1963 CENSUS OF MANUFACTURES

DISTILLATE AND RESIDUAL FUEL OIL CONSUMED IN MANUFACTURING INDUSTRIES: 1962

(MC63(1) - 7.1 SUPPLEMENT)

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MC63(1)-7.1(Supplement)

Distillate and Residual Fuel Oil Consumed in Manufacturing Industries: 1962

Supplementary data for tables 4, 6, and 7 in the report "Fuels and Electric Energy Consumed in Manufacturing Industries: 1962," MC63(1)-7

U.S. DEPARTMENT OF COMMERCE
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Within the Industry Division, the management of the Annual Survey of Manufactures was the responsibility of Elmer S. Biles, Assistant Chief for Program Implementation, assisted by Robert E. Crowther. Edward A. Robinson, Assistant Chief for Economic Research, had over-all responsibility for developing concepts and planning the content of the Survey. Louis J. Owen, Assistant Chief for Production and Process Statistics, coordinated the review of the product class shipments data and, assisted by Kenneth R. Brimmer, developed the statistics on consumption of fuels and electric energy. The aspects of sample design, estimation techniques, and variance formulas were carried out by Donald F. Clark under the supervision of Jack L. Ogus, Assistant Chief for Research and Methodology.

The review and analysis of the data from an industry standpoint was carried out in 9 commodity sections under the technical guidance of the following sector heads: Willis K. Jordan, Foods, Textiles, and Apparel; Cyril M. Wildes, Chemicals and Wood Products; and Paul F. Berard, Metals and Metal Products. The chiefs of these commodity sections are Charles H. W. Sedgewick, Foods; Robert J. Nealon. Textiles; Charles L. Kincannon (acting chief), Apparel and Leather; Kenneth E. McBeth, Lumber and Wood Products; Lonnie M. Conner (acting chief), Paper, Printing, and Publishing; Reese R. Morgan, Chemicals and Petroleum Products; Malcolm E. Bernhardt, Metals; Keith B. Willis, Machinery; and Dale W. Gordon (acting chief), Electrical Machinery and Transportation Equipment.

The application of the system of industrial classification of establishments was performed by William Cooper, Industry and Commodity Classification. Within the Industry Division, the preparation of the final manuscript for printing was the responsibility of Angela R. Daly.

In the Systems Division, systems and procedures were developed under the direction of Sol Dolleck, Chief, and Eugene L. Wendt, Assistant Chief for Periodic Censuses. The computer programming was planned and supervised by Mary H. Johnson, Roger O. Lepage, and Stephan Potemkin. Clerical procedures were developed by Evelyn V. Williams under the direction of Morris Gorinson. Quality control plans and procedures were developed by Maxwell D. Jeane. Clerical and electronic data processing and related operations were performed in the Processing Division under the direction of M. Douglas Fahey, Chief; James W. Shores, Assistant Chief for Electronic Data Processing Operations, and E. Richard Bourdon, Assistant Chief for Processing Operations. The clerical work was supervised by Jerry S. Cooper.

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CONTENTS OF SUPPLEMENT

This report, based upon a survey on Census Form MC-D-12 for 1962, presents statistics on fuel oil consumed by manufacturing establishments during 1962. This is a supplement to the previously published report, "Fuels and Electric Energy Consumed in Manufacturing Industries: 1962, MC63 (1)-7," and separates the fuel-oil-consumed data shown in that release into its components of distillate and residual oil.

Both quantity and cost figures are shown for 1962 by selected industries (supplemental table 4), by State (supplemental table 6), and by selected standard metropolitan statistical areas (supplemental table 7). These tables differ from those appearing in the original "fuels consumed" publication to the extent that certain geographic and industry detail has been deleted, particularly in table 7 where the separation between distillate and residual fuel oil could not be shown without disclosing individual company data.

DESCRIPTION OF SURVEY

MC-D-12 Survey.—Information on fuels and electric energy was collected in a special sample survey, MC-D-12, "Supplementary Inquiries for 1962," conducted as a part of the 1963 Census of Manufactures, in order to spread the workload of both respondents and the Census Bureau with regard to the 1963 economic censuses program. Form MC-D-12 was mailed to the approximately 60,000 manufacturing establishments included in the 1962 Annual Survey of Manufactures panel (see below) and about 1,000 additional respondents in 14 selected industries. The industry classification assigned to each "annual survey" establishment in the MC-D-12 Survey was the same as that used in tabulating the 1962 Annual Survey of Manufactures, whereas 1958 (census) industry codes were used for the supplemental 14-industry panel of respondents. Other related information, such as the sample weight and geographic code, are identical for both the annual survey and the MC-D-12 Survey. Related data on the use of fuels and electricity in manufacturing, such as number of production workers, man-hours, and value of shipments, appear in the 1962 Annual Survey of Manufactures report. Data showing horsepower of prime movers and electric motors in manufacturing establishments were also obtained in the MC-D-12 Survey and are shown in the report, "Horsepower of Power Equipment Available in Manufacturing Industries, December 31, 1962."

Annual Survey of Manufactures.—The reporting panel for the 1962 Annual Survey is a probability sample. It was selected from the 1958 Census of Manufactures lists supplemented by:

(a) New manufacturing companies that were provided by the Bureau of Old-Age and Survivors Insurance (BOASI) each year after 1958, and

(b) New plants that were acquired or constructed by companies in the sample. These additions were obtained by sending each multi-unit company in the panel a list of all the plants it owned or controlled (based on our records). The respondent was instructed to correct this list (Form MA-151, "Listing of Manufacturing Establishments").

Important features of the earlier Annual Survey of Manufactures sample designs were carried forward to the new sample. As in the previous surveys, companies rather than establishments were defined as the sampling units (although separate reports were required for each establishment of the selected companies); all companies with one or more establishments having more than 100 employees (or more than 250 employees in the apparel and printing and publishing industries) were included with certainty; smaller companies were sampled with probabilities proportional to assigned measures of size.

The present sample includes about 60,000 establishments compared with the 50,000 included in the 1955 to 1957 annual surveys. In addition to enlarging the sample, changes were introduced in the method for assigning measures of size and in the technique for selecting the sample companies after they had all been assigned probabilities of selection.

The measure of size assigned to each company depended upon the product-class shipments values its establishments reported in the 1958 Census, whereas the 1955 to 1957 annual survey measures of size were based on the amount of salaries and wages and the 4-digit industry classification of establishments. Companies reporting product classes that historically exhibited considerable year-to-year variability were assigned relatively large measures of size. Those that reported only stable product classes were assigned relatively small measures of size. Within each product class, the size measure also varied directly with the dollar amount shipped.

DEFINITION OF MANUFACTURING ESTABLISHMENTS

Following previous census procedures, annual survey data are collected on reports received from individual manufacturing establishments. The term "establishment" denotes a single plant or factory in which manufacturing

operations are performed. A company that operates in more than one location is required to submit a separate establishment report for each location. In some instances, companies engaged in distinctly different lines of activity at one location are requested to submit separate reports for these activities if the plant records permit such a separation and the operations are substantial in size. For single-establishment companies, the reporting establishment is identical with the company. Some 256,000 of the approximately 298,000 manufacturing establishments in the United States are operated by single-establishment companies. In addition, there are approximately 13,000 multiunit companies that operate two or more manufacturing establishments. These multiestablishment firms operate somewhat more than 40,000 manufacturing establishments.

The Annual Survey of Manufactures, for all years since its inception in 1949, and the 1958, 1954, and 1947 censuses include only establishments with one or more employees at any time during the year. Thus, manufacturing establishments operated by individual proprietors or partners with no paid employees are excluded. Although there were over 52,000 establishments with no paid employees in 1958, they accounted for less than 1 percent of the total value of shipments of all manufacturing industries in that year.

DEFINITION OF MANUFACTURING INDUSTRIES

The Annual Survey of Manufactures follows the definitions of manufacturing industries contained in the 1957 revision of the Standard Industrial Classification Manual (SIC). A full description of each of these separate industries is published in the 1958 Census of Manufactures volumes.

The SIC is the classification system used by all Federal statistical agencies, by most State agencies, and many private organizations. There is no other industrial classification system in widespread use, nor is there any other general-purpose system that is described in detail in official manuals or other published documents. Awareness of the SIC by business analysts, executives, statisticians, research scholars, and others has grown rapidly and will continue to increase particularly in view of the adaptability of the decimal numeric system in mechanical processing.

