Industry Wage Survey: Synthetic Fibers August 1976

U.S. Department of Labor
Bureau of Labor Statistics
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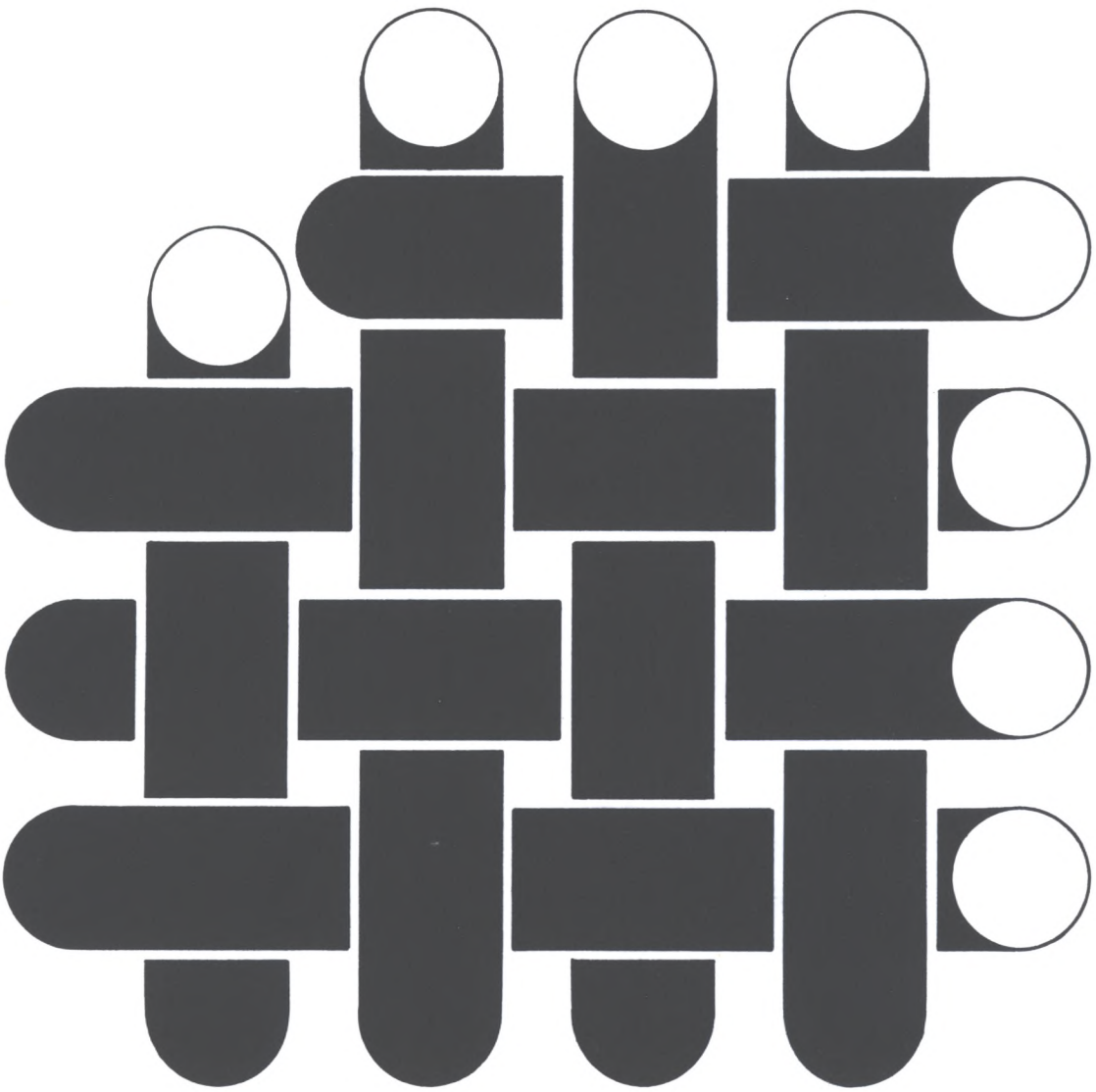

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U.S. Department of Labor
Ray Marshall, Secretary
Bureau of Labor Statistics
Julius Shiskin, Commissioner
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Preface

This bulletin summarizes the results of a Bureau of Labor Statistics survey of wages and related benefits in the synthetic fibers industries in August 1976. A similar survey was conducted in December 1970 (BLS Bulletin 1740).

This study was conducted in the Bureau's Office of Wages and Industrial Relations. Mary Kay Rieg of the Division of Occupational Wage Structures prepared the analysis; 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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Summary

Straight-time earnings of production and related workers in plants manufacturing synthetic fibers averaged $5.05 an hour in August 1976. One-tenth of these workers earned more than $6.40, while a similar proportion earned less than $3.90. Men, accounting for seven-tenths of the labor force in these plants, averaged $5.21 an hour. Women averaged $4.70, and were largely employed in the finishing departments and at inspection and testing jobs.

Four-fifths of the 62,793 production workers covered by the survey[1] were in plants primarily producing noncellulosic fibers such as nylon. They averaged $5.18 an hour. The remaining workers were in plants manufacturing cellulosic fibers (e.g., rayon) and averaged $4.45.

Among the occupations studied separately, highest averages in both industries were recorded for skilled maintenance jobs. The nationwide averages for these jobs ranged between $5.40 and $6.73 an hour in noncellulosic plants, and between $3.96 and $5.08 an hour in cellulosic plants. Highest average hourly earnings among processing occupations were recorded for dry process spinners ($4.59 in cellulosic and $5.40 in noncellulosic plants) and for chemical operators ($4.60 in cellulosic and $5.28 in noncellulosic plants). In cellulosic plants, guards averaged least ($3.96), and in noncellulosic plants, material handling laborers were the lowest paid ($4.04).

All production workers covered by the study were in establishments providing paid holidays (usually 8 to 10 annually); paid vacations; and life, hospitalization, and surgical insurance benefits. Retirement pension plans, in addition to Federal social security, were available to virtually all production workers.

Industry characteristics

The survey covered establishments engaged in the production of the two principal types of synthetic (manmade) fibers suitable for further manufacturing on textile processing equipment: Cellulosic fibers, such as rayon and acetate, and other synthetic organic fibers (noncellulosic), such as nylons, acrylics, and polyesters. The 60 establishments within the scope of the survey generally limited their production to one of these two major types of fibers.

Employment and production. Establishments within the scope of the August 1976 synthetic fiber survey employed an estimated 62,800 production workers—four-fifths in the noncellulosic fibers manufacturing sector. Since the December 1970 fibers survey,[2] the industry's production work force rose sharply, by about one-fifth, to a peak level of about 90,000 during the second half of 1974, only to fall back to or slightly below its 1970 level since then.[3] Continuing a long-term trend, the production work force in cellulosic plants shrank by nearly half since 1970—to slightly under 11,000 in August 1976—while the noncellulosic sector increased by roughly one-tenth.

While U.S. output of noncellulosic fibers advanced to a record 6,618 million pounds in 1976 (from 3,586 million in 1970), the cellulosic production level of 848 million pounds was well below the 1970 figure of 1,373 million. Cellulosics, such as rayon and acetate—the older type synthetics—are being replaced by polyester, nylon, and acrylics, as indicated by an 8-percent decline in cellulosics production worldwide in contrast to an 80-percent rise for noncellulosics between 1970 and 1976.[4]

Productivity gains in the synthetic fibers industry were among the highest recorded in the U.S. economy during the decade of the 1970's. Increasing at an annual average rate since 1970 of 9.2 percent, output per production worker hour made its greatest 1-year advance between 1970 and 1971—15.7 percent. During the 6-year span, the productivity gain resulted from a 5.6-percent annual rise in output coupled with a 2.7-percent average yearly decline in production hours worked.[5]

Products and processes. The three basic production processes for manmade fibers are: (1) The chemical prepara-

[1] See appendix A for scope and method of survey. Wage data contained in this bulletin exclude premium pay for overtime and for work on weekends, holidays, and late or other shifts. Due to unavailability of data from a major employer, averages and distributions presented in this bulletin represent only about nine-tenths of total estimated employment in the synthetic fiber industry. Consequently, they are not strictly comparable with averages and distributions developed from previous Bureau studies of the industry.

[2] See *Industry Wage Survey: Synthetic Fibers, December 1970*, Bulletin 1740 (Bureau of Labor Statistics, 1972).

[3] Based on the Bureau's *Employment and Earnings* series.

[4] From *Textile Organon*, February 1977, Textile Economics Bureau, Inc.

[5] *Productivity Indexes for Selected Industries, 1976 Edition* Bulletin 1938 (Bureau of Labor Statistics, 1977) and News Release, dated July 27, 1977, "Widespread Gains in Industry Productivity Reported by BLS for 1976."

tion of the spinning solution; (2) the transformation of the spinning solution into solidified filaments; and (3) the finishing or textile operations which prepare the product for sale. Differences in the methods used to perform these operations are quite pronounced and account, in large part, for variations in the occupational patterns found among individual establishments.

Processes in the preparation of the spinning solution vary according to the type of fiber produced. Rayon and acetate originate from cellulose—a fibrous substance usually obtained from materials such as wood pulp. Noncellulosic fibers, on the other hand, are derived from chemical compounds. The preparation of spinning solutions for noncellulosics requires much equipment but relatively few employees. More manual operations are required for cellulosics.

Spinning solutions are converted into solidified filaments by one of two means. Under the wet-process method, the spinning solution is forced through tiny holes of a spinneret into an acid bath which coagulates the fine streams of solutions. The dry-process method uses warm air instead of acid to solidify the filaments. When the wet process is used, the filaments must be washed free of the acid and then dried; the dry process does not require these steps. Rayon (viscose) uses the wet-process method, whereas acetate and most noncellulosic fibers use the dry-process method.

The finishing (textile) operations depend upon the form in which the product is to be sold. Continuous filament yarn is twisted (multifilament) and wound on bobbins for shipment. Tow, on the other hand, is a ropelike strand of filaments which is packaged in bulk and does not require winding. Staple (tow cut to specified lengths) is handled in a manner similar to the processing of tow, except for the added operations of crimping and cutting.

Approximately 60 percent of the production workers in cellulosic manufacturing, and 70 percent of those in noncellulosic manufacturing, were in plants whose principal product was multifilament yarn. In the cellulosic industry, plants employing 14 percent of the workers primarily manufactured staple and 27 percent, chiefly tire cord. In the noncellulosic industry, 7 percent of the workers were in plants mainly manufacturing tow and 20 percent were in those whose principal product was staple.

Location. Nearly all workers in cellulosic and noncellulosic fibers manufacturing were employed in the South.[6] North Carolina, South Carolina, Tennessee, and Virginia were the States with the heaviest employment concentrations.

Size of establishment. Synthetic fiber manufacturing plants generally employ 1,000 workers or more and are typically owned by multiplant companies.[7] Plants of 1,000 to 2,499 workers accounted for seven-tenths of the workers in cellulosic manufacturing; the remaining workers in the sector were employed in smaller establishments. Plants with at least 2,500 workers were common in noncellulosic manufacturing, where they employed nearly one-half of the work force. About two-fifths of the workers in the noncellulosic sector were employed in plants with 1,000 to 2,499 employees, with smaller plants accounting for the remainder.

Unionization. Virtually all of the cellulosic fibers plants studied had collective bargaining agreements covering a majority of their production workers at the time of the survey. Noncellulosic plants employing slightly more than two-fifths of that industry's work force had such agreements. The major unions in the cellulosic fibers industry are the Amalgamated Clothing and Textile Workers Union and the United Textile Workers of America, both AFL-CIO affiliates. In noncellulosics, single-firm independent unions represent a substantial proportion of the workers under collective bargaining agreements.

Method of wage payment. Virtually all workers covered by the survey were time-rated, usually under formal plans with single rates for specified occupations (table 9). Incentive workers accounted for about 2 percent of the workers in both the cellulosic and noncellulosic industries.

Average hourly earnings

Straight-time earnings of production workers in synthetic fibers manufacturing averaged $5.05 an hour in August 1976[8] (table 1). In the noncellulosic fibers industry, where four-fifths of the 62,793[9] workers were employed, earnings averaged $5.18; in the cellulosic fibers industry, the average was $4.45.

The growing predominance of the higher paying noncellulosic fibers industry, noted earlier in this report, has had a substantial impact on the level of earnings for all synthetic fibers manufacturing combined. For example, had the employment relationship between noncellulosic and cellulosic fibers plants remained constant since 1958, the average straight-time earnings of production workers covered by the

[6] For definition of the South as used in this survey, see footnote 3, table A-1.

[7] Companies operating 2 establishments or more.

[8] The straight-time average hourly earnings in this bulletin differ in concept from the gross average hourly earnings published in the Bureau's monthly *Employment and Earnings* series ($5.40 in August 1976). Unlike the latter, the estimates presented here exclude premium pay for overtime and for work on weekends, holidays, and late or other 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 hour totals reported by establishments in the industry was divided into the reported payroll totals.

[9] The estimate of the number of production workers within the 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 (71,700 in August 1976) mainly because of the unavailability of work force estimates for a major synthetic fiber plant not participating in the survey.

1976 survey would have been $4.67 an hour, instead of $5.05.[10]

Men, making up seven-tenths of the work force in cellulosic plants, averaged $4.52 an hour, compared with $4.29 for women. In noncellulosic plants, men accounted for approximately the same percentage of the work force and averaged $5.35–56 cents an hour more than women. Women in both industries were largely employed in finishing departments and at inspection and testing jobs. Differences in average pay levels for men and women may be the result of several factors, including differences in the distribution of the sexes among establishments and jobs having disparate pay levels. Also, differences noted in averages for men and women in the same job may reflect minor differences in duties. Job descriptions used to classify workers in wage surveys are usually more generalized than those used in individual establishments because allowance must be made for minor differences among establishments in specific duties performed.

Approximately 10 percent of the production workers earned less than $3.90 an hour, while a similar percentage earned $6.40 or more (table 2). Workers earning at least $6.40 were nearly all men and, with few exceptions, were employed in noncellulosic fibers plants. The middle 50 percent of the production workers in the earnings array for cellulosic fibers plants fell between $4.07 and $4.78; the corresponding range in noncellulosic fibers plants was $4.60 to $5.84. Contributing to the dispersion of individual earnings were differences in establishment pay levels and the wide range of skill requirements.

