately.
    ${ }^{\text {I }}$
    Includes data for workers in classification in addition to those shown separately.
    NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

[^8]:    Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    Includes data for regions in addition to those shown separately.
    NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

[^9]:    'Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
    ${ }^{3}$ Includes data for workers in classificication in addition to those sion
    NOTE: Dashes indicate no date reported or data that do not meet publication criteria.

[^10]:    See footnotes at end of table

[^11]:    I Includes those plans for which the employer pays at least part of the cost and excludes legally required plans such as workers' compensation and social security; however, plans required by State temporary disability laws are included if the employer contributes more than is legally required or the employees receive benefits in excess of legal
    requirements. "Noncontributory plans" include only those plans financed entirely by the employer
    ${ }^{2}$ Includes data for regions in addition to those shown separately.
    Unduplicated total of workers receiving sickness and accident insurance and sick leave shown separately
    4 Unduplicated total of workers covered by pension plans and severance pay shown separately.
    s Less than 0.5 percent.
    NOTE: Because of rounding. sums of individual items may not equal totals

[^12]:    1 The regions used in this study include New England-Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Middle Atlantic-New Jersey, New York, and Pennsylvania; Southeast-Alablama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and
    Tennessee; Great Lakes-lllinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Middle West-Lowa, Kansas, Missouri, Nebraska, North Dakota and South Dakota; and Pacific-California, Nevada, Oregon, and Washington.

    2 See individual area tables $12-19$ for definitions of selected areas.
    ${ }^{3}$ Includes only those establishments with 8 workers or more at the time of reference of the universe data.
    4 Includes executive. professional, and other workers in addition to the production and office worker categories shown separately.
    s Includes data for regions in addition to those shown separately. Alasha and Hawaii were not included in the study.

[^13]:    ${ }^{1}$ The temporary disability insurance laws in California and Rhode Island do not require employer contributions.