The SIC is an industrial classification of the total economy. It divides all activities into broad industrial divisions (manufacturing, mining, retail, agriculture, etc.). It further subdivides each division into major industry groups, then into industry groups, and finally into detailed industries. The numbering system provides flexibility, permitting use of classification at various levels of detail according to the specific needs and uses desired.

The manual defines manufacturing as the mechinical or chemical transformation of inorganic or organic substances into new products. The assembly of component parts or products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment.

An industry consists of a group of establishments that are primarily engaged in the same or similar lines of economic activity. In the manufacturing field, the line of activity is usually defined in terms of the types of products made, although in some instances the determination is based on materials consumed or process of manufacture.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Each of the establishments covered in the census was classified in one of approximately 430 manufacturing industries in accordance with the industry definitions embodied in the SIC system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. The product groupings from which industry classifications are derived are based on such considerations as whether they are typically produced by the same establishment, similarity of manufacturing processes, types of material used, types of customers, and the like. The group of products assigned to an industry is said to be "primary" to that industry. Accordingly, an establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. In a few instances, however, the industry classification of an establishment is determined not only by the products it makes but also by the processes employed in making those products.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this

extent. The general statistics (employment, inventories, value added by manufacture, etc.) shown for an industry, therefore, reflect not only the primary activities of the establishment in that industry but also their activities in the manufacture of secondary products and, in some instances, their auxiliary activities as well. For a description of each of the manufacturing industries and (1) the extent to which establishments in each manufacturing industry specialized in producing only the primary products of the industry and (2) the proportion of the U.S. total value of output of these primary products accounted for by the establishments of the industry, see "Appendix B, Industry Descriptions," 1958 Census of Manufactures, volumes I and III.

A special problem arises in the assignment of industry classifications to establishments whose principal activities change from one year to the next. Strict application of the principal-activity rule would result in the shifting of plants (and their figures on employment, cost of materials, value of shipments, etc.) from one industry to another regardless of the magnitude of the change. In order to minimize possible distortions from one report period to the next and at the same time compile current industry data, a modification was made for the annual surveys of manufactures in the general rule of classifying establishments on the basis of principal products reported in the current period. Small establishments (generally those with fewer than 100 employees) were retained in the industry in which they were classified in the 1958 census. Larger establishments that showed a change in their major activity from the previous period were also retained in their previous year's classification unless the shift in major activity was significant. This procedure results in greater comparability of the 1958, 1959, 1960, 1961, and 1962 general statistics.

Differences in the integration of production processes, types of operations, and alternatives in types of materials used should be considered when relating the general items (employment, value added, value of shipments) to the data on fuels and electric energy consumed.

STANDARD METROPOLITAN STATISTICAL AREAS

Standard metropolitan statistical areas (SMSA's) are integrated economic and social units with a large volume of daily travel and communication between the central city (having 50,000 or more population) and outlying parts of the area. Each area (except in New England) consists of one or more whole counties. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas were defined by the Federal Committee on Standard Metropolitan Statistical Areas of the U.S. Bureau of the Budget for general-purpose use throughout the Federal Government in presenting economic and social data. In the New England States, similar integration criteria have been applied in defining SMSA's on a city and town basis because towns are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of a considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial". It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the area title may include one or two additional city names.

The SMSA's in this report are those that were defined in 1959 at the time the sample was selected for the annual survey. A few of the titles and descriptions may differ slightly from the definitions in use in 1962.

SAMPLE PANEL

The reporting panel for this survey is basically the same as that used for the 1962 Annual Survey of Manufactures. The annual survey panel consisted of a probability sample drawn from (a) the list of all manufacturing establishments included in the 1958 Census of Manufactures; (b) lists of new manufacturing companies obtained from the Bureau of Old-Age and Survivors Insurance; and (c) any new plants acquired or constructed by companies selected for the sample. (For further details, see 1962 Annual Survey of Manufactures, "Introduction.") In order to reduce the standard error of estimates for selected industries, the Annual Survey of Manufactures panel of about 60,000 establishments was supplemented by selecting about 1,000 additional establishments classified in 14 specified industries. All of these relatively important fuel consuming industries had relatively high sampling errors associated with their

1961 Annual Survey fuel cost estimates. The 14 selected 4-digit industries from which establishments were chosen as a supplemental sample are as follows:

Industry	Title
2023	Condensed and evaporated milk
2046	Wet corn milling
2096	Shortening and cooking oils
2231	Weaving, finishing mills, wool
2261	Finishing plants, cotton
2816	Inorganic pigments
2952	Asphalt felts and coatings
3111	Leather tanning and finishing
3251	Brick and structural tile
3259	Structural clay products, n.e.c.
3274	Lime
3341	Secondary nonferrous metals
3431	Vitreous plumbing fixtures
3729	Aircraft equipment, n.e.c.

Establishments classified in these industries were assigned probabilities of selection dependent on their total employment and 4-digit industry classification in 1958. Based on these probabilities, a new sample of establishments was selected independently of the Annual Survey of Manufactures panel. Those establishments in the new sample which were not already included in the annual survey panel constituted the supplementary panel. Establishments in this supplementary panel were assigned their 1958 industry and geographic codes.

In order to develop unbiased estimates for these 14 industries, composite weights were assigned to reflect that each establishment in these industries (with the exception of new manufacturing establishments which commenced operations after 1958) had a dual chance of selection, once for the Annual Survey of Manufactures, and once in the supplementary sampling operation. The formula for the weights assigned was as follows:

$$W_c = \frac{W_1 \quad W_2}{W_1 + W_2 - 1}$$

Where W_c = composite weight

W_1 = weight associated with probability of selection in Annual Survey of Manufactures

W_2 = weight associated with probabiltiy of selection in supplemental sampling operation

All establishments other than those in the supplemental panel carry the identical sample weights assigned for the Annual Survey of Manufactures. Furthermore, the geographic and industry codes also assigned in this survey are identical with those used for tabulating the 1962 Annual Survey of Manufactures. These identical characteristics of the two surveys permit the correlation of data appearing in this report with information appearing in the 1962 Annual Survey of Manufactures publications as well as with the information on horsepower of available power equipment, also tabulated from the MC-D-12 survey.

ESTIMATING PROCEDURE

The statistics presented in this report are reciprocal estimates obtained by inflating each establishment's reported data by its sample weight and summing the inflated figures. Algebraically these estimates may be expressed as follows:

$$X_h^1 = \sum_{i=1}^{n_h} W_{hi} \quad X_{hi}$$

Where X_h^1 is the estimated total for the tabulation cell h

X_{hi} is the 1962 reported figure for establishment i in tabulation cell h

W_{hi} is the assigned weight for that establishment

n_h is the number of establishments in tabulation cell h

QUALIFICATIONS OF THE PUBLISHED DATA

All figures published in this report should be regarded as approximate rather than exact measures. The estimates differ from the true figures because of sampling variations, reporting errors, and processing errors. The magnitudes of the sampling variations for total fuel costs are smaller, while those for quantities are either approximately the same or slightly larger.

Measures of the reporting and processing errors are unavailable. However, estimates which were subject to large errors from such sources were detected and corrected in the process of Census Bureau review of the data. Other specific qualifications of the published data are indicated in the appropriate footnotes to the tables.