Occupational earnings

A number of occupations representing the various skill levels and activities found in the industries were selected for separate study. These occupations accounted for about seven-tenths of the production workers covered by the survey. In cellulosic fibers plants, average hourly earnings in these occupations ranged from $3.96 for guards to $5.09 for instrument repairers (table 5). Other averages above $5 an hour fell between $5.04 and $5.08 for several maintenance jobs, including electricians, mechanics, millwrights, and pipefitters. Chemical operators, numerically the largest group studied separately in cellulosic plants, averaged $4.60 an hour—1 cent more than dry-process spinners, 12 cents more than wet-process spinners, and 61 cents more than yarn winders.

In noncellulosic fibers plants, occupational averages ranged from $4.04 for material handling laborers to $6.73 for instrument repairers (table 7). Others averaging at least $6 an hour were carpenters, electricians, machinists, general mechanics, and pipefitters. Dry-process spinners, numerically the largest group studied, with one-fifth of the work force, averaged $5.40 an hour. Chemical operators and drawtwist operators averaged $5.28 and $4.66, respectively.

Where comparisons were possible, occupational averages were higher in noncellulosic fibers manufacturing than in cellulosics, except for material handling laborers, who averaged 30 cents an hour more in cellulosic plants. The average wage advantage for noncellulosic workers ranged from $1.64 an hour for instrument repairers to 14 cents for creel tenders. Average differentials between the two industries were $1 or more for maintenance trades workers, and most often 40 to 80 cents for those employed in processing and testing departments.

Earnings of individual workers also varied greatly within the same job and industry. In many instances, hourly earnings of the highest paid workers exceeded those of the lowest paid in the same job by $1.50 or more in cellulosics and by $2.50 or more in noncellulosics. Thus, some workers in comparatively low-paid jobs (as measured by the average for all workers) earned more than other workers in jobs for which higher averages were recorded. For example, the following tabulation indicates a considerable overlap of individual rates for tow operators and chemical operators in noncellulosic fibers plants, despite a 41-cent difference in their average hourly earnings:

Hourly earnings	*Chemical operators*	*Tow operators*
Average hourly earnings	$5.28	$4.87
Total number of workers	3,453	2,497
Under $4.00	441	267
$4.00 and under $4.40	286	224
$4.40 and under $4.80	827	787
$4.80 and under $5.20	88	370
$5.20 and under $5.60	393	642
$5.60 and under $6.00	406	207
$6.00 and over	1,012	—

Much of the earnings dispersion within individual jobs reflects differences in establishment pay levels.

Establishment practices and supplementary wage provisions

Data were also obtained for production and office workers on certain establishment practices, including work schedules and selected supplementary wage benefits such as paid holidays, paid vacations, and health, insurance, and retirement plans.

Scheduled weekly hours and shift practices. Over nine-tenths of the survey's production workers were in plants predominantly scheduling day-shift employees 40 hours a week (table 10). Forty-hour schedules were in effect for all of the office workers.

Shift work is widely used because of the continuous nature of synthetic fibers manufacturing operations. Rotating shifts, whereby individuals periodically worked day,

[10] The $4.67 figure was obtained by weighting the August 1976 average wage level for each industry by the corresponding 1958 employment figures.

evening, and night schedules, accounted for slightly more than three-fifths of the production workers in cellulosic plants and about four-fifths in noncellulosic plants at the time of the survey. Shift differentials for these workers varied considerably by establishment and schedule of work (tables 11-13). Workers assigned to day schedules of rotating shifts were frequently provided a paid lunch period not given to workers on fixed day shifts or in some cases they received a cents-per-hour or percentage differential above fixed day-shift rates. When assigned to evening or night schedules, workers on rotating shifts usually received differential pay and, in many instances, a paid lunch period as well. Less than 3 percent of the workers in each industry were assigned to either oscillating[11] or fixed evening and night schedules. Fixed day-shift schedules accounted for one-third of the workers in cellulosic plants and for about one-fifth in noncellulosic plants.

Paid holidays. All of the workers covered by the survey were in establishments providing paid holidays (table 14). In cellulosic plants, just under one-half of the production workers each received either 8 or 9 days annually; about two-fifths of the office workers in the industry received 8 days, and slightly more than one-half, 9 days. Holiday provisions were somewhat more liberal in noncellulosic plants, where more than one-half of the office workers, and nearly three-fifths of the production workers, received 10 paid holidays a year.

Paid vacations. Paid vacations, after qualifying periods of service, were also provided to all workers (table 15). For production workers in cellulosic plants, vacation payments were often based on a stipulated percentage of the employee's earnings, which were converted to an equivalent time basis for this survey.[12]

[11] Workers assigned to oscillating shifts were of 2 groups: Those alternating between day and evening schedules, and those alternating between evening and night schedules.

[12] For example, a payment of 2 percent of annual earnings was considered the equivalent of 1 week's pay.

Typical provisions for production workers in cellulosic plants were: 1 week of vacation pay after 1 year of service, 2 weeks after 3 years, 3 weeks after 10 years, 4 weeks after 15 years, and 5 weeks after 25 years. Similar provisions applied to office workers, except that, after 1 year of service, 2 weeks were usually provided and after 20 years, 5 weeks. In the noncellulosic industry, the usual provisions for both production and office workers were: 2 weeks of vacation pay after 1 year of service, 3 weeks after 5 years, 4 weeks after 10 years, and 5 weeks after 20 years.

Health, insurance, and retirement plans. Life, sickness and accident, hospitalization, and surgical insurance were provided for all workers (table 16). In addition, accidental death and dismemberment insurance, and basic and major medical insurance were widespread; the incidence of these plans, however, varied substantially between the two industries. Accidental death and dismemberment insurance, for example, applied to all production workers in cellulosic fibers manufacturing, compared with about three-fifths of the production workers in noncellulosics. Employers in both industries typically paid the total cost of most of the benefit plans previously mentioned. Hospitalization, surgical, basic medical, and major medical benefits usually covered employees and their dependents.

Retirement pensions, in addition to Federal social security, were available to all of the production and office workers in both industries. Such plans were nearly always financed entirely by the employers. Plans for retirement severance pay were virtually nonexistent.

Other selected benefits. Provisions for paid leave while attending funerals of family members and while serving as a juror covered nearly all of the workers in the survey (table 17). Technological severance pay plans, providing payments to workers permanently separated from employment because of a technological change or plant closing, were available to two-thirds of the production workers in the cellulosic industry, and to about one-fifth of those in the noncellulosic industry. The proportions of office workers covered by such provisions were seven-tenths in cellulosic plants and two-fifths in noncellulosic plants.

Table 1. Average hourly earnings: By selected characteristics

(Number and average straight-time hourly earnings [1] of production workers in synthetic fibers manufacturing establishments by selected characteristics, United States and South, August 1976)

Item	United States [2]		South	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
ALL PRODUCTION WORKERS	62,793	$5.05	61,184	$5.07
MEN	43,642	5.21	42,474	5.22
WOMEN	19,151	4.70	18,710	4.71
SIZE OF ESTABLISHMENT:				
LESS THAN 1,000 WORKERS	9,999	4.35	8,390	4.32
1,000 TO 2,499 WORKERS	28,577	4.79	28,577	4.79
2,500 WORKERS OR MORE	24,217	5.66	24,217	5.66
CELLULOSIC FIBERS ESTABLISHMENTS	10,830	4.45	10,198	4.42
MEN	7,558	4.52	7,065	4.50
WOMEN	3,272	4.29	3,133	4.25
SIZE OF ESTABLISHMENT:				
LESS THAN 1,000 WORKERS	3,105	4.60	2,473	4.52
1,000 TO 2,499 WORKERS	7,725	4.39	7,725	4.39
NONCELLULOSIC FIBERS ESTABLISHMENTS	51,963	5.18	50,986	5.19
MEN	36,084	5.35	35,409	5.37
WOMEN	15,879	4.79	15,577	4.81
SIZE OF ESTABLISHMENT:				
LESS THAN 1,000 WORKERS	6,894	4.23	5,917	4.23
1,000 TO 2,499 WORKERS	20,852	4.93	20,852	4.93
2,500 WORKERS OR MORE	24,217	5.66	24,217	5.66

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Includes data for regions in addition to the South.

Table 2. Earnings distribution: All establishments

(Percent distribution of production workers in synthetic fibers manufacturing establishments by straight-time hourly earnings,[1] United States and South, August 1976)

Hourly earnings	United States[2]			South		
	All workers	Men	Women	All workers	Men	Women
NUMBER OF WORKERS	62,793	43,642	19,151	61,184	42,474	18,710
AVERAGE HOURLY EARNINGS	$5.05	$5.21	$4.70	$5.07	$5.22	$4.71
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
UNDER $3.30	1.7	0.7	4.0	1.7	0.7	4.1
$3.30 AND UNDER $3.40	.4	.4	.4	.4	.4	.4
$3.40 AND UNDER $3.50	.5	.2	1.1	.5	.2	1.1
$3.50 AND UNDER $3.60	1.6	.4	4.3	1.4	.4	3.6
$3.60 AND UNDER $3.70	.6	.6	.6	.6	.6	.6
$3.70 AND UNDER $3.80	2.7	3.3	1.4	2.7	3.3	1.4
$3.80 AND UNDER $3.90	2.3	2.4	2.3	2.4	2.4	2.3
$3.90 AND UNDER $4.00	4.4	5.4	2.1	4.2	5.4	1.7
$4.00 AND UNDER $4.20	4.1	3.7	5.0	4.0	3.6	5.1
$4.20 AND UNDER $4.40	6.3	5.5	7.9	6.3	5.6	8.0
$4.40 AND UNDER $4.60	6.4	5.2	9.0	5.7	4.3	8.9
$4.60 AND UNDER $4.80	11.6	11.1	12.8	11.8	11.2	13.1
$4.80 AND UNDER $5.00	5.6	4.9	7.4	5.7	4.9	7.5
$5.00 AND UNDER $5.20	9.1	7.2	13.4	9.0	7.0	13.6
$5.20 AND UNDER $5.40	12.9	10.2	19.0	13.2	10.4	19.4
$5.40 AND UNDER $5.60	3.2	3.3	3.0	3.2	3.4	3.0
$5.60 AND UNDER $5.80	3.5	4.4	1.5	3.6	4.5	1.6
$5.80 AND UNDER $6.00	11.1	14.2	4.2	11.3	14.5	4.1
$6.00 AND UNDER $6.20	1.0	1.4	.1	1.0	1.5	.1
$6.20 AND UNDER $6.40	.9	1.2	.1	.8	1.2	.1
$6.40 AND UNDER $6.60	2.2	3.1	([3])	2.2	3.2	([3])
$6.60 AND UNDER $6.80	1.1	1.5	.1	1.1	1.6	.1
$6.80 AND UNDER $7.00	2.8	4.0	.1	2.9	4.1	.1
$7.00 AND UNDER $7.20	3.9	5.5	.1	4.0	5.7	.1
$7.20 AND UNDER $7.40	([3])	([3])	-	([3])	([3])	-
$7.40 AND OVER	.1	.1	([3])	([3])	.1	-

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Includes data for regions in addition to the South.

[3] Less than 0.05 percent.

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

Table 3. Earnings distribution: Cellulosic fibers

(Percent distribution of production workers in cellulosic fibers manufacturing establishments by straight-time hourly earnings,[1] United States and South, August 1976)

Hourly earnings	United States[2]			South		
	All workers	Men	Women	All workers	Men	Women
NUMBER OF WORKERS	10,830	7,558	3,272	10,198	7,065	3,133
AVERAGE HOURLY EARNINGS	$4.45	$4.52	$4.29	$4.42	$4.50	$4.25
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
UNDER $3.30	2.8	1.5	5.9	2.9	1.5	6.2
$3.30 AND UNDER $3.40	.7	.8	.4	.8	.9	.4
$3.40 AND UNDER $3.50	.4	.4	.3	.4	.5	.3
$3.50 AND UNDER $3.60	.4	.5	.2	.4	.5	.2
$3.60 AND UNDER $3.70	1.1	1.0	1.5	1.2	1.1	1.5
$3.70 AND UNDER $3.80	4.2	4.9	2.6	4.5	5.3	2.7
$3.80 AND UNDER $3.90	7.6	7.7	7.3	8.0	8.2	7.6
$3.90 AND UNDER $4.00	4.5	4.6	4.2	4.7	4.9	4.4
$4.00 AND UNDER $4.10	4.5	4.0	5.7	4.8	4.2	6.0
$4.10 AND UNDER $4.20	1.4	1.7	.7	1.5	1.8	.7
$4.20 AND UNDER $4.30	6.0	6.0	6.1	6.4	6.4	6.3
$4.30 AND UNDER $4.40	8.7	5.7	15.6	9.1	6.0	16.2
$4.40 AND UNDER $4.50	9.7	4.0	22.9	10.0	3.8	23.9
$4.50 AND UNDER $4.60	7.9	7.3	9.4	6.4	5.5	8.3
$4.60 AND UNDER $4.70	7.0	7.8	5.2	6.9	7.5	5.5
$4.70 AND UNDER $4.80	9.6	11.1	6.2	10.2	11.8	6.5
$4.80 AND UNDER $4.90	3.9	4.9	1.5	3.7	4.6	1.5
$4.90 AND UNDER $5.00	5.6	7.4	1.5	5.8	7.8	1.2
$5.00 AND UNDER $5.10	2.9	3.9	.5	1.9	2.6	.2
$5.10 AND UNDER $5.20	6.5	9.2	.2	6.8	9.7	.2
$5.20 AND UNDER $5.30	2.0	2.8	-	2.1	3.0	-
$5.30 AND UNDER $5.40	.4	.5	.1	.4	.6	.1
$5.40 AND UNDER $5.50	(3)	-	.1	(3)	-	.1
$5.50 AND UNDER $5.60	.4	.1	.8	.1	.2	-
$5.60 AND UNDER $5.70	(3)	(3)	-	(3)	(3)	-
$5.70 AND UNDER $5.80	(3)	.1	-	-	-	-
$5.80 AND UNDER $5.90	.3	-	1.1	-	-	-
$5.90 AND UNDER $6.00	1.0	1.5	-	1.1	1.6	-
$6.00 AND OVER	.3	.4	.1	-	-	-

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Includes data for regions in addition to the South.

[3] Less than 0.05 percent.

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

Table 4. Earnings distribution: Noncellulosic fibers

(Percent distribution of production workers in noncellulosic fibers manufacturing establishments by straight-time hourly earnings,[1] United States and South, August 1976)

Hourly earnings	United States[2]			South		
	All workers	Men	Women	All workers	Men	Women
NUMBER OF WORKERS	51,963	36,084	15,879	50,986	35,409	15,577
AVERAGE HOURLY EARNINGS	$5.18	$5.35	$4.79	$5.19	$5.37	$4.81
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
UNDER $3.30	1.5	0.6	3.6	1.5	0.6	3.6
$3.30 AND UNDER $3.40	.3	.3	.4	.3	.3	.4
$3.40 AND UNDER $3.50	.5	.1	1.3	.5	.1	1.3
$3.50 AND UNDER $3.60	1.9	.4	5.1	1.6	.4	4.3
$3.60 AND UNDER $3.70	.5	.6	.4	.5	.6	.4
$3.70 AND UNDER $3.80	2.4	3.0	1.2	2.4	2.9	1.2
$3.80 AND UNDER $3.90	1.3	1.2	1.3	1.3	1.3	1.3
$3.90 AND UNDER $4.00	4.4	5.6	1.7	4.2	5.5	1.2
$4.00 AND UNDER $4.20	3.7	3.3	4.8	3.6	3.1	4.8
$4.20 AND UNDER $4.40	4.5	4.3	5.1	4.5	4.3	5.0
$4.40 AND UNDER $4.60	4.0	3.9	4.2	3.6	3.3	4.2
$4.60 AND UNDER $4.80	10.6	9.4	13.1	10.7	9.5	13.3
$4.80 AND UNDER $5.00	4.8	3.3	8.3	4.9	3.4	8.4
$5.00 AND UNDER $5.20	9.0	5.9	16.0	9.1	5.9	16.3
$5.20 AND UNDER $5.40	15.1	11.7	22.9	15.3	11.8	23.3
$5.40 AND UNDER $5.60	3.8	3.9	3.5	3.9	4.0	3.6
$5.60 AND UNDER $5.80	4.2	5.3	1.8	4.3	5.4	1.9
$5.80 AND UNDER $6.00	13.1	16.8	4.8	13.4	17.1	4.9
$6.00 AND UNDER $6.20	1.2	1.7	.1	1.2	1.8	.1
$6.20 AND UNDER $6.40	1.0	1.4	.1	1.0	1.4	.1
$6.40 AND UNDER $6.60	2.6	3.7	.1	2.7	3.8	.1
$6.60 AND UNDER $6.80	1.3	1.9	.1	1.4	1.9	.1
$6.80 AND UNDER $7.00	3.4	4.8	.1	3.4	4.9	.1
$7.00 AND UNDER $7.20	4.7	6.7	.1	4.8	6.8	.1
$7.20 AND UNDER $7.40	([3])	([3])	-	([3])	([3])	-
$7.40 AND OVER	.1	.1	-	.1	.1	-

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Includes data for regions in addition to the South.

[3] Less than 0.05 percent.

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

Table 5. Occupational earnings: Cellulosic fibers—United States

(Number and straight-time hourly earnings[1] of workers in selected occupations in cellulosic fibers manufacturing establishments, United States, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																			
			UNDER 3.50	3.50 AND UNDER 3.60	3.60 – 3.70	3.70 – 3.80	3.80 – 3.90	3.90 – 4.00	4.00 – 4.10	4.10 – 4.20	4.20 – 4.30	4.30 – 4.40	4.40 – 4.50	4.50 – 4.60	4.60 – 4.70	4.70 – 4.80	4.80 – 4.90	4.90 – 5.00	5.00 – 5.10	5.10 – 5.20	5.20 – 5.30	5.30 – 5.40	5.40 and over
MAINTENANCE																						
CARPENTERS, MAINTENANCE	74	$4.81	-	-	-	-	-	-	-	9	3	-	-	24	-	-	-	-	4	24	10	-	-
ELECTRICIANS, MAINTENANCE	217	5.04	-	-	-	-	-	-	-	-	26	-	-	-	-	6	8	36	26	75	22	7	11
INSTRUMENT REPAIRERS	111	5.09	-	-	-	-	-	-	-	-	7	-	-	-	-	7	10	18	12	36	8	3	10
MACHINISTS, MAINTENANCE	88	4.99	-	-	-	-	-	-	-	-	-	14	-	-	-	-	6	14	7	34	13	-	-
MECHANICS, GENERAL	545	5.07	-	-	-	-	-	-	-	73	-	-	-	-	-	-	40	148	119	75	-	-	[3]90
MILLWRIGHTS	325	5.08	-	-	-	-	-	-	-	-	11	-	-	-	-	5	20	75	-	148	66	-	-
PIPEFITTERS, MAINTENANCE	216	5.08	-	-	-	-	-	-	-	-	13	-	-	-	-	1	6	16	40	103	27	10	-
PROCESSING																						
CHEMICAL OPERATORS, CELLULOSIC FIBERS	1,237	4.60	-	-	2	28	76	81	50	-	-	20	4	50	75	645	20	186	-	-	-	-	-
MEN	1,123	4.59	-	-	2	28	76	81	50	-	-	20	4	40	74	555	20	173	-	-	-	-	-
JET HANDLERS	168	4.52	-	-	11	-	-	-	-	-	3	23	-	60	57	14	-	-	-	-	-	-	-
MEN	105	4.60	-	-	-	-	-	-	-	-	-	4	-	60	41	-	-	-	-	-	-	-	-
WOMEN	63	4.39	-	-	11	-	-	-	-	-	3	19	-	-	16	14	-	-	-	-	-	-	-
SPINNERS, DRY PROCESS	863	4.59	3	19	-	-	-	-	-	-	-	28	-	318	361	57	77	-	-	-	-	-	-
MEN	500	4.61	3	15	-	-	-	-	-	-	-	23	-	96	246	56	61	-	-	-	-	-	-
SPINNERS, WET PROCESS	521	4.48	-	-	-	40	-	-	125	-	-	48	-	-	-	279	29	-	-	-	-	-	-
MEN	426	4.42	-	-	-	40	-	-	125	-	-	48	-	-	-	184	29	-	-	-	-	-	-
CREEL TENDERS	245	4.45	4	-	-	48	-	-	-	-	-	154	4	-	-	-	-	-	-	-	-	-	[4]35
MEN	21	4.08	1	-	-	9	-	-	-	-	-	8	3	-	-	-	-	-	-	-	-	-	-
WOMEN	224	4.49	3	-	-	39	-	-	-	-	-	146	1	-	-	-	-	-	-	-	-	-	35
THROWERS (TWISTERS)	488	4.15	-	-	-	-	139	75	67	-	-	-	200	-	-	-	-	-	-	-	-	-	7
WOMEN	352	4.21	-	-	-	-	35	65	67	-	-	-	185	-	-	-	-	-	-	-	-	-	-
TOW OPERATORS	167	4.58	-	-	-	-	-	-	-	-	-	28	-	71	54	-	14	-	-	-	-	-	-
MEN	141	4.58	-	-	-	-	-	-	-	-	-	28	-	62	37	-	14	-	-	-	-	-	-
WAREER OPERATORS	354	4.35	-	-	-	-	45	15	26	-	125	12	98	-	-	-	-	-	-	-	-	9	24
MEN	21	4.39	-	-	-	-	10	-	-	-	-	-	5	-	-	-	-	-	-	-	-	6	-
WOMEN	333	4.34	-	-	-	-	35	15	26	-	125	12	93	-	-	-	-	-	-	-	-	3	24
WINDERS, YARN	469	3.99	[5]113	-	-	-	74	-	86	-	-	108	85	-	-	-	-	-	-	-	-	-	3
WOMEN	438	4.00	113	-	-	-	44	-	86	-	-	107	85	-	-	-	-	-	-	-	-	-	3
INSPECTION AND TESTING																						
LABORATORY ASSISTANTS	116	4.41	1	4	3	4	27	1	3	4	-	6	13	1	11	4	5	11	9	6	-	-	1
MEN	56	4.08	1	4	3	4	27	1	-	1	-	2	2	1	4	-	-	-	3	2	-	-	1
PHYSICAL TEST OPERATORS	163	4.06	[6]20	-	8	10	-	28	5	21	17	39	13	-	1	-	-	1	-	-	-	-	-
WOMEN	150	4.05	20	-	8	10	-	26	5	13	17	38	12	-	-	-	-	1	-	-	-	-	-
MISCELLANEOUS																						
LABORERS, MATERIAL HANDLING	247	4.34	[7]47	16	-	11	19	-	-	-	-	5	26	54	43	-	-	-	-	-	-	-	[8]26
MEN	212	4.32	47	14	-	11	19	-	-	-	-	5	14	38	38	-	-	-	-	-	-	-	26
STOCK CLERKS	82	4.38	-	-	-	11	2	7	2	-	-	-	8	21	31	-	-	-	-	-	-	-	-
MEN	70	4.37	-	-	-	11	2	4	2	-	-	-	7	19	25	-	-	-	-	-	-	-	-
WOMEN	12	4.42	-	-	-	-	-	3	-	-	-	-	1	2	6	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 5. Occupational earnings: Cellulosic fibers—United States—Continued

(Number and straight-time hourly earnings[1] of workers in selected occupations in cellulosic fibers manufacturing establishments, United States, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																			
			UNDER 3.50	3.50 AND UNDER 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.10	4.10 - 4.20	4.20 - 4.30	4.30 - 4.40	4.40 - 4.50	4.50 - 4.60	4.60 - 4.70	4.70 - 4.80	4.80 - 4.90	4.90 - 5.00	5.00 - 5.10	5.10 - 5.20	5.20 - 5.30	5.30 - 5.40	5.40 and over
MISCELLANEOUS--CONTINUED																						
POWER-TRUCK OPERATORS[9]	283	$4.21	[10]33	-	-	-	26	19	-	-	111	4	9	55	22	-	-	-	-	-	-	-	4
MEN	250	4.20	33	-	-	-	26	18	-	-	83	4	9	51	22	-	-	-	-	-	-	-	4
FORKLIFT	210	4.19	28	-	-	-	26	19	-	-	64	-	9	38	22	-	-	-	-	-	-	-	4
MEN	189	4.18	28	-	-	-	26	18	-	-	48	-	9	34	22	-	-	-	-	-	-	-	4
OTHER THAN FORKLIFT:																						
MEN	61	4.27	5	-	-	-	-	-	-	-	35	4	-	17	-	-	-	-	-	-	-	-	-
GUARDS	54	3.96	-	3	3	17	12	4	2	3	-	3	3	-	2	1	-	-	-	1	-	-	-
JANITORS, PORTERS, OR CLEANERS	243	4.03	[11]25	-	37	-	-	56	-	1	51	55	18	-	-	-	-	-	-	-	-	-	-
MEN	201	4.03	21	-	28	-	-	48	-	1	42	49	12	-	-	-	-	-	-	-	-	-	-
WOMEN	42	4.03	4	-	9	-	-	8	-	-	9	6	6	-	-	-	-	-	-	-	-	-	-

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Unless otherwise indicated, all or virtually all workers in an occupational category were men.

[3] All workers were at $5.90 to $6.

[4] All workers were at $5.80 to $5.90.

[5] All workers were at $3.20 to $3.30.

[6] Workers were distributed as follows: 11 at $3.20 to $3.30; 3 at $3.30 to $3.40; and 6 at $3.40 to $3.50.

[7] All workers were at $3.30 to $3.40.

[8] All workers were at $6.20 to $6.30.

[9] Includes data for power truck operators in addition to those shown separately.

[10] All workers were at $3.40 to $3.50.

[11] Workers were distributed as follows: 18 at $3.20 to $3.30; 6 at $3.30 to $3.40; and 1 at $3.40 to $3.50.