SUPPLEMENTAL TABLE 4. Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	All industries, total	195,615	623,341	44,730	190,917	150,885	432,424
20	Food and kindred products	21,045	72,210	5,445	25,794	15,600	46,416
201	Meat products	1,990	7,095	565	2,713	1,425	4,382
2011	Meat packing plants	1,302	4,485	345	1,637	957	2,848
2013	Prepared meat	368	1,309	126	570	242	739
2015	Poultry dressing plants	320	1,301	94	506	226	795
202	Dairy products	4,303	16,474	1,381	6,716	2,922	9,758
2021	Creamery butter	741	2,877	114	597	627	2,280
2022	Natural cheese	380	1,681	178	923	201	758
2023	Condensed and evaporated milk	462	1,492	88	357	373	1,135
2024	Ice cream and frozen desserts	261	1,054	130	655	130	399
2025	Special dairy products	22	78	3	1	19	77
2026	Fluid milk	2,438	9,292	869	4,183	1,569	5,109
203	Canned and frozen foods	3,303	11,407	656	3,146	2,648	8,261
2031	Canned and cured seafoods	305	1,563	150	996	155	567
2032	Canned specialties	304	1,023	11	61	293	962
2033	Canned fruits and vegetables	1,551	5,165	327	1,258	1,225	3,907
2034	Dehydrated fruits and vegetables	39	180	11	64	28	116
2035	Pickles and sauces	190	708	51	255	139	453
2036	Fresh or frozen packaged fish	83	380	52	290	31	90
2037	Frozen fruits and vegetables	831	2,388	54	222	777	2,166
204	Grain mill products	1,350	5,039	385	1,936	965	3,103
2041	Flour and meal	141	532	67	294	74	238
2042	Prepared animal feeds	955	3,522	238	1,201	717	2,321
2043	Cereal preparations	40	140	5	22	35	118
2045	Blended and prepared flour	76	215	1	5	76	210
2046	Wet corn milling	138	630	74	414	63	216
205	Bakery products	1,931	7,702	905	4,466	1,026	3,236
2051	Bread and related products	1,726	6,972	836	4,124	890	2,848
2052	Biscuit and crackers	205	730	69	342	136	388
206	Sugar	2,311	5,813	111	369	2,201	5,444
2061	Raw cane sugar	356	1,108	(S)	(S)	(S)	(S)
2062	Cane sugar refining	1,504	3,531	20	83	1,484	3,448
2063	Beet sugar	451	1,174	(S)	(S)	(S)	(S)
207	Candy and related products	662	2,080	104	444	559	1,636
2071	Confectionery products	504	1,599	49	229	456	1,370
2072	Chocolate and cocoa products	112	354	(S)	(S)	(S)	(S)
2073	Chewing gum	46	127	(S)	(S)	(S)	(S)
208	Beverages	2,380	7,486	519	2,371	1,861	5,115
2082	Malt liquors	1,020	2,660	14	56	1,006	2,604
2083	Malt	69	299	29	134	41	165
2084	Wines and brandy	172	551	49	194	123	357
2085	Distilled liquor, except brandy	170	431	5	23	166	408
2086	Bottled and canned soft drinks	547	2,386	316	1,588	232	798
2087	Flavorings	401	1,159	108	376	293	783
209	Other food preparations	2,815	9,114	820	3,633	1,995	5,481
2092	Soybean oil mills	150	566	57	264	93	302
2094	Grease and tallow	772	2,612	321	1,386	452	1,226
2095	Animal oils, n.e.c.	306	933	-	-	306	933
2096	Shortening and cooking oils	560	1,455	9	39	550	1,416
2097	Manufactured ice	48	219	47	214	1	5
2098	Macaroni and spaghetti	60	172	9	35	51	137
2099	Food preparations, n.e.c.	762	2,742	353	1,577	408	1,165
21	Tobacco products	374	1,237	57	220	316	1,017
2111	Cigarettes	153	509	(S)	(S)	(S)	(S)
2121	Cigars	65	213	32	119	33	94
2131	Chewing and smoking tobacco	16	55	(S)	(S)	(S)	(S)
2141	Tobacco stemming and redrying	140	460	16	65	124	395

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
22	Textile mill products	9,945	30,001	1,321	5,584	8,624	24,417
2211	Weaving mills, cotton	465	1,425	103	366	362	1,059
2221	Weaving mills, synthetics	472	1,527	95	414	377	1,113
2231	Weaving, finishing mills, wool	1,417	4,073	97	353	1,321	3,720
2241	Narrow fabric mills	237	834	69	289	168	545
225	Knitting mills	1,520	5,344	339	1,595	1,181	3,749
2252	Seamless hosiery mills	397	1,532	115	499	281	1,033
2253	Knit outerwear mills	257	965	87	438	171	527
2254	Knit underwear mills	92	334	32	153	60	181
2256	Knit fabric mills	630	1,910	30	142	600	1,768
2259	Knitting mills, n.e.c.	33	118	12	42	22	76
226	Textile finishing, except wool	3,342	9,082	342	1,310	3,000	7,772
2261	Finishing plants, cotton	1,735	4,869	174	804	1,561	4,065
2262	Finishing plants, synthetics	857	2,249	147	399	710	1,850
227	Floor covering mills	571	1,814	40	195	531	1,619
2271	Woven carpets and rugs	316	901	12	55	304	846
2272	Tufted carpets and rugs	218	793	24	115	194	678
228	Yarn and thread mills	566	1,798	72	328	493	1,470
2281	Yarn mills, except wool	176	637	51	228	124	409
2282	Throwing and winding mills	48	154	(S)	(S)	(S)	(S)
2283	Wool yarn mills	203	629	9	42	194	587
2284	Thread mills	139	378	(S)	(S)	(S)	(S)
229	Miscellaneous textile goods	1,354	4,104	164	734	1,190	3,370
2294	Processed textile waste	88	275	11	69	76	206
2295	Coated fabric, not rubberized	597	1,666	42	190	555	1,476
2298	Cordage and twine	43	128	10	31	33	97
2299	Textile goods, n.e.c.	34	123	17	78	17	45
23	Apparel and related products	1,140	4,690	517	2,610	624	2,080
2311	Men's and boys' suits and coats	168	689	56	300	112	389
232	Men's and boys' furnishings	192	895	107	557	85	338
2321	Men's dress shirts and nightwear	87	407	63	313	24	94
2322	Men's and boys' underwear	31	124	5	24	27	100
2327	Separate trousers	37	185	19	115	18	70
2328	Work clothing	22	107	10	49	12	58
2329	Men's and boys' clothing, n.e.c.	12	57	7	41	4	16
233	Women's and misses' outerwear	174	928	121	677	54	251
2335	Dresses	58	325	45	264	13	61
2337	Women's suits, coats and skirts	62	305	44	233	18	72
234	Women's undergarments	147	565	68	326	79	239
2341	Women's and children's underwear	76	351	55	274	21	77
2342	Corsets and allied garments	71	214	12	52	58	162
236	Children's outerwear	55	277	38	203	17	74
2369	Children's outerwear, n.e.c.	24	115	10	53	14	62
238	Miscellaneous apparel	36	186	16	100	20	86
239	Fabricated textiles, n.e.c.	191	673	75	345	115	328
2392	Housefurnishing, n.e.c.	60	224	9	51	51	173
24	Lumber and wood products	3,843	17,706	2,447	12,737	1,396	4,969
2411	Logging camps and contractors	894	4,765	725	4,057	169	708
242	Sawmills and planing mills	1,963	9,331	1,364	7,017	599	2,314
2421	Sawmills and planing mills	1,868	8,945	1,315	6,771	553	2,174
243	Millwork and related products	486	1,714	159	691	327	1,023
2431	Millwork plants	93	460	61	317	32	143
2432	Veneer and plywood plants	366	1,112	78	256	288	856