Table 6. Occupational earnings: Cellulosic fibers—South

(Number and straight-time hourly earnings[1] of workers in selected occupations in cellulosic fibers manufacturing establishments, South, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																			
			UNDER 3.50	3.50 AND UNDER 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.10	4.10 - 4.20	4.20 - 4.30	4.30 - 4.40	4.40 - 4.50	4.50 - 4.60	4.60 - 4.70	4.70 - 4.80	4.80 - 4.90	4.90 - 5.00	5.00 - 5.10	5.10 - 5.20	5.20 - 5.30	5.30 - 5.40	5.40 and over
MAINTENANCE																							
CARPENTERS, MAINTENANCE	72	$4.80	-	-	-	-	-	-	-	9	3	-	-	24	-	-	-	-	2	24	10	-	-
ELECTRICIANS, MAINTENANCE	206	5.04	-	-	-	-	-	-	-	-	26	-	-	-	-	6	8	36	15	75	22	7	11
INSTRUMENT REPAIRERS	107	5.09	-	-	-	-	-	-	-	-	7	-	-	-	-	7	10	18	8	36	8	3	10
MACHINISTS, MAINTENANCE	81	4.98	-	-	-	-	-	-	-	-	-	14	-	-	-	-	6	14	-	34	13	-	-
MECHANICS, GENERAL	504	5.06	-	-	-	-	-	-	-	73	-	-	-	-	-	-	40	148	78	75	-	-	[3]90
MILLWRIGHTS	325	5.08	-	-	-	-	-	-	-	-	11	-	-	-	-	5	20	75	-	148	66	-	-
PIPEFITTERS, MAINTENANCE	199	5.08	-	-	-	-	-	-	-	-	13	-	-	-	-	1	6	16	23	103	27	10	-
PROCESSING																							
CHEMICAL OPERATORS, CELLULOSIC FIBERS	1,187	4.60	-	-	2	28	76	81	50	-	-	20	4	-	75	645	20	186	-	-	-	-	-
MEN	1,083	4.59	-	-	2	28	76	81	50	-	-	20	4	-	74	555	20	173	-	-	-	-	-
JET HANDLERS	156	4.52	-	-	11	-	-	-	-	-	3	23	-	48	57	14	-	-	-	-	-	-	-
MEN	93	4.60	-	-	-	-	-	-	-	-	-	4	-	48	41	-	-	-	-	-	-	-	-
WOMEN	63	4.39	-	-	11	-	-	-	-	-	3	19	-	-	16	14	-	-	-	-	-	-	-
SPINNERS, DRY PROCESS	735	4.60	3	19	-	-	-	-	-	-	-	28	-	232	319	57	77	-	-	-	-	-	-
SPINNERS, WET PROCESS	521	4.48	-	-	-	40	-	-	125	-	-	48	-	-	-	279	29	-	-	-	-	-	-
MEN	426	4.42	-	-	-	40	-	-	125	-	-	48	-	-	-	184	29	-	-	-	-	-	-
CREEL TENDERS	210	4.22	4	-	-	48	-	-	-	-	-	154	4	-	-	-	-	-	-	-	-	-	-
MEN	21	4.08	1	-	-	9	-	-	-	-	-	8	3	-	-	-	-	-	-	-	-	-	-
WOMEN	189	4.24	3	-	-	39	-	-	-	-	-	146	1	-	-	-	-	-	-	-	-	-	-
THROWERS (TWISTERS)	481	4.13	-	-	-	-	139	75	67	-	-	-	200	-	-	-	-	-	-	-	-	-	-
WOMEN	352	4.21	-	-	-	-	35	65	67	-	-	-	185	-	-	-	-	-	-	-	-	-	-
TOW OPERATORS	167	4.58	-	-	-	-	-	-	-	-	-	28	-	71	54	-	14	-	-	-	-	-	-
MEN	141	4.58	-	-	-	-	-	-	-	-	-	28	-	62	37	-	14	-	-	-	-	-	-
WARPER OPERATORS	330	4.26	-	-	-	-	45	15	26	-	125	12	98	-	-	-	-	-	-	-	-	9	-
MEN	21	4.39	-	-	-	-	10	-	-	-	-	-	5	-	-	-	-	-	-	-	-	6	-
WOMEN	309	4.25	-	-	-	-	35	15	26	-	125	12	93	-	-	-	-	-	-	-	-	3	-
WINDERS, YARN	466	3.98	[4]113	-	-	-	74	-	86	-	-	108	85	-	-	-	-	-	-	-	-	-	-
WOMEN	435	3.99	113	-	-	-	44	-	86	-	-	107	85	-	-	-	-	-	-	-	-	-	-
INSPECTION AND TESTING																							
LABORATORY ASSISTANTS	112	4.41	1	4	3	4	27	1	3	4	-	2	13	1	11	4	5	11	9	6	-	-	3
MEN	55	4.07	1	4	3	4	27	1	-	1	-	1	2	1	4	-	-	-	3	2	-	-	1
PHYSICAL TEST OPERATORS	161	4.06	[5]20	-	8	10	-	28	5	21	15	39	13	-	1	-	-	1	-	-	-	-	-
WOMEN	148	4.04	20	-	8	10	-	26	5	13	15	38	12	-	-	-	-	1	-	-	-	-	-
MISCELLANEOUS																							
LABORERS, MATERIAL HANDLING	221	4.11	[6]47	16	-	11	19	-	-	-	-	5	26	54	43	-	-	-	-	-	-	-	-
MEN	186	4.05	47	14	-	11	19	-	-	-	-	5	14	38	38	-	-	-	-	-	-	-	-
STOCK CLERKS	78	4.37	-	-	-	11	2	7	2	-	-	-	8	17	31	-	-	-	-	-	-	-	-
MEN	67	4.37	-	-	-	11	2	4	2	-	-	-	7	16	25	-	-	-	-	-	-	-	-
WOMEN	11	4.41	-	-	-	-	-	3	-	-	-	-	1	1	6	-	-	-	-	-	-	-	-
POWER-TRUCK OPERATORS	273	4.18	[7]33	-	-	-	26	19	-	-	111	4	3	55	22	-	-	-	-	-	-	-	-
MEN	240	4.17	33	-	-	-	26	18	-	-	83	4	3	51	22	-	-	-	-	-	-	-	-
FORKLIFT	200	4.15	28	-	-	-	26	19	-	-	64	-	3	38	22	-	-	-	-	-	-	-	-
MEN	179	4.13	28	-	-	-	26	18	-	-	48	-	3	34	22	-	-	-	-	-	-	-	-
OTHER THAN FORKLIFT:																							
MEN	61	4.27	5	-	-	-	-	-	-	-	35	4	-	17	-	-	-	-	-	-	-	-	-
GUARDS	51	3.93	-	3	3	17	12	4	1	3	-	2	3	-	1	1	-	-	-	1	-	-	-
JANITORS, PORTERS, OR CLEANERS	237	4.02	[8]25	-	37	-	-	56	-	1	51	49	18	-	-	-	-	-	-	-	-	-	-
MEN	197	4.02	21	-	28	-	-	48	-	1	42	45	12	-	-	-	-	-	-	-	-	-	-
WOMEN	40	4.01	4	-	9	-	-	8	-	-	9	4	6	-	-	-	-	-	-	-	-	-	-

[1] Includes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Unless otherwise indicated, all or virtually all workers in an occupational category were men.

[3] All workers were at $5.90 to $6.

[4] All workers were at $3.20 to $3.30.

[5] Workers were distributed as follows: 11 at $3.20 to $3.30; 3 at $3.30 to $3.40; and 6 at $3.40 to $3.50.

[6] All workers were at $3.30 to $3.40.

[7] All workers were at $3.40 to $3.50.

[8] Workers were distributed as follows: 18 at $3.20 to $3.30; 6 at $3.30 to $3.40; and 1 at $3.40 to $3.50.

Table 7. Occupational earnings: Noncellulosic fibers—United States

(Number and straight-time hourly earnings [1] of workers in selected occupations in noncellulosic fibers manufacturing establishments, United States, August 1976)

Department, occupation, and sex [2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																							
			UNDER 3.30	3.30 AND UNDER 3.40	3.40 - 3.50	3.50 - 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.20	4.20 - 4.40	4.40 - 4.60	4.60 - 4.80	4.80 - 5.00	5.00 - 5.20	5.20 - 5.40	5.40 - 5.60	5.60 - 5.80	5.80 - 6.00	6.00 - 6.20	6.20 - 6.40	6.40 - 6.60	6.60 - 6.80	6.80 - 7.00	7.00 - 7.20	7.20 AND OVER
MAINTENANCE																										
CARPENTERS, MAINTENANCE	138	$6.07	-	-	-	-	-	-	-	-	-	9	-	20	-	1	5	19	-	10	7	-	1	2	18	46	-
ELECTRICIANS, MAINTENANCE	932	6.47	-	-	-	-	-	-	-	-	-	12	42	38	-	41	17	12	37	7	34	-	117	14	230	331	-
HELPERS, MAINTENANCE TRADES	89	5.40	-	-	-	-	6	4	-	-	-	-	-	-	-	-	31	-	-	48	-	-	-	-	-	-	-
INSTRUMENT REPAIRERS	507	6.73	-	-	-	-	-	-	-	-	-	18	-	15	-	3	1	9	4	2	42	8	3	13	121	250	18
MACHINISTS, MAINTENANCE	268	6.38	-	-	-	-	-	-	-	-	-	-	13	23	-	2	1	28	15	1	12	2	-	-	92	79	-
MECHANICS, GENERAL	3,277	6.08	-	-	-	-	-	-	-	-	140	30	135	6	-	190	59	140	795	1	165	-	272	218	706	420	-
PIPEFITTERS, MAINTENANCE	568	6.59	-	-	-	-	-	-	-	4	-	8	6	47	10	2	1	20	1	1	21	-	13	17	121	296	-
PROCESSING																										
CHEMICAL OPERATORS, NONCELLULOSIC FIBERS	3,453	5.28	-	-	-	-	-	24	16	401	104	182	171	656	60	28	355	38	81	325	217	96	418	281	-	-	-
JET HANDLERS	489	5.01	-	-	-	-	-	-	-	52	7	88	-	37	33	80	34	29	42	87	-	-	-	-	-	-	-
MEN	412	4.96	-	-	-	-	-	-	-	49	6	77	-	30	32	80	23	20	42	53	-	-	-	-	-	-	-
WOMEN	77	5.29	-	-	-	-	-	-	-	3	1	11	-	7	1	-	11	9	-	34	-	-	-	-	-	-	-
SPINNERS, DRY PROCESS	7,428	5.40	-	-	-	-	-	152	150	246	75	126	65	578	158	677	472	599	487	3643	-	-	-	-	-	-	-
MEN	7,028	5.44	-	-	-	-	-	152	150	124	65	126	47	508	98	677	455	587	475	3564	-	-	-	-	-	-	-
WOMEN	400	4.76	-	-	-	-	-	-	-	122	10	-	18	70	60	-	17	12	12	79	-	-	-	-	-	-	-
SPINNERS, WET PROCESS	401	5.27	-	-	-	-	-	-	-	-	34	23	2	14	17	3	142	-	123	43	-	-	-	-	-	-	-
MEN	377	5.25	-	-	-	-	-	-	-	-	32	23	2	14	17	3	142	-	101	43	-	-	-	-	-	-	-
CREEL TENDERS	1,459	4.59	34	-	-	44	-	60	40	80	134	42	48	509	174	211	37	6	8	1	7	24	-	-	-	-	-
MEN	826	4.43	34	-	-	-	-	60	40	80	128	38	42	281	20	50	26	4	4	-	4	15	-	-	-	-	-
WOMEN	633	4.79	-	-	-	44	-	-	-	-	6	4	6	228	154	161	11	2	4	1	3	9	-	-	-	-	-
DRAWTWIST OPERATORS	6,868	4.66	312	-	190	336	32	486	-	347	156	124	242	708	656	1040	2068	171	-	-	-	-	-	-	-	-	-
MEN	2,329	4.59	30	-	-	30	32	486	-	291	84	106	60	47	84	40	984	55	-	-	-	-	-	-	-	-	-
WOMEN	4,539	4.70	282	-	190	306	-	-	-	56	72	18	182	661	572	1000	1084	116	-	-	-	-	-	-	-	-	-
TOW OPERATORS	2,497	4.87	-	-	-	-	18	51	108	90	8	216	218	569	157	213	597	45	2	205	-	-	-	-	-	-	-
MEN	1,934	4.89	-	-	-	-	18	51	66	90	8	140	154	446	132	96	505	39	2	187	-	-	-	-	-	-	-
WOMEN	563	4.82	-	-	-	-	-	-	42	-	-	76	64	123	25	117	92	6	-	18	-	-	-	-	-	-	-
WARPER OPERATORS	1,721	4.98	43	1	-	75	6	5	5	2	13	154	179	16	116	209	631	152	39	3	2	4	1	11	23	31	-
MEN	448	5.23	-	-	-	-	-	-	-	-	1	46	47	1	-	50	216	28	21	3	-	2	1	6	10	16	-
WOMEN	1,273	4.90	43	1	-	75	6	5	5	2	12	108	132	15	116	159	415	124	18	-	2	2	-	5	13	15	-
WINDERS, YARN	778	4.16	3113	-	-	-	-	200	22	-	231	51	-	-	-	22	112	27	-	-	-	-	-	-	-	-	-
MEN	235	4.62	-	-	-	-	-	66	6	-	3	41	-	-	-	22	92	5	-	-	-	-	-	-	-	-	-
WOMEN	543	3.96	113	-	-	-	-	134	16	-	228	10	-	-	-	-	20	22	-	-	-	-	-	-	-	-	-
INSPECTION AND TESTING																										
LABORATORY ASSISTANTS	1,086	5.14	-	16	-	33	7	37	19	54	71	81	29	56	24	34	119	56	182	192	9	2	6	13	10	12	24
MEN	513	5.14	-	5	-	20	7	17	19	14	68	30	14	28	8	21	20	19	93	59	8	1	5	11	10	12	24
WOMEN	573	5.14	-	11	-	13	-	20	-	40	3	51	15	28	16	13	99	37	89	133	1	1	1	2	-	-	-
PHYSICAL TEST OPERATORS	1,438	4.75	2	5	6	117	93	-	34	8	104	23	30	216	80	137	504	16	59	4	-	-	-	-	-	-	-
MEN	216	4.86	2	-	-	-	36	-	2	1	14	7	8	1	9	16	84	12	22	2	-	-	-	-	-	-	-
WOMEN	1,222	4.73	-	5	6	117	57	-	32	7	90	16	22	215	71	121	420	4	37	2	-	-	-	-	-	-	-
MISCELLANEOUS																										
LABORERS, MATERIAL HANDLING	525	4.04	6	67	-	-	30	26	20	168	54	49	54	28	6	12	5	-	-	-	-	-	-	-	-	-	-
MEN	496	4.03	6	67	-	-	30	26	20	160	36	49	51	28	6	12	5	-	-	-	-	-	-	-	-	-	-
STOCK CLERKS	147	5.39	-	-	-	9	-	-	-	2	4	-	3	3	8	12	6	28	5	62	5	-	-	-	-	-	-
MEN	132	5.33	-	-	-	9	-	-	-	2	4	-	3	3	8	12	6	28	5	47	5	-	-	-	-	-	-

See footnotes at end of table.

Table 7. Occupational earnings: Noncellulosic fibers—United States—Continued

(Number and straight-time hourly earnings[1] of workers in selected occupations in noncellulosic fibers manufacturing establishments, United States, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																								
			UNDER 3.30	3.30 AND UNDER 3.40	3.40 - 3.50	3.50 - 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.20	4.20 - 4.40	4.40 - 4.60	4.60 - 4.80	4.80 - 5.00	5.00 - 5.20	5.20 - 5.40	5.40 - 5.60	5.60 - 5.80	5.80 - 6.00	6.00 - 6.20	6.20 - 6.40	6.40 - 6.60	6.60 - 6.80	6.80 - 7.00	7.00 - 7.20	7.20 AND OVER
MISCELLANEOUS--CONTINUED																											
POWER-TRUCK OPERATORS[4]	1,577	$4.68	-	-	45	24	-	150	4	-	-	220	127	222	308	45	381	-	31	20	-	-	-	-	-	-	-
MEN	1,318	4.73	-	-	45	21	-	150	4	-	-	56	115	200	268	35	373	-	31	20	-	-	-	-	-	-	-
FORKLIFT	1,165	4.83	-	-	40	24	-	76	4	-	-	2	127	148	280	45	368	-	31	20	-	-	-	-	-	-	-
MEN	1,092	4.82	-	-	40	21	-	76	4	-	-	2	115	148	240	35	360	-	31	20	-	-	-	-	-	-	-
OTHER THAN FORKLIFT:																											
MEN	226	4.30	-	-	5	-	-	74	-	-	-	54	-	52	28	-	13	-	-	-	-	-	-	-	-	-	-
GUARDS	166	5.49	-	-	-	-	-	-	1	-	25	4	16	8	4	3	22	4	-	25	-	-	10	44	-	-	-
MEN	155	5.43	-	-	-	-	-	-	1	-	25	4	16	8	4	3	21	4	-	22	-	-	10	37	-	-	-
WOMEN	11	6.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	-	-	-	7	-	-	-
JANITORS, PORTERS OR CLEANERS	617	4.20	32	21	-	-	70	2	-	27	69	193	144	-	-	59	-	-	-	-	-	-	-	-	-	-	-
MEN	465	4.15	32	21	-	-	68	2	-	19	61	114	96	-	-	52	-	-	-	-	-	-	-	-	-	-	-
WOMEN	152	4.34	-	-	-	-	2	-	-	8	8	79	48	-	-	7	-	-	-	-	-	-	-	-	-	-	-

[1] Includes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Unless otherwise indicated, all or virtually all workers in an occupational category were men.

[3] Workers were distributed as follows: 16 at $2.70 to $2.80; 2 at $3 to $3.10; and 95 at $3.20 to $3.30.

[4] Includes data for power truck operators in addition to those shown separately.

Table 8. Occupational earnings: Noncellulosic fibers—South

(Number and straight-time hourly earnings[1] of workers in selected occupations in noncellulosic fibers manufacturing establishments, South, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																							
			UNDER 3.30	3.30 AND UNDER 3.40	3.40 - 3.50	3.50 - 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.20	4.20 - 4.40	4.40 - 4.60	4.60 - 4.80	4.80 - 5.00	5.00 - 5.20	5.20 - 5.40	5.40 - 5.60	5.60 - 5.80	5.80 - 6.00	6.00 - 6.20	6.20 - 6.40	6.40 - 6.60	6.60 - 6.80	6.80 - 7.00	7.00 - 7.20	7.20 AND OVER
MAINTENANCE																										
CARPENTERS, MAINTENANCE	136	$6.09	-	-	-	-	-	-	-	-	-	9	-	20	-	-	4	19	-	10	7	-	1	2	18	46	-
ELECTRICIANS, MAINTENANCE	909	6.50	-	-	-	-	-	-	-	-	-	12	40	36	-	31	8	12	37	7	34	-	117	14	230	331	-
HELPERS, MAINTENANCE TRADES	89	5.40	-	-	-	-	6	4	-	-	-	-	-	-	-	-	31	-	-	48	-	-	-	-	-	-	-
INSTRUMENT REPAIRERS	503	6.74	-	-	-	-	-	-	-	-	-	18	-	15	-	-	-	9	4	2	42	8	3	13	121	250	18
MACHINISTS, MAINTENANCE	260	6.43	-	-	-	-	-	-	-	-	-	-	12	19	-	-	-	28	15	1	12	2	-	-	92	79	-
MECHANICS, GENERAL	3,211	6.10	-	-	-	-	-	-	-	-	140	24	135	-	-	165	30	140	795	1	165	-	272	218	706	420	-
PIPEFITTERS, MAINTENANCE	565	6.60	-	-	-	-	-	-	-	4	-	8	6	47	10	-	-	20	1	1	21	-	13	17	121	296	-
PROCESSING																										
CHEMICAL OPERATORS, NONCELLULOSIC FIBERS	3,453	5.28	-	-	-	-	-	24	16	401	104	182	171	656	60	28	355	38	81	325	217	96	418	281	-	-	-
JET HANDLERS	489	5.01	-	-	-	-	-	-	-	52	7	88	-	37	33	80	34	29	42	87	-	-	-	-	-	-	-
MEN	412	4.96	-	-	-	-	-	-	-	49	6	77	-	30	32	80	23	20	42	53	-	-	-	-	-	-	-
WOMEN	77	5.29	-	-	-	-	-	-	-	3	1	11	-	7	1	-	11	9	-	34	-	-	-	-	-	-	-
SPINNERS, DRY PROCESS	7,393	5.41	-	-	-	-	-	152	150	246	75	126	30	578	158	677	472	599	487	3643	-	-	-	-	-	-	-
MEN	6,996	5.44	-	-	-	-	-	152	150	124	65	126	15	508	98	677	455	587	475	3564	-	-	-	-	-	-	-
WOMEN	397	4.77	-	-	-	-	-	-	-	122	10	-	15	70	60	-	17	12	12	79	-	-	-	-	-	-	-
SPINNERS, WET PROCESS	369	5.38	-	-	-	-	-	-	-	-	2	23	2	14	17	3	142	-	123	43	-	-	-	-	-	-	-
MEN	347	5.36	-	-	-	-	-	-	-	-	2	23	2	14	17	3	142	-	101	43	-	-	-	-	-	-	-
CREEL TENDERS	1,431	4.60	34	-	-	44	-	60	40	80	106	42	48	509	174	211	37	6	8	1	7	24	-	-	-	-	-
MEN	798	4.45	34	-	-	-	-	60	40	80	100	38	42	281	20	50	26	4	4	-	4	15	-	-	-	-	-
WOMEN	633	4.79	-	-	-	44	-	-	-	-	6	4	6	228	154	161	11	2	4	1	3	9	-	-	-	-	-
DRAWTWIST OPERATORS	6,721	4.67	312	-	190	336	32	486	-	220	156	124	222	708	656	1040	2068	171	-	-	-	-	-	-	-	-	-
MEN	2,245	4.61	30	-	-	30	32	486	-	220	84	106	47	47	84	40	984	55	-	-	-	-	-	-	-	-	-
WOMEN	4,476	4.71	282	-	190	306	-	-	-	-	72	18	175	661	572	1000	1084	116	-	-	-	-	-	-	-	-	-
TOW OPERATORS	2,497	4.87	-	-	-	-	18	51	108	90	8	216	218	569	157	213	597	45	2	205	-	-	-	-	-	-	-
MEN	1,934	4.89	-	-	-	-	18	51	66	90	8	140	154	446	132	96	505	39	2	187	-	-	-	-	-	-	-
WOMEN	563	4.82	-	-	-	-	-	-	42	-	-	76	64	123	25	117	92	6	-	18	-	-	-	-	-	-	-
WARPER OPERATORS	1,658	5.01	43	-	-	72	-	-	-	-	8	150	160	13	112	206	629	151	39	3	2	4	1	11	23	31	-
MEN	436	5.25	-	-	-	-	-	-	-	-	1	46	35	1	-	50	216	28	21	3	-	2	1	6	10	16	-
WOMEN	1,222	4.92	43	-	-	72	-	-	-	-	7	104	125	12	112	156	413	123	18	-	2	2	-	5	13	15	-
WINDERS, YARN	778	4.16	3113	-	-	-	-	200	22	-	231	51	-	-	-	22	112	27	-	-	-	-	-	-	-	-	-
MEN	235	4.62	-	-	-	-	-	66	6	-	3	41	-	-	-	22	92	5	-	-	-	-	-	-	-	-	-
WOMEN	543	3.96	113	-	-	-	-	134	16	-	228	10	-	-	-	-	20	22	-	-	-	-	-	-	-	-	-
INSPECTION AND TESTING																										
LABORATORY ASSISTANTS	1,042	5.16	-	16	-	33	7	37	19	54	71	56	28	52	17	33	118	55	182	191	6	2	6	13	10	12	24
MEN	489	5.15	-	5	-	20	7	17	19	14	68	20	13	26	4	20	19	18	93	58	5	1	5	11	10	12	24
WOMEN	553	5.16	-	11	-	13	-	20	-	40	3	36	15	26	13	13	99	37	89	133	1	1	1	2	-	-	-
PHYSICAL TEST OPERATORS	1,438	4.75	2	5	6	117	93	-	34	8	104	23	30	216	80	137	504	16	59	4	-	-	-	-	-	-	-
MEN	216	4.86	2	-	-	-	36	-	2	1	14	7	8	1	9	16	84	12	22	2	-	-	-	-	-	-	-
WOMEN	1,222	4.73	-	5	6	117	57	-	32	7	90	16	22	215	71	121	420	4	37	2	-	-	-	-	-	-	-
MISCELLANEOUS																										
LABORERS, MATERIAL HANDLING	507	4.04	6	67	-	-	30	12	20	168	54	49	50	28	6	12	5	-	-	-	-	-	-	-	-	-	-
MEN	478	4.03	6	67	-	-	30	12	20	160	36	49	47	28	6	12	5	-	-	-	-	-	-	-	-	-	-
STOCK CLERKS	144	5.41	-	-	-	9	-	-	-	2	4	-	-	3	8	12	6	28	5	62	5	-	-	-	-	-	-
MEN	129	5.35	-	-	-	9	-	-	-	2	4	-	-	3	8	12	6	28	5	47	5	-	-	-	-	-	-

See footnotes at end of table.

Table 8. Occupational earnings: Noncellulosic fibers—South—Continued

(Number and straight-time hourly earnings[1] of workers in selected occupations in noncellulosic fibers manufacturing establishments, South, August 1976)

Department, occupation, and sex[2]	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																							
			UNDER 3.30	3.30 AND UNDER 3.40	3.40 - 3.50	3.50 - 3.60	3.60 - 3.70	3.70 - 3.80	3.80 - 3.90	3.90 - 4.00	4.00 - 4.20	4.20 - 4.40	4.40 - 4.60	4.60 - 4.80	4.80 - 5.00	5.00 - 5.20	5.20 - 5.40	5.40 - 5.60	5.60 - 5.80	5.80 - 6.00	6.00 - 6.20	6.20 - 6.40	6.40 - 6.60	6.60 - 6.80	6.80 - 7.00	7.00 - 7.20	7.20 AND OVER
MISCELLANEOUS--CONTINUED																										
POWER-TRUCK OPERATORS[4]	1,564	$4.69	-	-	45	24	-	150	-	-	-	220	118	222	308	45	381	-	31	20	-	-	-	-	-	-
MEN	1,305	4.74	-	-	45	21	-	150	-	-	-	56	106	200	268	35	373	-	31	20	-	-	-	-	-	-
FORKLIFT	1,152	4.83	-	-	40	24	-	76	-	-	-	2	118	148	280	45	368	-	31	20	-	-	-	-	-	-
MEN	1,079	4.83	-	-	40	21	-	76	-	-	-	2	106	148	240	35	360	-	31	20	-	-	-	-	-	-
OTHER THAN FORKLIFT:																										
MEN	226	4.30	-	-	5	-	-	74	-	-	-	54	-	52	28	-	13	-	-	-	-	-	-	-	-	-
GUARDS	159	5.52	-	-	-	-	-	-	-	-	25	4	15	7	4	2	22	1	-	25	-	-	10	44	-	-
MEN	148	5.46	-	-	-	-	-	-	-	-	25	4	15	7	4	2	21	1	-	22	-	-	10	37	-	-
WOMEN	11	6.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	-	-	-	7	-	-
JANITORS, PORTERS OR CLEANERS	596	4.21	32	21	-	-	58	-	-	26	69	193	138	-	-	59	-	-	-	-	-	-	-	-	-	-
MEN	446	4.16	32	21	-	-	58	-	-	18	61	114	90	-	-	52	-	-	-	-	-	-	-	-	-	-
WOMEN	150	4.35	-	-	-	-	-	-	-	8	8	79	48	-	-	7	-	-	-	-	-	-	-	-	-	-

[1] Includes premium pay for overtime and for work on weekends, holidays, and late or other shifts.

[2] Unless otherwise indicated, all or virtually all workers in an occupational category were men.

[3] Workers were distributed as follows: 16 at $2.70 to $2.80; 2 at $3 to $3.10; and 95 at $3.20 to $3.30.

[4] Includes data for power-truck operators in addition to those shown separately.

Table 9. Method of wage payment

(Percent of production workers in synthetic fibers manufacturing establishments by method of wage payment,[1] United States and South, August 1976)

Method of wage payment	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[2]	South	United States[2]	South	United States[2]	South
All workers	100	100	100	100	100	100
Time-rated workers	98	98	98	99	98	98
Formal plans	98	98	98	99	98	98
Single rate	66	66	60	59	67	67
Range of rates	32	33	38	40	31	31
Individual rates	(3)	(3)	(3)	(3)	(3)	(3)
Incentive workers	2	2	2	1	2	2
Individual piecework	1	1	(3)	(3)	1	1
Group piecework	1	1	(3)	(3)	1	1
Individual bonus	1	(3)	1	(3)	(3)	(3)

[1] For definition of method of wage payment, see appendix A.
[2] Includes data for regions in addition to the South.
[3] Less than 0.5 percent.

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

Table 10. Scheduled weekly hours

(Percent of production workers and office workers in synthetic fibers manufacturing establishments by scheduled weekly hours,[1] United States and South, August 1976)

Weekly hours	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[2]	South	United States[2]	South	United States[2]	South
	Production workers					
All workers	100	100	100	100	100	100
40 hours	92	92	92	92	92	92
42 hours	8	8	8	8	8	8
	Office workers					
All workers	100	100	100	100	100	100
40 hours	100	100	100	100	100	100

[1] Data relate to the predominant schedule for full-time day-shift workers in each establishment.
[2] Includes data for regions in addition to the South.