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
24	Lumber and wood products—Continued						
244	Wooden containers	57	247	29	145	28	102
2441	Nailed wooden boxes and shook	39	175	12	78	27	97
249	Miscellaneous wood products	443	1,649	170	827	273	822
2491	Wood preserving	137	433	24	104	113	329
2499	Wood products, n.e.c.	306	1,216	145	723	160	493
25	Furniture and fixtures	882	3,598	329	1,691	552	1,907
251	Household furniture	547	2,311	239	1,226	309	1,085
2511	Wood furniture not upholstered	217	935	104	552	113	383
2512	Wood furniture, upholstered	147	590	72	348	76	242
2514	Metal household furniture	107	449	26	124	81	325
252	Office furniture	126	429	22	94	104	335
2522	Metal office furniture	111	379	20	86	90	293
2531	Public building furniture	49	215	15	86	34	129
254	Partitions and fixtures	106	458	39	213	68	245
259	Furniture and fixtures, n.e.c.	53	185	15	72	37	113
26	Paper and allied products	31,105	80,189	2,578	8,431	28,527	71,758
2611	Pulp mills	3,447	8,356	47	159	3,400	8,197
2621	Paper mills, except building	11,368	29,472	678	2,090	10,690	27,382
2631	Paperboard mills	11,218	26,849	1,034	2,746	10,185	24,103
264	Paper and paperboard products	1,732	5,487	334	1,527	1,399	3,960
2641	Paper coating and glazing	437	1,354	43	197	394	1,157
2642	Envelopes	60	236	20	83	40	153
2643	Bags, except textile bags	202	688	43	216	159	472
2645	Die cut paper and board	93	280	9	35	84	245
2646	Pressed and molded pulp goods	313	1,165	131	650	182	515
2649	Paper and board products, n.e.c.	612	1,715	88	344	524	1,371
265	Paperboard containers and boxes	2,301	7,321	365	1,549	1,937	5,772
2651	Folding paperboard boxes	237	850	64	312	173	538
2652	Set-up paperboard boxes	60	240	24	117	36	123
2653	Corrugated shipping containers	1,665	5,167	228	935	1,438	4,232
2654	Sanitary food containers	212	661	17	72	195	589
2655	Fiber cans, tubes, drums, etc.	127	403	32	113	94	290
2661	Building paper and board mills	1,038	2,704	121	360	917	2,344
27	Printing and publishing	1,438	5,794	488	2,465	950	3,329
2711	Newspapers	330	1,422	161	806	169	616
2721	Periodicals	40	175	22	121	18	54
273	Books	174	628	52	233	123	395
2731	Books, publishing and printing	44	164	19	74	25	90
2732	Book printing	131	464	33	159	98	305
2741	Miscellaneous publishing	24	102	8	44	16	58
275	Commercial printing	704	2,794	162	877	542	1,917
2751	Printing letterpress	521	1,970	93	541	427	1,429
2761	Manifold business forms	55	216	19	87	36	129
2771	Greeting cards	32	125	17	72	15	53
278	Bookbinding and related work	44	170	16	75	29	95
2782	Blankbooks; looseleaf binders	35	141	15	73	19	68
28	Chemicals and allied products	19,866	57,204	4,087	15,599	15,780	41,605
281	Basic chemicals	9,963	28,397	2,081	7,456	7,883	20,941
2812	Alkalies and chlorine	470	1,263	150	487	320	776
2813	Industrial gases	309	1,079	152	535	157	544
2815	Intermediate coal tar products	1,598	4,198	112	457	1,486	3,741
2816	Inorganic pigments	1,800	5,473	306	1,198	1,494	4,275
2818	Organic chemicals, n.e.c.	2,742	7,273	351	1,356	2,391	5,917
2819	Inorganic chemicals, n.e.c.	2,720	8,420	796	3,106	1,924	5,314

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
28	Chemicals and allied products—Continued						
282	Fibers, plastics, rubbers	2,951	7,842	419	1,602	2,532	6,240
2821	Plastics materials	2,086	5,585	321	1,180	1,764	4,405
2823	Cellulosic man-made fibers	240	658	14	70	225	588
283	Drugs	2,152	5,565	437	1,330	1,714	4,235
2833	Medicinals and botanicals	1,140	2,748	334	896	806	1,852
284	Cleaning and toilet goods	1,208	4,016	209	938	999	3,078
2841	Soap and other detergents	690	2,320	115	496	575	1,824
2842	Polishes and sanitation goods	124	421	28	121	96	300
2843	Surface active agents	192	592	26	141	166	451
2844	Toilet preparations	203	683	40	180	162	503
285	Paints and varnishes	605	2,349	243	1,162	362	1,187
2851	Paints and varnishes	559	2,140	197	953	362	1,187
2861	Gum and wood chemicals	296	814	29	124	267	690
287	Agricultural chemicals	1,202	3,839	405	1,895	797	1,944
2871	Fertilizers	} 1,116	3,522	366	1,713	750	1,809
2872	Fertilizers, mixing only						
2873	Agricultural pesticides	} 87	317	40	182	47	135
2879	Agricultural chemicals, n.e.c.						
289	Other chemical products	1,490	4,382	264	1,092	1,226	3,290
2891	Glue and gelatin	753	2,028	85	331	668	1,697
2892	Explosives	183	567	13	55	171	512
2893	Printing ink	158	468	15	58	143	410
2894	Fatty acids	75	213	11	52	64	161
2899	Chemical preparations, n.e.c.	320	1,106	140	596	180	510
29	Petroleum and coal products	9,825	25,598	1,026	4,374	8,799	21,224
2911	Petroleum refining	7,334	16,806	67	184	7,267	16,622
295	Paving and roofing materials	2,269	8,051	911	3,939	1,359	4,112
2951	Paving mixtures and blocks	1,391	5,558	790	3,484	601	2,074
2952	Asphalt felts and coatings	878	2,493	121	455	758	2,038
299	Petroleum and coal products, n.e.c.	222	741	49	251	173	490
2992	Lubricating oils and greases	138	428	37	168	101	260
30	Rubber and plastics products, n.e.c.	3,833	11,626	610	2,676	3,223	8,950
3011	Tires and inner tubes	303	892	33	163	269	729
3021	Rubber footwear	284	733	10	42	273	691
3069	Fabricated rubber products, n.e.c.	1,810	5,280	240	960	1,569	4,320
3079	Plastics products, n.e.c.	1,405	4,606	325	1,511	1,080	3,095
31	Leather and leather products	1,462	4,496	232	1,018	1,229	3,478
3111	Leather tanning and finishing	988	2,775	64	242	924	2,533
314	Footwear, except rubber	323	1,198	98	485	225	713
3141	Footwear, except rubber	302	1,121	92	453	210	668
3142	House slippers	20	77	6	32	15	45
3161	Luggage	21	76	13	51	8	25
317	Purses and small leather goods	44	146	12	54	32	92
3172	Small leather goods	34	106	6	27	28	79
32	Stone, clay and glass products	13,606	46,345	4,360	20,255	9,246	26,090
322	Pressed and blown glassware	1,857	5,623	305	1,293	1,552	4,330
3221	Glass containers	1,527	4,523	183	779	1,344	3,744
3229	Pressed and blown glass, n.e.c.	329	1,100	121	514	208	586
3241	Cement, hydraulic	3,053	8,381	231	1,021	2,821	7,360

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
32	Stone, clay and glass products—Continued						
325	Structural clay products	1,277	4,712	654	2,857	623	1,855
3251	Brick and structural tile	755	2,655	313	1,377	443	1,278
3259	Structural clay products, n.e.c.	277	1,024	180	733	97	291
326	Pottery and related products	332	1,231	177	779	155	452
3261	Vitreous plumbing fixtures	147	476	63	256	83	220
3264	Porcelain electrical supplies	83	297	38	176	45	121
327	Concrete and plaster products	3,834	15,037	1,862	9,224	1,972	5,813
3271	Concrete block and brick	756	2,853	329	1,490	428	1,363
3272	Concrete products	443	2,022	304	1,508	139	514
3273	Ready-mixed concrete	1,113	5,669	1,045	5,404	68	265
3274	Lime	318	950	57	251	261	699
3275	Gypsum products	1,203	3,543	128	571	1,076	2,972
3281	Cut stone and stone products	177	884	141	762	37	122
329	Nonmetallic minerals, n.e.c.	2,921	9,927	967	4,200	1,954	5,727
3291	Abrasive products	288	1,131	141	642	147	489
3293	Gaskets and insulations	407	1,245	54	214	353	1,031
3295	Minerals: Ground or treated	1,070	3,805	404	1,774	666	2,031
3296	Mineral wool	277	946	67	315	210	631
3297	Nonclay refractories	297	1,081	188	747	109	334
33	Primary metal industries	46,182	155,884	10,815	41,680	35,367	114,204
331	Steel rolling and finishing	35,291	117,965	7,049	25,232	28,243	92,733
3312	Blast furnaces and steel mills	34,394	114,818	6,793	24,119	27,601	90,699
3315	Steel wire drawing	363	1,211	135	535	229	676
3316	Cold finishing of steel shapes	186	608	46	197	140	411
332	Iron and steel foundries	1,613	6,801	1,063	4,837	549	1,964
3321	Gray iron foundries	611	2,817	480	2,314	131	503
3322	Malleable iron foundries	239	963	159	692	80	271
3323	Steel foundries	762	3,021	424	1,831	338	1,190
333	Primary nonferrous metal	2,519	6,690	362	1,476	2,157	5,214
3331	Primary copper	2,123	5,258	166	654	1,957	4,604
3341	Secondary nonferrous metals	794	2,895	373	1,540	421	1,355
335	Nonferrous rolling and drawing	2,839	8,736	723	3,071	2,116	5,665
3351	Copper rolling and drawing	1,156	3,355	190	851	966	2,504
3352	Aluminum rolling and drawing	601	2,211	360	1,494	242	717
3356	Rolling and drawing, n.e.c.	117	436	63	273	54	163
3357	Nonferrous wire drawing, etc.	964	2,734	110	453	854	2,281
336	Nonferrous foundries	550	2,471	342	1,704	209	767
3361	Aluminum castings	231	1,083	178	900	52	183
3362	Brass, bronze, copper castings	204	931	140	684	63	247
3369	Nonferrous castings, n.e.c.	116	457	23	120	93	337
339	Primary metal industries, n.e.c.	2,576	10,326	903	3,820	1,673	6,506
3391	Iron and steel forgings	2,440	9,832	827	3,501	1,614	6,331
3392	Nonferrous forgings	78	257	22	94	56	163
34	Fabricated metal products	7,104	25,621	3,125	14,353	3,979	11,268
3411	Metal cans	262	844	44	171	218	673
342	Cutlery, hand tools, hardware	1,035	3,687	375	1,730	660	1,957
3421	Cutlery	173	541	37	187	136	354
3423	Edge tools	329	1,290	168	767	161	523
3425	Hand saws and saw blades	31	117	11	55	21	62
3429	Hardware, n.e.c.	501	1,739	159	721	342	1,018
343	Plumbing and nonelectric heating	411	1,615	222	991	189	624
3433	Nonelectric heating equipment	299	1,188	148	683	151	505