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

Table 11. Shift differential practices--All establishments

(Percent of production workers assigned to selected shifts by type of shift and amount of shift differential, United States and South, August 1976)

Shift differential	United States[1]						South					
	Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts		Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts	
	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)
Workers assigned to selected shifts	25.6	25.2	25.2	1.5	0.6	0.5	26.0	25.6	25.6	1.5	0.2	0.1
Receiving differential	12.3	24.9	24.9	.1	.6	.5	12.4	25.3	25.3	.1	.2	.1
Uniform cents per hour	.2	7.3	7.3	.1	.6	.5	.2	7.4	7.4	.1	.2	.1
5 cents	–	.1	–	–	.3	–	–	.1	–	–	(4)	–
6 cents	–	.1	–	.1	–	–	–	.1	–	.1	–	–
7 cents	–	1.1	–	–	–	–	–	1.2	–	–	–	–
8 cents	–	1.6	–	–	(4)	–	–	1.5	–	–	(4)	–
10 cents	–	.7	.1	–	.1	.3	–	.7	.1	–	.1	–
11 cents	–	–	.1	–	–	–	–	–	.1	–	–	–
12 cents	–	.6	1.1	–	.1	.1	–	.6	1.2	–	–	–
13 cents	–	–	1.3	–	–	–	–	–	1.4	–	–	–
14 cents	.2	.2	.2	–	–	–	.2	.2	.2	–	–	–
15 cents	–	.6	.7	–	–	.1	–	.7	.7	–	–	(4)
16 cents	–	.2	.2	–	–	–	–	.2	.2	–	–	–
18 cents	–	–	.6	–	–	–	–	–	.7	–	–	–
19 cents	–	–	–	–	–	–	–	–	–	–	–	–
20 cents	–	2.1	.6	–	(4)	(4)	–	2.1	.6	–	(4)	(4)
25 cents	–	–	1.4	–	–	–	–	–	1.4	–	–	–
28 cents	–	–	.2	–	–	–	–	–	.2	–	–	–
40 cents	–	–	.7	–	–	–	–	–	.7	–	–	–
Uniform percentage	4.3	4.1	4.1	–	–	–	4.4	4.2	4.2	–	–	–
10 percent	4.3	4.1	4.1	–	–	–	4.4	4.2	4.2	–	–	–
Uniform cents per hour plus paid lunch period not provided fixed day shift workers	–	10.1	10.1	(4)	(4)	–	–	10.3	10.4	(4)	.1	–
7 cents	–	.4	–	–	–	–	–	.5	–	–	–	–
8 cents	–	2.4	–	–	–	–	–	2.5	–	–	–	–
10 cents	–	3.5	.3	–	–	–	–	3.6	.3	–	–	–
11 cents	–	.4	–	–	–	–	–	.4	–	–	–	–
14 cents	–	–	2.9	–	–	–	–	–	3.0	–	–	–
15 cents	–	1.8	–	–	(4)	–	–	1.8	–	–	(4)	–
18 cents	–	–	.4	–	–	–	–	–	.4	–	–	–
19 cents	–	.6	–	–	–	–	–	.6	–	–	–	–
20 cents	–	.9	3.1	(4)	(4)	–	–	1.0	3.2	(4)	(4)	–
25 cents	–	–	2.4	–	–	–	–	–	2.4	–	–	–
30 cents	–	–	.9	–	–	–	–	–	1.0	–	–	–
Uniform percentage plus paid lunch period not provided fixed day shift workers	3.0	3.0	3.0	–	–	–	3.1	3.1	3.1	–	–	–
10 percent	3.0	3.0	3.0	–	–	–	3.1	3.1	3.1	–	–	–
Paid lunch period not provided fixed day-shift workers	2.4	–	–	–	–	–	2.5	–	–	–	–	–
8 hours pay for 7.5 hours work	2.1	–	–	–	–	–	2.2	–	–	–	–	–
Other formal paid differential	.2	.4	.4	–	–	–	–	.2	.2	–	–	–

[1] Includes data for regions in addition to the South.
[2] Workers assigned to rotating shifts worked alternately on day, evening, and night schedules.
[3] Workers assigned to oscillating shifts were of 2 groups: Those alternating between day and evening schedules, and those alternating between evening and night schedules.
[4] Less than 0.05 percent.

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

Table 12. Shift differential practices--Cellulosic fibers

(Percent of production workers assigned to selected shifts by type of shift and amount of shift differential, United States and South, August 1976)

Shift differential	United States[1]						South					
	Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts		Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts	
	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)
Workers assigned to selected shifts	20.6	20.5	20.5	2.4	0.2	0.1	20.8	20.7	20.7	2.5	0.2	0.1
Receiving differential	2.1	20.5	20.5	.4	.2	.1	1.2	20.7	20.7	.5	.2	.1
Uniform cents per hour	1.1	16.2	16.2	.4	.2	.1	1.2	17.2	17.2	.5	.2	.1
5 cents	–	.6	–	–	([4])	–	–	.6	–	–	([4])	–
6 cents	–	.8	–	.4	–	–	–	.8	–	.5	–	–
7 cents	–	6.6	–	–	–	–	–	7.0	–	–	–	–
8 cents	–	3.2	–	–	–	–	–	3.4	–	–	–	–
10 cents	–	.2	.6	–	.1	–	–	.2	.6	–	.1	–
11 cents	–	–	.7	–	–	–	–	–	.8	–	–	–
12 cents	–	–	6.6	–	–	–	–	–	7.0	–	–	–
13 cents	–	–	3.2	–	–	–	–	–	3.4	–	–	–
14 cents	1.1	1.1	1.1	–	–	–	1.2	1.2	1.2	–	–	–
15 cents	–	3.7	3.9	–	–	([4])	–	3.9	4.2	–	–	–
20 cents	–	–	–	–	–	.1	–	–	–	–	–	.1
Uniform cents per hour plus paid lunch period not provided fixed day shift workers	–	1.9	1.9	–	–	–	–	2.1	2.1	–	–	–
10 cents	–	1.9	1.9	–	–	–	–	2.1	2.1	–	–	–
Other formal paid differential	1.0	2.3	2.3	–	–	–	–	1.4	1.4	–	–	–

[1] Includes data for regions in addition to the South.
[2] Workers assigned to rotating shifts worked alternately on day, evening, and night schedules.
[3] Workers assigned to oscillating shifts were of 2 groups: Those alternating between day and evening schedules, and those alternating between evening and night schedules.
[4] Less than 0.05 percent.

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

Table 13. Shift differential practices--Noncellulosic fibers

(Percent of production workers assigned to selected shifts by type of shift and amount of shift differential, United States and South, August 1976)

Shift differential	United States[1]						South					
	Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts		Rotating shifts[2]			Oscillating shifts[3]	Fixed shifts	
	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)	Day schedules (1st)	Evening schedules (2nd)	Night schedules (3rd)	First or second group	Evening schedules (2nd)	Night schedules (3rd)
Workers assigned to selected shifts	26.6	26.2	26.2	1.3	0.7	0.5	27.1	26.6	26.6	1.3	0.2	0.1
Receiving differential	14.4	25.8	25.9	(4)	.7	.5	14.6	26.3	26.3	(4)	.2	.1
Uniform cents per hour	–	5.5	5.5	–	.6	.5	–	5.5	5.5	–	.2	.1
5 cents	–	–	–	–	.3	–	–	–	–	–	–	–
8 cents	–	1.2	–	–	(4)	–	–	1.1	–	–	(4)	–
10 cents	–	.7	–	–	.1	.3	–	.8	–	–	.1	–
12 cents	–	.8	–	–	.1	.1	–	.8	–	–	–	–
13 cents	–	–	.9	–	–	–	–	–	1.0	–	–	–
15 cents	–	–	–	–	–	.1	–	–	–	–	–	.1
16 cents	–	.2	.3	–	–	–	–	.2	.2	–	–	–
18 cents	–	–	.8	–	–	–	–	–	.8	–	–	–
19 cents	–	–	–	–	–	–	–	–	–	–	–	–
20 cents	–	2.5	.7	–	.1	(4)	–	2.6	.8	–	.1	(4)
25 cents	–	–	1.7	–	–	–	–	–	1.7	–	–	–
28 cents	–	–	.2	–	–	–	–	–	.2	–	–	–
40 cents	–	–	.9	–	–	–	–	–	.9	–	–	–
Uniform percentage	5.2	5.0	5.0	–	–	–	5.3	5.1	5.1	–	–	–
10 percent	5.2	5.0	5.0	–	–	–	5.3	5.1	5.1	–	–	–
Uniform cents per hour plus paid lunch period not provided fixed day shift workers	–	11.8	11.8	(4)	.1	–	–	12.0	12.0	(4)	.1	–
7 cents	–	.5	–	–	–	–	–	.5	–	–	–	–
8 cents	–	2.9	–	–	–	–	–	3.0	–	–	–	–
10 cents	–	3.8	–	–	–	–	–	3.9	–	–	–	–
11 cents	–	.5	–	–	–	–	–	.5	–	–	–	–
14 cents	–	–	3.5	–	–	–	–	–	3.5	–	–	–
15 cents	–	2.1	–	–	(4)	–	–	2.2	–	–	(4)	–
18 cents	–	–	.5	–	–	–	–	–	.5	–	–	–
19 cents	–	.7	–	–	–	–	–	.7	–	–	–	–
20 cents	–	1.1	3.8	(4)	(4)	–	–	1.1	3.9	(4)	(4)	–
25 cents	–	–	2.9	–	–	–	–	–	2.9	–	–	–
30 cents	–	–	1.1	–	–	–	–	–	1.1	–	–	–
Uniform percentage plus paid lunch period not provided fixed day shift workers	3.6	3.6	3.6	–	–	–	3.7	3.7	3.7	–	–	–
10 percent	3.6	3.6	3.6	–	–	–	3.7	3.7	3.7	–	–	–
Paid lunch period not provided fixed day-shift workers	3.0	–	–	–	–	–	3.0	–	–	–	–	–
8 hours pay for 7.5 hours work	2.6	–	–	–	–	–	2.6	–	–	–	–	–

[1] Includes data for regions in addition to the South.
[2] Workers assigned to rotating shifts worked alternately on day, evening, and night schedules.
[3] Workers assigned to oscillating shifts were of 2 groups: Those alternating between day and evening schedules, and those alternating between evening and night schedules.
[4] Less than 0.05 percent.

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

Table 14. Paid holidays

(Percent of production workers and office workers in synthetic fibers manufacturing establishments with formal provisions for paid holidays, United States and South, August 1976)

Number of paid holidays	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[1]	South	United States[1]	South	United States[1]	South
	Production workers					
All workers	100	100	100	100	100	100
Workers in establishments providing paid holidays	100	100	100	100	100	100
6 days	2	2	(2)	–	2	2
7 days	1	1	3	3	–	–
8 days	23	24	49	52	18	18
9 days	20	18	48	45	14	13
10 days	46	47	–	–	56	57
11 days	8	9	–	–	10	10
	Office workers					
All workers	100	100	100	100	100	100
Workers in establishments providing paid holidays	100	100	100	100	100	100
6 days	1	1	(2)	–	1	1
7 days	(2)	(2)	3	3	–	–
8 days	20	19	43	45	15	14
9 days	25	24	53	51	20	20
10 days	45	47	–	–	53	55
11 days	8	8	–	–	9	10

[1] Includes data for regions in addition to the South.
[2] Less than 0.5 percent.

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

Table 15. Paid vacations

(Percent of production workers and office workers in synthetic fibers manufacturing establishments with formal provisions for paid vacations after selected periods of service, United States and South, August 1976)

Vacation policy	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[1]	South	United States[1]	South	United States[1]	South
	Production workers					
All workers	100	100	100	100	100	100
Method of payment						
Workers in establishments providing paid vacations	100	100	100	100	100	100
Length-of-time payment	76	78	34	35	85	86
Percentage payment	24	22	66	65	15	14
Amount of vacation pay[2]						
After 1 year of service:						
1 week	47	46	100	100	36	35
2 weeks	53	54	–	–	64	65
After 2 years of service:						
1 week	26	24	55	52	20	18
Over 1 and under 2 weeks	1	1	–	–	1	1
2 weeks	73	75	45	48	79	81
After 3 years of service:						
1 week	2	1	–	–	3	2
Over 1 and under 2 weeks	1	1	–	–	1	1
2 weeks	97	98	100	100	96	97
After 5 years of service:						
2 weeks	31	29	100	100	16	15
Over 2 and under 3 weeks	1	1	–	–	1	1
3 weeks	68	70	–	–	83	84
After 10 years of service:						
2 weeks	7	6	12	13	6	5
3 weeks	26	25	88	87	14	13
4 weeks	67	68	–	–	81	82
After 15 years of service:						
2 weeks	1	1	–	–	2	2
3 weeks	9	8	13	13	8	7
4 weeks	90	91	87	87	90	92
After 20 years of service:						
2 weeks	1	1	–	–	2	2
3 weeks	3	3	([3])	–	3	3
4 weeks	23	21	88	88	9	7
5 weeks	73	75	11	12	86	88
After 25 years of service:						
2 weeks	1	1	–	–	2	2
3 weeks	2	2	([3])	–	2	2
4 weeks	11	10	21	22	9	8
5 weeks	86	87	79	78	87	88
After 30 years of service:						
2 weeks	1	1	–	–	2	2
3 weeks	2	2	([3])	–	2	2
4 weeks	10	10	21	22	8	8
5 weeks	74	74	79	78	73	73
6 weeks	12	13	–	–	15	15
Maximum service benefits:						
2 weeks	1	1	–	–	2	2
3 weeks	2	2	([3])	–	2	2
4 weeks	10	10	21	22	8	8
5 weeks	43	42	79	78	35	34
6 weeks	44	45	–	–	53	54

See footnotes at end of table.

Table 15. Paid vacations—Continued

(Percent of production workers and office workers in synthetic fibers manufacturing establishments with formal provisions for paid vacations after selected periods of service. United States and South, August 1976)

Vacation policy	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[1]	South	United States[1]	South	United States[1]	South
	Office workers					
All workers	100	100	100	100	100	100
Method of payment						
Workers in establishments providing paid vacations	100	100	100	100	100	100
Length-of-time payment	99	99	100	100	99	99
Percentage payment	1	1	–	–	1	1
Amount of vacation pay[2]						
After 1 year of service:						
1 week	3	3	5	5	2	2
2 weeks	93	93	95	95	93	93
Over 2 and under 3 weeks	4	4	–	–	5	5
After 2 years of service:						
1 week	1	1	(3)	–	1	1
2 weeks	95	95	100	100	94	94
Over 2 and under 3 weeks	4	4	–	–	5	5
After 3 years of service:						
1 week	1	1	–	–	1	1
2 weeks	95	95	100	100	94	94
Over 2 and under 3 weeks	4	4	–	–	5	5
After 5 years of service:						
2 weeks	22	21	58	56	15	15
3 weeks	78	79	42	44	85	85
After 10 years of service:						
2 weeks	2	2	5	5	2	2
3 weeks	21	20	53	51	16	15
Over 3 and under 4 weeks	4	4	–	–	5	5
4 weeks	73	74	42	44	78	79
After 15 years of service:						
2 weeks	1	1	–	–	1	1
3 weeks	2	2	5	5	2	1
4 weeks	97	97	95	95	97	98
After 20 years of service:						
2 weeks	1	1	–	–	1	1
3 weeks	(3)	–	(3)	–	(3)	–
4 weeks	11	10	34	31	7	6
Over 4 and under 5 weeks	4	4	–	–	5	5
5 weeks	84	85	66	69	87	88
After 25 years of service:						
2 weeks	1	1	–	–	1	1
3 weeks	(3)	–	(3)	–	(3)	–
4 weeks	7	7	13	14	6	6
Over 4 and under 5 weeks	4	4	–	–	5	5
5 weeks	87	88	86	86	88	88
After 30 years of service:						
2 weeks	1	1	–	–	1	1
3 weeks	(3)	–	(3)	–	(3)	–
4 weeks	7	7	13	14	6	6
5 weeks	77	76	86	86	75	75
6 weeks	15	15	–	–	17	18
Maximum service benefits:						
2 weeks	1	1	–	–	1	1
3 weeks	(3)	–	(3)	–	(3)	–
4 weeks	7	7	13	14	6	6
5 weeks	46	45	86	86	40	39
6 weeks	45	46	–	–	53	54

See footnotes on following page.