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
34	Fabricated metal products—Continued						
344	Structural metal products	1,353	5,498	674	3,289	679	2,209
3441	Fabricated structural steel	297	1,195	189	869	109	326
3442	Metal doors, sash, and trim	262	1,037	105	486	158	551
3443	Boiler shop products	438	1,762	193	978	245	784
3444	Sheet metal work	187	805	110	546	77	259
3449	Miscellaneous metal work, n.e.c.	168	699	77	410	91	289
345	Screw machine products and bolts	597	2,324	332	1,487	265	837
3451	Screw machine products	182	856	165	795	16	61
3452	Bolts, nuts, washers, and rivets	415	1,468	166	692	249	776
3461	Metal stampings	1,368	3,269	316	1,447	[illegible],052	1,822
347	Metal services, n.e.c.	730	3,023	421	1,888	309	1,135
3471	Plating and polishing	526	2,098	272	1,179	255	919
3479	Metal coating, engraving, etc.	204	925	150	709	54	216
3481	Fabricated wire products, n.e.c.	286	1,142	136	633	150	509
349	Fabricated metal products, n.e.c.	1,063	4,219	605	2,717	458	1,502
3494	Valves and pipe fittings	609	2,367	370	1,603	239	764
3498	Fabricated pipe and fittings	64	274	39	194	25	80
3499	Fabricated metal products, n.e.c.	120	547	63	316	58	231
35	Machinery, except electrical	7,705	26,969	2,652	11,537	5,053	15,432
351	Engines and turbines	1,343	3,632	157	688	1,185	2,944
3511	Steam engines and turbines	1,050	2,463	20	81	1,031	2,382
3519	Internal combustion engines	292	1,169	138	607	155	562
3522	Farm machinery and equipment	316	1,394	137	744	178	650
353	Construction and like equipment	849	3,115	277	1,236	572	1,879
3531	Construction machinery	476	1,911	166	740	310	1,171
3534	Elevators and moving stairways	86	230	3	16	84	214
3535	Conveyors	61	243	46	191	15	52
3537	Industrial trucks and tractors	41	154	16	77	25	77
354	Metalworking machinery	1,328	5,207	600	2,715	727	2,492
3541	Metal-cutting machine tools	334	1,190	122	461	212	729
3542	Metal-forming machine tools	196	835	88	430	108	405
3545	Machine tool accessories	333	1,180	78	360	256	820
355	Special industry machinery	1,198	4,427	483	2,179	715	2,248
3551	Food products machinery	133	550	40	212	92	338
3552	Textile machinery	418	1,419	190	753	228	666
3553	Woodworking machinery	28	106	14	56	14	50
3554	Paper industries machinery	137	546	83	363	54	183
3555	Printing trades machinery	166	671	56	309	109	362
3559	Special industry machinery, n.e.c.	316	1,135	99	486	217	649
356	General industrial machinery	1,212	4,177	357	1,611	855	2,566
3561	Pumps and compressors	299	1,082	125	562	175	520
3562	Ball and roller bearings	408	1,168	63	247	346	921
3564	Blowers and fans	74	260	24	105	50	155
3566	Power transmission equipment	227	845	60	269	167	576
3569	General industry machinery, n.e.c.	154	619	66	324	88	295
357	Office machines, n.e.c.	645	1,846	251	654	394	1,192
3571	Computing and related machines	458	1,268	224	554	234	714
3579	Office machines, n.e.c.	92	281	16	51	77	230
358	Service industry machines	418	1,555	139	623	279	932
3581	Automatic vending machines	24	106	19	86	5	20
3585	Refrigeration machinery	234	818	73	311	162	507
3589	Service industry machines, n.e.c.	81	341	21	111	60	230
3599	Machine shops	398	1,616	250	1,087	148	529

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
36	Electrical machinery	5,152	17,623	1,478	6,521	3,674	11,102
361	Electric distribution products	510	1,741	132	602	379	1,139
3611	Electric measuring instruments	168	601	57	250	111	351
3612	Transformers	95	305	8	40	87	265
3613	Switchgear and switchboards	247	835	67	307	180	528
362	Electric industrial apparatus	412	1,570	151	697	260	873
3621	Motors and generators	181	669	63	276	118	393
3622	Industrial controls	93	388	38	181	55	207
3623	Welding apparatus	32	128	18	76	15	52
3629	Electric industrial goods, n.e.c	80	290	27	139	53	151
363	Household appliances	714	2,402	155	691	559	1,711
3631	Household cooking equipment	86	299	40	164	46	135
3633	Household laundry equipment	69	266	14	62	56	204
3634	Electric housewares and fans	233	848	64	291	169	557
3639	Household appliances, n.e.c	75	296	25	112	50	184
364	Lighting and wiring devices	806	2,952	278	1,256	528	1,696
3641	Electric lamps	96	260	22	70	75	190
3642	Lighting fixtures	202	768	53	288	149	480
3643	Current carrying devices	293	1,104	97	463	196	641
3644	Noncurrent carrying devices	214	820	106	435	108	385
365	Radio, TV, receiving equipment	381	1,323	73	325	307	998
366	Communication equipment	1,173	3,638	223	986	950	2,652
3661	Telephone; telegraph apparatus	233	729	39	161	194	568
3662	Radio, TV communication equipment	939	2,909	184	825	756	2,084
367	Electronic components	830	2,928	290	1,301	540	1,627
3673	Electron tubes, transmitting	49	157	8	36	40	121
3679	Electronic components, n.e.c	697	2,488	265	1,198	432	1,290
369	Electrical products, n.e.c	328	1,069	168	621	160	448
3691	Storage batteries	170	496	101	311	69	185
3692	Primary batteries, dry and wet	13	57	13	57	-	-
3694	Engine electrical equipment	77	265	25	108	52	157
3699	Electrical products, n.e.c	57	221	29	145	28	76
37	Transportation equipment	7,003	22,542	1,931	7,870	5,071	14,672
371	Motor vehicles and equipment	2,682	8,872	745	2,978	1,937	5,894
3713	Truck and bus bodies	72	324	36	196	36	128
372	Aircraft and parts	2,863	8,757	572	2,326	2,290	6,431
3721	Aircraft	909	2,633	129	488	780	2,145
3722	Aircraft engines and parts	1,201	3,716	344	1,357	857	2,359
373	Ships and boats	962	2,934	269	1,155	693	1,779
3731	Ship building and repairing	906	2,655	226	927	680	1,728
3732	Boat building and repairing	55	279	42	228	13	51
374	Railroad equipment	359	1,347	247	928	112	419
3751	Motorcycles, bicycles, and parts	29	117	9	44	19	73
379	Transportation equipment, n.e.c	109	515	89	439	20	76
3799	Transportation equipment, n.e.c	14	71	6	38	9	33
38	Instruments and related products	1,476	5,031	459	1,871	1,017	3,160
3811	Scientific instruments	234	798	55	254	179	544
382	Mechanical measuring devices	404	1,371	75	322	329	1,049
3821	Mechanical measuring devices	303	1,011	47	208	256	803
3822	Automatic temperature controls	101	360	27	114	74	246
3831	Optical instruments and lenses	35	139	14	65	21	74
384	Medical instruments and supplies	277	1,017	114	521	162	496
3841	Surgical and medical instruments	46	177	26	120	20	57
3842	Surgical appliances and supplies	197	718	80	359	116	359
3843	Dental equipment and supplies	34	122	8	42	26	80

See footnotes at end of table.