Footnotes to table 15.

[1] Includes data for regions in addition to the South.
[2] Vacation payments, such as percent of annual earnings, were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions for progression. For example, changes indicated at 10 years may include changes that occurred between 5 and 10 years.
[3] Less than 0.5 percent.

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

Table 16. Health, insurance, and retirement plans

(Percent of production workers and office workers in synthetic fibers manufacturing establishments with specified health, insurance, and retirement plans,[1] United States and South, August 1976)

Type of plan	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[2]	South	United States[2]	South	United States[2]	South
	Production workers					
All workers	100	100	100	100	100	100
Workers in establishments providing:						
Life insurance	100	100	100	100	100	100
Noncontributory plans	92	93	100	100	90	91
Accidental death and dismemberment insurance	67	66	100	100	60	59
Noncontributory plans	63	63	100	100	56	56
Sickness and accident insurance or sick leave or both[3]	100	100	100	100	100	100
Sickness and accident insurance	93	92	100	100	91	91
Noncontributory plans	70	70	100	100	64	64
Sick leave (full pay, no waiting period)	32	32	–	–	39	39
Sick leave (partial pay or waiting period)	8	8	–	–	10	10
Long-term disability insurance	17	17	24	26	15	15
Noncontributory plans	11	12	24	26	9	9
Hospitalization insurance	100	100	100	100	100	100
Covering employees and their dependents	100	100	100	100	100	100
Noncontributory plans	76	77	63	60	79	80
Noncontributory for employees; contributory for dependents	17	18	37	40	13	13
Surgical insurance	100	100	100	100	100	100
Covering employees and their dependents	100	100	100	100	100	100
Noncontributory plans	76	77	63	60	79	80
Noncontributory for employees; contributory for dependents	17	18	37	40	13	13
Medical insurance	95	96	87	92	97	97
Covering employees only	5	4	13	8	3	3
Covering employees and their dependents	95	96	87	92	97	97
Noncontributory plans	74	75	49	52	79	80
Noncontributory for employees; contributory for dependents	15	15	37	40	10	10
Major medical insurance	79	78	92	92	76	76
Covering employees only	21	22	8	8	24	24
Covering employees and their dependents	79	78	92	92	76	76
Noncontributory plans	20	21	15	15	22	22
Noncontributory for employees; contributory for dependents	18	19	30	32	16	16
Retirement plans	100	100	100	100	100	100
Pensions	100	100	100	100	100	100
Noncontributory plans	99	100	100	100	99	100

See footnotes at end of table.

Table 16. Health, insurance, and retirement plans—Continued

(Percent of production workers and office workers in synthetic fibers manufacturing establishments with specified health, insurance, and retirement plans,[1] United States and South, August 1976)

Type of plan	All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[2]	South	United States[2]	South	United States[2]	South
	Office workers					
All workers	100	100	100	100	100	100
Workers in establishments providing:						
Life insurance	100	100	100	100	100	100
Noncontributory plans	88	89	100	100	86	87
Accidental death and dismemberment insurance	69	69	100	100	64	63
Noncontributory plans	62	62	100	100	56	56
Sickness and accident insurance or sick leave or both[3]	100	100	100	100	100	100
Sickness and accident insurance	64	63	50	48	66	66
Noncontributory plans	39	38	50	48	37	37
Sick leave (full pay, no waiting period)	76	76	70	73	77	77
Long-term disability insurance	37	37	71	70	31	32
Noncontributory plans	16	16	–	–	18	19
Hospitalization insurance	100	100	100	100	100	100
Covering employees and their dependents	100	100	100	100	100	100
Noncontributory plans	74	74	71	69	74	75
Noncontributory for employees; contributory for dependents	12	12	29	31	9	9
Surgical insurance	100	100	100	100	100	100
Covering employees and their dependents	100	100	100	100	100	100
Noncontributory plans	74	74	71	69	74	75
Noncontributory for employees; contributory for dependents	12	12	29	31	9	9
Medical insurance	96	98	89	93	98	98
Covering employees only	4	2	11	7	2	2
Covering employees and their dependents	96	98	89	93	98	98
Noncontributory plans	71	73	60	63	73	75
Noncontributory for employees; contributory for dependents	11	11	29	31	7	8
Major medical insurance	76	75	94	93	73	72
Covering employees only	24	25	6	7	27	28
Covering employees and their dependents	76	75	94	93	73	72
Noncontributory plans	29	30	38	39	28	28
Noncontributory for employees; contributory for dependents	8	8	13	14	7	7
Retirement plans	100	100	100	100	100	100
Pensions	100	100	100	100	100	100
Noncontributory plans	99	99	100	100	99	99

[1] 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 the South.

[3] Unduplicated total of workers covered by sickness and accident insurance and sick leave shown separately.

Table 17. Other selected benefits

(Percent of production and office workers in synthetic fibers manufacturing establishments with formal provisions for funeral leave pay, jury-duty pay, and technological severance pay, United States and South, August 1976)

Type of benefits[1]	Production workers						Office workers					
	All establishments		Cellulosic fibers		Noncellulosic fibers		All establishments		Cellulosic fibers		Noncellulosic fibers	
	United States[2]	South	United States[2]	South	United States[2]	South	United States[2]	South	United States[2]	South	United States[2]	South
Workers in establishments with provisions for:												
Funeral leave pay	98	99	99	100	98	98	93	93	59	57	99	99
Jury-duty pay	99	100	99	100	100	100	94	94	59	57	100	100
Technological severance pay	30	29	68	66	22	21	46	45	71	70	41	41

[1] For definitions of items, see appendix A.

[2] Includes data for regions in addition to the South.

Appendix A. Scope and Method of Survey

Scope of survey

The survey included establishments primarily engaged in the manufacture of cellulosic manmade fibers and other synthetic organic fibers (noncellulosic) in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on textile processing equipment (industries 2823 and 2824 as defined in the 1967 edition of the *Standard Industrial Classification Manual*, prepared by the U.S. Office of Management and Budget.) Separate auxiliary units, such as central offices and research laboratories, were excluded. Also excluded from the survey were establishments primarily engaged in manufacturing glass fibers.

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

Products

Classification of establishments by industry was based on the principal type of fiber manufactured. For example, if 60 percent of the total value of an establishment's production was cellulosic fiber and 40 percent was noncellulosic fiber, all workers in that establishment were considered as producing cellulosic fiber.

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.

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.

Table A-1. Estimated number of establishments and employees within scope of survey and number studied, synthetic fibers industry, August 1976

Industry branch and region	Number of establishments[1]		Workers in establishments			
	Within scope of study	Actually studied	Within scope of study			Actually studied
			Total[2]	Production workers	Office workers	
All establishments						
United States[3]	60	42	81,254	62,793	4,759	64,219
South[4]	54	36	79,208	61,184	4,626	62,173
Cellulosic fibers establishments						
United States[3]	12	12	13,255	10,830	697	13,255
South[4]	10	10	12,475	10,198	666	12,475
Noncellulosic fibers establishments						
United States[3]	48	30	67,999	51,963	4,062	50,964
South[4]	44	26	66,733	50,986	3,960	49,698

[1] Includes only those establishments with 20 workers or more at the time of reference of the universe data.

[2] Includes executive, professional, office, and other workers in addition to the production worker category shown separately.

[3] Includes data for regions in addition to the South.

[4] The South as used in this study includes: Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

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

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 B 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, part-time, 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 *median* designates position; that is, one-half of the employees surveyed received more than this rate and one-half received less. 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 rate.

Method of wage payment

Tabulations by method of wage payment relate to the number of workers paid under the various time and incentive wage systems. Formal rate structures for time-rated workers provide single rates or a range of rates for individual job categories. In the absence of a formal rate structure, pay rates are determined primarily by the qualifications of the individual 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 practices

Data relate to shift practices of establishments during the payroll period studied and are presented in terms of the proportion of production workers actually employed under the conditions specified. Workers assigned to rotating shifts variously work on day, evening, and night shifts, and workers assigned to fixed shifts regularly work on their assigned shift. Workers assigned to oscillating shifts were of two groups: Those alternating between day and evening schedules, and those alternating between evening and night schedules.

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 one-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 workers' compensation and social security. Among plans included are those underwritten by a commercial insurance company and those paid directly by the employer from 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.

[1] The temporary disability insurance laws in California and Rhode Island do not require employer contributions.

Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field staff in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This classification permits the grouping of occupational wage rates representing comparable job content. Because of the 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.

Maintenance

Carpenter, maintenance

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

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.

Helper, maintenance trades

Assists one or more workers in the skilled maintenance trades, by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working areas, machines, and equipment; assisting worker by holding materials or tools: performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade. In some trades, the helper is confined to supplying, lifting, and holding materials and tools and cleaning working areas; and in others, the worker is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

Instrument repairer

Installs, maintains, adjusts, and repairs manual, pneumatic, electric, and/or electronic measuring, recording, and regulating instruments in a chemical plant. Work involves *most of the following*: Inspecting, testing, and adjusting instruments periodically, determining cause of trouble in

instruments not functioning properly and making necessary repairs or adjustments; disconnecting inaccurate or damaged instruments and replacing them; examining mechanism and cleaning parts; replacing worn or broken parts; assembling instruments and installing them on testing apparatus; and calibrating instruments to established standard.

Machinist, maintenance

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

Mechanic, general

Performs the work of two or more maintenance trades rather than specializing in only one trade or one type of maintenance work. In general, the work of a general mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

The classification includes workers who regularly perform two or more types of skilled maintenance work within a section or department of a large establishment, such as pipefitting, millwrighting, welding, machining, machine and equipment repairing, and carpentry, among others. It also includes workers who maintain and repair machines, mechanical and electrical equipment, and/or the structure of a small establishment where specialization in maintenance work is impractical. It *does not* however, include workers who only make minor repairs or adjustments.

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; aligning 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.

Pipefitter, maintenance

Installs or repairs water, steam, gas, or other types of pipe and pipe fittings in an establishment. Work involves *most of the following*: Laying out of work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machine; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and sizes of pipe required; making standard tests to determine whether finished pipes meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. *Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.*

Chemical preparation

Chemical operator, cellulosic fiber

Operates equipment in which raw materials are treated chemically to produce a solution from which rayon or acetate fibers are spun. Work consists of *most of the following*: Regulates the flow of materials by turning valves; observes and controls temperatures and time elements as prescribed; tends pumps, tanks, vessels, and other related equipment. May take batch samples for the testing laboratory.

Workers in this classification are usually designated according to their specific function, such as: Acid mixer, barratte operator, churn operator, correction man, and steeping-press operator.

Chemical operator, noncellulosic fiber

Controls the conversion of chemical intermediates to produce a solution for spinning noncellulosic fibers by operating one of several types of equipment such as autoclaves, reactors, retorts, etc. Observes a control board to determine the proper functioning of the chemical process as prescribed, recognizes and reports off-standard conditions, taking necessary corrective action if due to elements under

worker's control. Maintains proper flow of the intermediates and product by opening and closing valves, observes, records and controls temperature, and time elements, operates pumps, tanks, vessels, and other related equipment. May obtain samples for testing laboratory and keep prescribed records of production.

Workers in this classification are usually designated according to their specific functions, such as: Polymer preparation operator, solution operator, and salt-house operator.

Spinning

Jet handler

(Spinneret cleaner)

Cleans from spinnerets any gummy residue (left by spinning solution) to prevent clogging of the tiny holes through which solution is forced. Dismounts spinnerets from holders and washes in acid bath; blows holes clean with compressed air, examines spinnerets for defects; and remounts spinneret in holder.

Spinner, dry process

Tends spinning machine that converts a liquid spinning solution into a solid filament by the dry process method of spinning. Work involves *one or more of the following*: Correcting off-standard conditions as the spinning solution is forced through the spinneret and coagulated into a filament by warm air; wiping and spraying spinnerets regularly to insure an even flow of the solution; stringing up and establishing proper threadline by passing filaments through guides and attaching to the winding device; and doffing (removing) full spinning packages from the machine. Worker may also keep records and take samples for laboratory analysis. Where filaments are passed directly from spinnerets on one floor to draw (stretching) machines on floor below, workers on both floors (topmen and bottom men) are to be classified in this occupation.

Spinner, wet process

Tends spinning machine that forces liquid solution through tiny holes in the spinneret (metal disc) into a solidifying acid bath and forms the resulting filaments into a thread. Duties include *most of the following*: Collects ends of filaments from the solidifying bath to form an untwisted thread which is passed over a wheel, through guides, and attached to a winding device; removes (doffs) full spinning boxes; makes periodic inspections, repairing breaks as necessary.

Finishing

Creel tender

Tends creel mechanism of drawtwist machines or warpers by replacing empty packages of yarn or tow with full ones. Assists in stringing yarn from creel through guides to the drawtwist machine or warper; ties end of yarn on new package to end of yarn from exhausted package; inspects product as it is drawn from creel and reports off-standard conditions. May take samples and keep production records.

Drawtwist operator

(Drawwind operator)

Operates a drawtwist machine that draws and twists noncellulosic yarn from a spinning package. Work includes *most of the following*: Stocks machines with spinning bobbins; strings up positions by threading guides, wrapping rolls, and following standard procedures and practices; repairs breaks and inspects for off-standard positions; patrols assignment for threadline breaks and improper alinement; starts and doffs machines according to schedule. May keep production records.

Thrower (twister)

Tends machine that twists rayon or acetate yarn in plants where box or cake method of spinning is not used. Places full bobbins and empty spools on twisting (throwing) machine, starts end of thread from bobbin and spool, ties together ends of broken threads, and removes empty bobbins and full spools from machine.

Tow operator

Operates any of several types of machines processing tow (a ropelike collection of filaments) immediately after spinning and just before packing. Typical of such operations are the following: (1) *Take-up operator*—operates machine that takes tow from the conveyor belt of the spinning machine; (2) *crimper operator*—operates machine that places a crimp in the tow to enable the fibers to be twisted into yarn; (3) *piddler machine operator*—operates a machine whose mechanism swings back and forth, lapping the tow into transport cans; and (4) *cutter operator*—operates machine that cuts crimped tow into specified lengths.

Warper operator

(Beamer)

Operates machine that draws yarn from many individual

packages and winds the strands parallel onto beams to form a warp. Work involves *most of the following*: Threads ends of individual strands of yarn through guides, drop wires, and comb of machine, following directions of a drawing to obtain a prescribed arrangement; fastens ends of all strands to the beam mounted in the machine; operates the powered winding mechanism to draw the yarn from the packages and wind it on the beam; and pieces together broken ends of yarn by twisting or tying the ends together. May also tend creel mechanism of machine.

Winder, yarn

Tends the operation of one or more of the various type machines used to wind twisted yarn from one form to another for shipment or to facilitate handling in later processing. Work involves: Placing packages of yarn on reels or spindles of machine; threading yarn through the various guides; piecing-up broken ends by twisting or tying the two ends together; removing fully wound packages and replacing with empty bobbins, cones, tubes, or quills.

Inspection and testing

Laboratory assistant

(Technician; laboratorian; chemical control operator)

Performs standard and routine chemical laboratory tests or special analytical control work under the direction of a chemist or foreman. Among the types of tests that may be carried on by the laboratory assistant to determine properties of materials are viscosity tests, specific gravity tests, volumetric analysis, and calorimetric analysis. Keeps accurate records of test observations and reports to supervisor. Classification does not include workers performing physical tests. See *Physical-test operator.*

Physical test operator

Performs standard and routine *physical* tests to determine the specific characteristics of continuous filament yarn, staple yarn, or tow. Uses instruments and specifically designed machines, under the supervision of the laboratory foreman, to make the following types of tests: Denier, tenacity, twist determination, staple fiber length, crimp count on tow and staple, tare weight, moisture analysis, filament count, and abrasion resistance.

Material movement and handling

Laborer, material handling

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

A worker employed in a warehouse or manufacturing plant 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 to proper location. *Longshore workers, who load and unload ships, are excluded.* If primary duty is to operate power truck, classify as power-truck operator.

Stock clerk

Receives, stores, and issues equipment, material, merchandise, or tools in a stockroom or storeroom. Work involves *a combination of the following*: Checking incoming orders; storing supplies; applying identifications to articles; issuing supplies; taking periodic inventory or keeping perpetual inventory; making up necessary reports; requesting or ordering supplies when needed. *Stockroom laborers, tool crib attendants, and employees who supervise stock clerks and laborers are excluded.*

Power-truck operator

Operates a manually controlled gasoline- or electric-powered 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:

Forklift operator

Power-truck operator, other than forklift

Custodial

Guard

Performs routine police duties, either at fixed post or on tour, maintaining order, using arms or force where necessary. *Includes gate-men, who are stationed at gate and check on identity of employees and other persons entering.*

Janitor, porter, or cleaner

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

Industry Wage Studies

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

Manufacturing

Basic Iron and Steel, 1972. BLS Bulletin 1839
Candy and Other Confectionery Products, 1975. BLS Bulletin 1939
Cigar Manufacturing, 1972. BLS Bulletin 1796
Cigarette Manufacturing, 1976. BLS Bulletin 1944
Corrugated and Solid Fiber Boxes, 1976. BLS Bulletin 1921
Fabricated Structural Steel, 1974. BLS Bulletin 1935
Fertilizer Manufacturing, 1971. BLS Bulletin 1763
Flour and Other Grain Mill Products, 1972. BLS Bulletin 1803
Fluid Milk Industry, 1973. BLS Bulletin 1871
Footwear, 1975. BLS Bulletin 1946
Hosiery, 1973. BLS Bulletin 1863
Industrial Chemicals, 1971. BLS Bulletin 1768
Iron and Steel Foundries, 1973. BLS Bulletin 1894
Leather Tanning and Finishing, 1973. BLS Bulletin 1835
Machinery Manufacturing, 1974-75. BLS Bulletin 1929
Meat Products, 1974. BLS Bulletin 1896
Men's and Boys' Separate Trousers, 1974. BLS Bulletin 1906
Men's and Boys' Shirts (Except Work Shirts) and Nightwear, 1974. BLS Bulletin 1901
Men's and Boys' Suits and Coats, 1976. BLS Bulletin 1962
Miscellaneous Plastics Products, 1974. BLS Bulletin 1914
Motor Vehicles and Parts, 1973-74. BLS Bulletin 1912
Nonferrous Foundries, 1975. BLS Bulletin 1952
Paints and Varnishes, 1976. BLS Bulletin 1973
Paperboard Containers and Boxes, 1970. BLS Bulletin 1719
Petroleum Refining, 1976. BLS Bulletin 1948
Pressed or Blown Glass and Glassware, 1975. BLS Bulletin 1923
Pulp, Paper, and Paperboard Mills, 1972. BLS Bulletin 1844
Shipbuilding and Repairing, 1976. BLS Bulletin 1968
Southern Sawmills and Planing Mills, 1969. BLS Bulletin 1694
Structural Clay Products, 1975. BLS Bulletin 1942
Synthetic Fibers, 1976. BLS Bulletin 1975

Manufacturing–Continued

Textile Dyeing and Finishing, 1976. BLS Bulletin 1967
Textiles, 1975. BLS Bulletin 1945
Wages and Demographic Characteristics in Work Clothing Manufacturing, 1972. BLS Bulletin 1858
West Coast Sawmilling, 1969. BLS Bulletin 1704
Women's and Misses' Coats and Suits, 1970. BLS Bulletin 1728
Women's and Misses' Dresses, 1974. BLS Bulletin 1908
Wood Household Furniture, Except Upholstered, 1974. BLS Bulletin 1930

Nonmanufacturing

Appliance Repair Shops, 1975. BLS Bulletin 1936
Auto Dealer Repair Shops, 1973. BLS Bulletin 1876
Banking, 1973. BLS Bulletin 1862
Bituminous Coal Mining, 1967. BLS Bulletin 1583
Communications, 1975. BLS Bulletin 1954
Contract Cleaning Services, 1974. BLS Bulletin 1916
Contract Construction, 1973. BLS Bulletin 1911
Crude Petroleum and Natural Gas Production, 1972. BLS Bulletin 1797
Department Stores, 1973. BLS Bulletin 1869
Educational Institutions: Nonteaching Employees, 1968-69. BLS Bulletin 1671
Electric and Gas Utilities, 1972. BLS Bulletin 1834
Hospitals, 1975-76. BLS Bulletin 1949
Hotels and Motels, 1973. BLS Bulletin 1883
Laundry and Cleaning Services, 1968. BLS Bulletin 1645[1]
Life Insurance, 1971. BLS Bulletin 1791
Metal Mining, 1972. BLS Bulletin 1820
Motion Picture Theaters, 1966. BLS Bulletin 1542[1]
Nursing Homes and Related Facilities, 1976. BLS Bulletin 1964
Scheduled Airlines, 1975. BLS Bulletin 1951
Wages and Tips in Restaurants and Hotels, 1970. BLS Bulletin 1712

[1] Bulletin out of stock.

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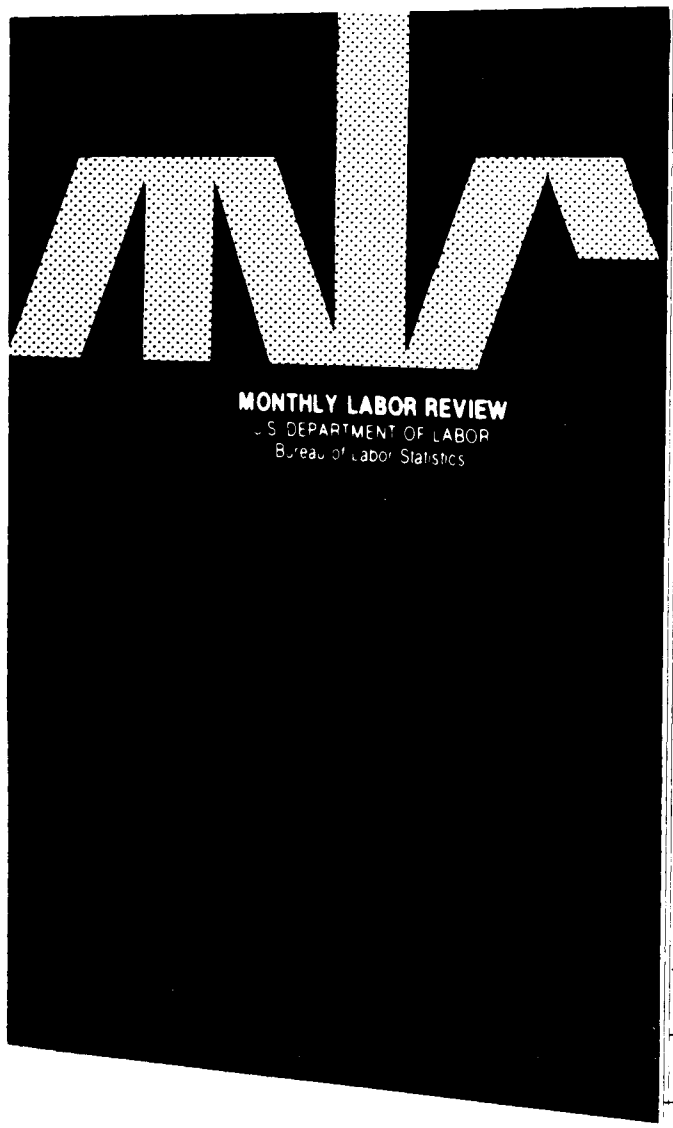

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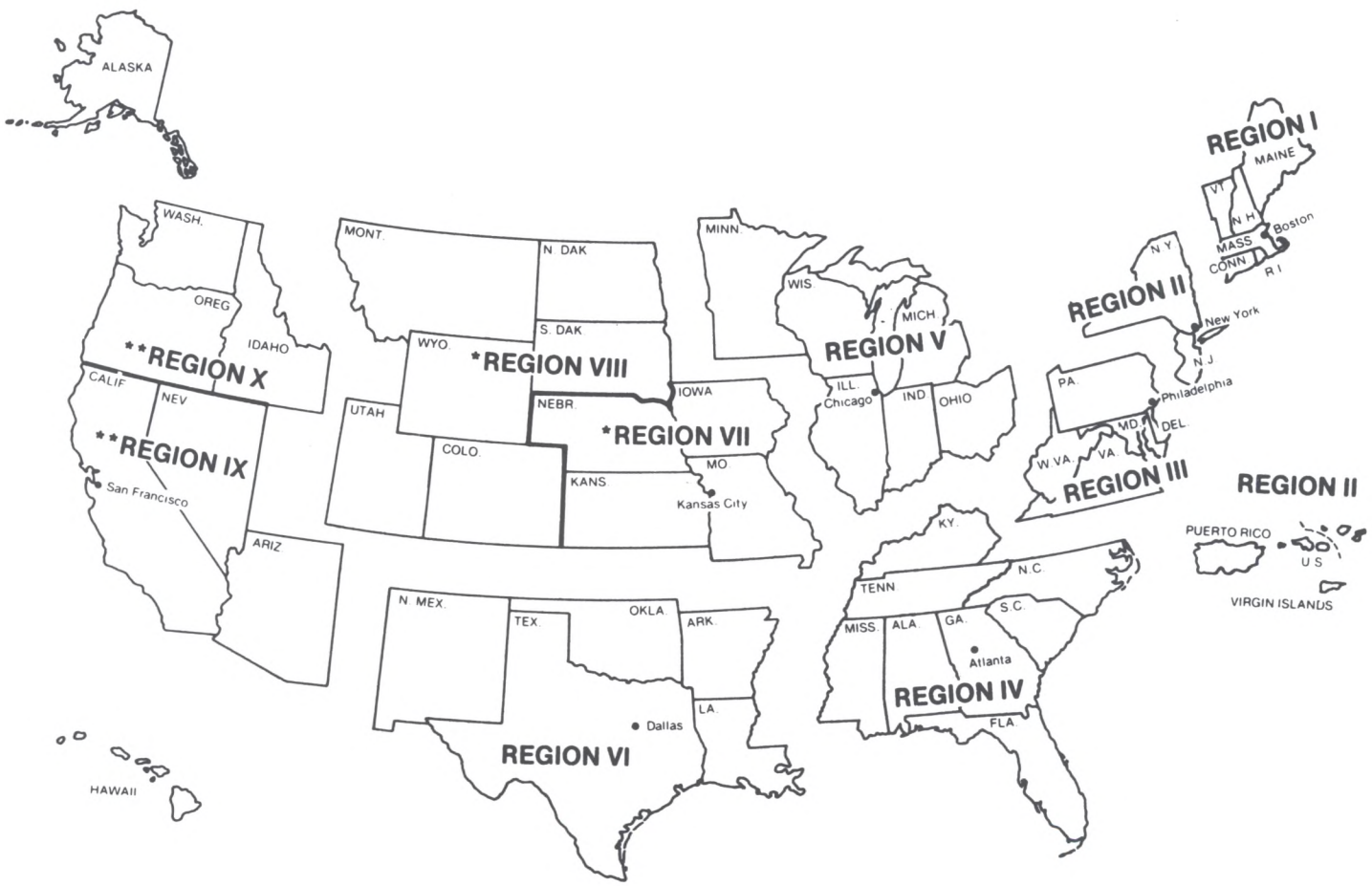

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