SUPPLEMENTAL TABLE 4. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected Industries: 1962**—Continued

Code	Industry group and industry	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
38	Instruments and related products—Continued						
3851	Ophthalmic goods	126	370	15	75	111	295
3861	Photographic equipment	322	1,081	158	509	164	572
387	Watches and clocks	79	255	29	125	50	130
39	Miscellaneous manufacturing	1,836	6,683	657	3,111	1,180	3,572
391	Jewelry and silverware	295	823	29	132	265	691
3911	Jewelry, precious metal	36	137	19	82	17	55
3914	Silverware and plated ware	229	584	1	5	227	579
3931	Musical instruments and parts	62	235	12	45	50	190
394	Toys and sporting goods	537	2,168	239	1,186	297	982
3941	Games and toys, n.e.c.	194	692	67	307	126	385
3942	Dolls	29	113	13	69	16	44
3949	Sporting and athletic goods, n.e.c.	283	1,266	155	789	129	477
395	Office supplies	140	471	47	212	93	259
3951	Pens and mechanical pencils	14	73	(S)	(S)	(S)	(S)
3952	Lead pencils and art goods	58	204	32	128	26	76
3953	Marking devices	7	29	(S)	(S)	(S)	(S)
3955	Carbon paper and inked ribbons	61	165	(S)	(S)	(S)	(S)
396	Costume jewelry and notions	221	822	66	339	155	483
3961	Costume jewelry	57	248	21	131	35	117
3963	Buttons	36	159	8	48	28	111
3964	Needles, pins, and fasteners	113	347	28	113	84	234
398, 399	Miscellaneous manufactures	582	2,164	264	1,197	319	967
3981	Brooms and brushes	111	441	57	277	54	164
3983	Matches	27	114	19	81	8	33
3988	Morticians' goods	55	237	27	131	29	106
3993	Signs and advertising displays	92	438	64	311	27	127
3999	Miscellaneous products, n.e.c.	87	341	43	191	43	150
19	Ordnance and accessories	794	2,294	116	520	678	1,774

Note: Detail may not add to totals because of independent rounding. Industry group totals include estimates for all component industries, regardless of whether or not separate data are shown for the individual industries.

- Represents zero. n.e.c. Not elsewhere classified. (S) Withheld because the estimate did not meet publication standards for one or more of the following reasons: The standard error associated with the figure was too high (generally in excess of 25 percent); cost of fuel less than $50 thousand; to avoid disclosing figures of individual companies; or on the basis of a consistency review.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	United States, total	195,615	623,341	44,730	190,917	150,885	432,424
	Alabama, total	1,342	4,915	911	3,542	431	1,373
20	Food and kindred products	33	133	9	51	24	82
22	Textile mill products	26	96	6	23	20	73
32	Stone, clay and glass products	59	229	17	86	42	143
	Alaska	568	2,128	106	768	462	1,360
	Arizona	26	146	(S)	(S)	(S)	(S)
	Arkansas, total	122	444	30	178	92	266
26	Paper and allied products	31	101	-	-	31	101
	California, total	6,556	17,677	1,069	3,988	5,487	13,689
20	Food and kindred products	1,365	3,280	114	396	1,251	2,884
24	Lumber and wood products	746	3,009	401	1,564	345	1,445
26	Paper and allied products	1,426	3,000	79	170	1,347	2,830
28	Chemicals and allied products	655	1,538	64	201	591	1,337
29	Petroleum and coal products	363	959	9	41	355	918
30	Rubber and plastics products, n.e.c.	20	60	4	18	16	42
32	Stone, clay and glass products	438	1,339	115	477	323	862
33	Primary metal industries	1,162	3,122	52	204	1,110	2,918
37	Transportation equipment	283	996	154	592	129	404
	Colorado, total	696	1,912	533	1,470	163	442
20	Food and kindred products	76	263	49	164	27	99
	Connecticut, total	9,313	26,894	1,595	7,003	7,718	19,891
20	Food and kindred products	316	1,214	142	715	173	499
22	Textile mill products	815	2,284	147	449	668	1,835
23	Apparel and related products	96	277	38	117	58	160
26	Paper and allied products	840	2,112	41	151	799	1,961
28	Chemicals and allied products	1,097	2,710	48	225	1,049	2,485
30	Rubber and plastics products, n.e.c.	626	1,627	29	104	597	1,523
31	Leather and leather products	31	87	3	15	27	72
33	Primary metal industries	1,297	3,809	245	1,108	1,051	2,701
34	Fabricated metal products	683	2,293	242	1,121	442	1,172
35	Machinery, except electrical	768	2,443	233	975	535	1,468
36	Electrical machinery	356	1,105	73	320	283	785
37	Transportation equipment	986	2,614	54	272	932	2,342
38	Instruments and related products	116	391	41	179	75	212
39	Miscellaneous manufacturing, including ordnance.	679	1,792	60	260	619	1,532
	Delaware, total	2,375	7,001	259	1,141	2,116	5,860
20	Food and kindred products	203	786	17	94	185	692
28	Chemicals and allied products	753	1,982	43	202	710	1,780
	District of Columbia, total	156	500	19	71	137	429
20	Food and kindred products	90	294	(S)	(S)	(S)	(S)
	Florida, total	8,346	21,104	1,361	4,389	6,984	16,715
20	Food and kindred products	1,028	2,954	164	728	864	2,226
24	Lumber and wood products	61	265	35	193	26	72
26	Paper and allied products	4,245	9,687	800	1,792	3,445	7,895
28	Chemicals and allied products	1,219	3,501	163	832	1,057	2,669
32	Stone, clay and glass products	1,309	3,118	23	108	1,286	3,010
	Georgia, total	3,317	9,454	567	2,370	2,750	7,084
20	Food and kindred products	348	1,254	83	369	265	885
22	Textile mill products	328	1,209	81	360	246	849
23	Apparel and related products	15	80	11	64	4	16
28	Chemicals and allied products	221	629	138	401	84	228
32	Stone, clay and glass products	304	991	81	375	223	616

See footnotes at end of table.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**—Continued

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	Hawaii	816	2,653	90	434	726	2,219
	Idaho	303	1,551	217	1,255	86	296
	Illinois, total	12,330	48,169	3,165	14,294	9,165	33,875
20	Food and kindred products	1,216	5,165	316	1,519	900	3,646
23	Apparel and related products	47	202	15	73	32	129
24	Lumber and wood products	58	270	26	147	32	123
25	Furniture and fixtures	140	569	32	153	108	416
26	Paper and allied products	421	1,696	136	565	286	1,131
27	Printing and publishing	273	1,034	36	171	237	863
28	Chemicals and allied products	899	3,451	259	1,072	640	2,379
29	Petroleum and coal products	204	736	54	220	150	516
30	Rubber and plastics products, n.e.c.	235	872	30	132	206	740
32	Stone, clay and glass products	940	3,637	327	1,513	613	2,124
33	Primary metal industries	4,258	15,500	579	2,615	3,679	12,885
35	Machinery, except electrical	983	4,220	393	1,836	589	2,384
36	Electrical machinery	845	3,325	137	673	709	2,652
37	Transportation equipment	273	992	166	580	107	412
38	Instruments and related products	225	913	64	308	160	605
39	Miscellaneous manufacturing, including ordnance.	193	876	61	302	131	574
	Indiana, total	9,646	34,382	1,585	6,917	8,061	27,465
20	Food and kindred products	286	1,201	129	627	157	574
23	Apparel and related products	20	89	12	56	8	33
25	Furniture and fixtures	81	374	42	219	39	155
26	Paper and allied products	116	456	54	217	62	239
27	Printing and publishing	64	265	29	139	35	126
28	Chemicals and allied products	159	582	52	246	107	336
30	Rubber and plastics products, n.e.c.	70	288	28	116	43	172
32	Stone, clay and glass products	425	1,840	211	1,080	215	760
33	Primary metal industries	6,547	22,366	304	1,190	6,243	21,176
34	Fabricated metal products	283	1,208	161	749	123	459
35	Machinery, except electrical	270	946	197	672	74	274
36	Electrical machinery	210	734	82	354	129	380
37	Transportation equipment	373	1,437	118	533	256	904
	Iowa, total	745	3,015	269	1,328	476	1,687
20	Food and kindred products	222	927	84	423	138	504
36	Electrical machinery	75	287	6	30	69	257
	Kansas, total	427	1,177	125	453	302	724
20	Food and kindred products	112	309	30	109	82	200
28	Chemicals and allied products	123	359	26	114	98	245
32	Stone, clay and glass products	54	135	13	43	41	92
	Kentucky, total	402	1,715	198	944	204	771
20	Food and kindred products	52	240	32	157	20	83
21	Tobacco products	57	214	-	-	57	214
26	Paper and allied products	11	53	(S)	(S)	(S)	(S)
	Louisiana	79	363	67	319	12	44
	Maine, total	6,340	17,787	345	1,707	5,995	16,080
20	Food and kindred products	552	1,991	181	904	370	1,087
24	Lumber and wood products	43	203	40	191	3	12
26	Paper and allied products	4,367	11,507	20	95	4,347	11,412
31	Leather and leather products	218	674	13	69	204	605
	Maryland, total	7,385	21,557	1,058	4,313	6,326	17,244
20	Food and kindred products	774	2,447	165	670	610	1,777
23	Apparel and related products	29	138	18	89	11	49
26	Paper and allied products	104	310	20	72	84	238
28	Chemicals and allied products	921	2,956	249	795	672	2,161

See footnotes at end of table.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**—Continued

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	Maryland—Continued						
30	Rubber and plastics products, n.e.c.	143	382	8	48	135	334
33	Primary metal industries	3,270	9,126	262	1,125	3,008	8,001
34	Fabricated metal products	99	372	36	178	63	194
35	Machinery, except electrical	88	269	9	47	79	222
36	Electrical machinery	86	276	20	88	66	188
37	Transportation equipment	441	1,211	35	172	406	1,039
	Massachusetts, total	13,799	41,732	2,662	11,500	11,137	30,232
20	Food and kindred products	1,317	3,967	184	943	1,133	3,024
22	Textile mill products	1,442	4,321	104	547	1,338	3,774
23	Apparel and related products	50	205	19	107	31	98
25	Furniture and fixtures	79	309	28	151	52	158
26	Paper and allied products	2,934	8,026	317	1,029	2,618	6,997
27	Printing and publishing	124	433	28	144	96	289
28	Chemicals and allied products	1,253	3,492	124	586	1,129	2,906
30	Rubber and plastics products, n.e.c.	665	1,851	59	245	605	1,606
31	Leather and leather products	408	1,138	21	92	386	1,046
33	Primary metal industries	810	2,796	450	1,726	360	1,070
34	Fabricated metal products	640	2,352	226	1,078	414	1,274
35	Machinery, except electrical	1,334	3,778	199	843	1,135	2,935
36	Electrical machinery	594	1,917	74	400	521	1,517
37	Transportation equipment	330	992	58	251	272	741
38	Instruments and related products	338	931	129	381	209	550
39	Miscellaneous manufacturing, including ordnance.	358	1,269	134	625	224	644
	Michigan, total	6,699	25,731	2,448	10,654	4,251	15,077
20	Food and kindred products	517	2,000	113	564	403	1,436
26	Paper and allied products	412	1,335	29	142	383	1,193
27	Printing and publishing	19	73	7	28	12	45
28	Chemicals and allied products	339	1,259	102	454	238	805
30	Rubber and plastics products, n.e.c.	94	408	20	90	74	318
32	Stone, clay and glass products	368	1,376	138	590	230	786
33	Primary metal industries	3,051	11,658	1,384	5,676	1,667	5,982
34	Fabricated metal products	373	1,648	189	938	184	710
35	Machinery, except electrical	466	1,944	149	719	317	1,225
36	Electrical machinery	56	229	19	94	37	135
37	Transportation equipment	713	2,653	185	839	528	1,814
	Minnesota, total	1,775	6,912	368	1,942	1,407	4,970
20	Food and kindred products	836	3,065	118	644	718	2,421
26	Paper and allied products	36	148	11	52	25	96
28	Chemicals and allied products	72	294	39	184	32	110
32	Stone, clay and glass products	115	508	42	238	73	270
34	Fabricated metal products	70	351	38	214	32	137
35	Machinery, except electrical	83	352	27	154	57	198
37	Transportation equipment	65	234	7	31	58	203
	Mississippi	77	363	46	227	31	136
	Missouri, total	1,165	4,161	383	1,732	781	2,429
20	Food and kindred products	256	880	55	266	201	614
23	Apparel and related products	11	58	3	15	8	43
26	Paper and allied products	53	175	10	41	43	134
27	Printing and publishing	16	73	5	22	11	51
28	Chemicals and allied products	166	579	68	295	98	284
29	Petroleum and coal products	20	69	7	32	13	37
32	Stone, clay and glass products	117	466	57	253	60	213
33	Primary metal industries	157	480	25	119	132	361
34	Fabricated metal products	47	210	32	146	16	64
35	Machinery, except electrical	68	275	35	157	33	118
36	Electrical machinery	34	118	12	45	22	73
37	Transportation equipment	100	333	43	167	57	166
39	Miscellaneous manufacturing, including ordnance.	59	167	5	23	54	144

See footnotes at end of table.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**—Continued

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	Nebraska, total	171	664	114	476	57	188
20	Food and kindred products	80	314	35	159	46	155
28	Chemicals and allied products	27	98	27	98	-	-
	Nevada	323	1,274	31	173	292	1,101
	New Hampshire, total	1,871	5,807	493	1,850	1,378	3,957
22	Textile mill products	613	1,794	84	287	529	1,507
24	Lumber and wood products	63	299	44	240	19	59
26	Paper and allied products	592	1,718	211	614	381	1,104
31	Leather and leather products	164	500	20	91	144	409
32	Stone, clay and glass products	102	277	7	26	95	251
35	Machinery, except electrical	73	260	18	75	55	185
	New Jersey, total	27,484	73,809	5,075	19,550	22,409	54,259
20	Food and kindred products	2,290	6,293	421	1,643	1,869	4,650
23	Apparel and related products	123	585	108	535	15	50
24	Lumber and wood products	58	176	15	69	42	107
25	Furniture and fixtures	44	163	22	107	22	56
26	Paper and allied products	2,046	4,955	79	261	1,967	4,694
27	Printing and publishing	177	618	76	352	101	266
28	Chemicals and allied products	6,519	16,996	1,478	4,622	5,040	12,374
29	Petroleum and coal products	5,244	11,631	49	237	5,194	11,394
30	Rubber and plastics products, n.e.c.	635	1,937	192	825	442	1,112
31	Leather and leather products	131	345	39	113	92	232
32	Stone, clay and glass products	2,183	6,846	518	2,518	1,665	4,328
33	Primary metal industries	2,744	7,787	646	2,566	2,098	5,221
34	Fabricated metal products	771	2,695	414	1,778	357	917
35	Machinery, except electrical	747	2,405	264	1,203	484	1,202
36	Electrical machinery	992	2,780	293	1,027	699	1,753
37	Transportation equipment	666	1,820	217	706	449	1,114
38	Instruments and related products	232	719	74	321	158	398
39	Miscellaneous manufacturing, including ordnance.	181	662	104	454	77	208
	New York, total	15,434	53,090	4,772	21,549	10,662	31,541
20	Food and kindred products	2,790	9,774	954	4,493	1,836	5,281
22	Textile mill products	723	2,323	158	727	565	1,596
23	Apparel and related products	140	678	93	493	47	185
24	Lumber and wood products	78	354	55	282	23	72
25	Furniture and fixtures	140	610	73	375	67	235
26	Paper and allied products	1,405	4,193	180	792	1,226	3,401
27	Printing and publishing	228	881	80	380	148	501
28	Chemicals and allied products	1,150	3,452	208	908	942	2,544
30	Rubber and plastics products, n.e.c.	144	492	36	167	108	325
31	Leather and leather products	125	400	34	163	91	237
32	Stone, clay and glass products	1,338	4,256	379	1,754	959	2,502
33	Primary metal industries	3,466	12,420	926	4,019	2,541	8,401
34	Fabricated metal products	571	2,220	237	1,178	334	1,042
35	Machinery, except electrical	721	2,456	380	1,418	341	1,038
36	Electrical machinery	714	2,472	272	1,213	442	1,259
37	Transportation equipment	782	2,531	154	725	629	1,806
38	Instruments and related products	238	862	66	298	172	564
39	Miscellaneous manufacturing, including ordnance.	323	1,204	166	789	157	415
	North Carolina, total	2,710	9,820	820	4,053	1,890	5,767
20	Food and kindred products	261	1,210	171	930	90	280
21	Tobacco products	80	278	11	42	69	236
22	Textile mill products	834	3,078	213	943	621	2,135
23	Apparel and related products	61	295	36	205	25	90
24	Lumber and wood products	134	616	76	390	58	226
25	Furniture and fixtures	43	175	23	102	20	73
26	Paper and allied products	879	2,314	8	49	871	2,265
28	Chemicals and allied products	57	256	40	197	17	59
32	Stone, clay and glass products	158	727	115	580	43	147

See footnotes at end of table.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**—Continued

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	North Dakota	57	334	44	259	13	75
	Ohio, total	8,193	30,090	2,322	9,842	5,871	20,248
20	Food and kindred products	450	1,807	210	902	240	905
25	Furniture and fixtures	13	60	(S)	(S)	(S)	(S)
26	Paper and allied products	159	666	70	320	89	346
28	Chemicals and allied products	298	1,204	201	845	98	359
30	Rubber and plastics products, n.e.c.	87	379	49	226	38	153
32	Stone, clay and glass products	127	582	95	458	32	124
33	Primary metal industries	5,527	21,013	1,201	4,651	4,327	16,362
35	Machinery, except electrical	227	1,014	107	535	119	479
37	Transportation equipment	204	825	64	288	141	537
	Oklahoma	27	71	(S)	(S)	(S)	(S)
	Oregon, total	2,097	7,546	535	2,678	1,562	4,868
20	Food and kindred products	311	1,105	111	499	200	606
24	Lumber and wood products	630	2,662	322	1,650	307	1,012
26	Paper and allied products	576	1,441	(S)	(S)	(S)	(S)
29	Petroleum and coal products	49	124	-	-	49	124
32	Stone, clay and glass products	201	725	12	54	189	671
33	Primary metal industries	156	565	12	68	144	497
34	Fabricated metal products	34	149	14	72	20	77
37	Transportation equipment	26	104	14	55	12	49
	Pennsylvania, total	21,969	70,913	4,862	21,088	17,107	49,825
20	Food and kindred products	1,541	5,049	405	2,004	1,135	3,045
21	Tobacco products	60	190	21	72	39	118
22	Textile mill products	1,024	3,248	211	905	813	2,343
23	Apparel and related products	242	817	65	333	177	484
25	Furniture and fixtures	95	360	20	103	75	257
27	Printing and publishing	143	570	48	243	95	327
28	Chemicals and allied products	2,384	6,122	240	977	2,144	5,145
29	Petroleum and coal products	244	786	113	474	130	312
30	Rubber and plastics products, n.e.c.	338	940	10	69	329	871
31	Leather and leather products	118	422	34	171	84	251
34	Fabricated metal products	936	3,413	361	1,641	576	1,772
35	Machinery, except electrical	1,004	3,207	267	1,166	737	2,041
36	Electrical machinery	590	1,934	158	692	432	1,242
37	Transportation equipment	469	1,627	197	821	272	806
39	Miscellaneous manufacturing, including ordnance.	230	866	97	510	134	356
	Rhode Island, total	3,284	9,400	441	1,945	2,843	7,455
20	Food and kindred products	148	479	21	134	127	345
22	Textile mill products	1,093	3,012	79	386	1,014	2,626
34	Fabricated metal products	161	396	111	243	50	153
35	Machinery, except electrical	101	269	26	89	75	180
39	Miscellaneous manufacturing, including ordnance.	103	364	16	87	87	277
	South Carolina, total	2,854	8,223	439	2,000	2,415	6,223
20	Food and kindred products	54	260	36	195	18	65
22	Textile mill products	385	1,340	82	315	303	1,025
23	Apparel and related products	39	203	24	139	14	64
24	Lumber and wood products	150	682	102	480	48	202
28	Chemicals and allied products	104	417	78	339	26	78
	Tennessee, total	604	2,681	386	1,927	219	754
22	Textile mill products	18	99	8	37	10	62
26	Paper and allied products	100	321	6	22	94	299
	Texas	670	2,081	543	1,713	126	368
	Utah, total	906	2,692	642	1,931	264	761
32	Stone, clay and glass products	123	347	15	73	108	274

See footnotes at end of table.

SUPPLEMENTAL TABLE 6. **Residual and Distillate Fuel Oil Used for Heat and Power, by States and Selected Industry Groups: 1962**—Continued

Code	State and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	Vermont, total	716	2,747	194	1,038	522	1,709
26	Paper and allied products	63	225	7	50	56	175
32	Stone, clay and glass products	85	376	43	243	42	133
35	Machinery, except electrical	42	167	18	71	24	96
	Virginia, total	2,489	9,208	1,062	4,913	1,428	4,295
20	Food and kindred products	503	1,603	109	524	394	1,079
21	Tobacco products	134	409	8	31	126	378
22	Textile mill products	75	305	24	116	51	189
23	Apparel and related products	58	267	18	92	40	175
25	Furniture and fixtures	17	96	17	96	-	-
26	Paper and allied products	462	1,537	117	541	345	996
27	Printing and publishing	18	66	2	11	16	55
28	Chemicals and allied products	246	898	135	602	111	296
32	Stone, clay and glass products	249	945	118	536	131	409
	Washington, total	4,971	13,526	490	2,448	4,481	11,078
20	Food and kindred products	450	1,543	71	289	379	1,254
24	Lumber and wood products	444	2,090	286	1,560	157	530
26	Paper and allied products	2,723	6,086	28	74	2,696	6,012
28	Chemicals and allied products	307	860	2	9	305	851
33	Primary metal industries	298	777	18	91	280	686
34	Fabricated metal products	112	351	21	105	91	246
37	Transportation equipment	269	775	(S)	(S)	(S)	(S)
	West Virginia, total	921	3,177	847	2,930	75	247
32	Stone, clay and glass products	13	66	13	66	-	-
	Wisconsin, total	2,642	11,190	965	4,675	1,677	6,515
20	Food and kindred products	889	3,609	226	1,099	663	2,510
22	Textile mill products	16	70	4	20	12	50
24	Lumber and wood products	50	245	34	167	16	78
26	Paper and allied products	282	1,158	87	436	195	722
28	Chemicals and allied products	53	213	12	56	41	157
31	Leather and leather products	37	163	7	34	30	129
33	Primary metal industries	220	966	80	393	140	573
34	Fabricated metal products	174	777	83	394	91	383
35	Machinery, except electrical	322	1,396	128	611	193	785
36	Electrical machinery	71	327	56	267	15	60
37	Transportation equipment	128	541	71	324	57	217

Note: Detail figures may not add to totals because of independent rounding. State totals include the estimates for all component major industry groups, regardless of whether or not data are shown for the individual major groups.

- Represents zero. n.e.c. Not elsewhere classified. (S) Withheld because the estimate did not meet publication standards for one or more of the following reasons: The standard error associated with the figure was too high (generally in excess of 25 percent); cost of fuel less than $50 thousand; to avoid disclosing figures of individual companies; or on the basis of a general consistency review.

SUPPLEMENTAL TABLE 7. Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD CONSOLIDATED AREAS						
	Chicago, Ill.-Northwestern Indiana, total	15,612	58,761	2,627	11,692	12,985	47,069
28	Chemicals and allied products	692	2,599	130	595	562	2,004
33	Primary metal industries	9,028	32,173	630	2,712	8,398	29,461
34	Fabricated metal products	877	3,736	426	1,934	451	1,802
39	Miscellaneous manufacturing, including ordnance	162	743	46	231	117	512
	New York, N.Y.-Northeastern New Jersey, total[1]	21,831	62,405	4,870	20,359	16,962	42,046
20	Food and kindred products	3,230	9,700	716	3,282	2,516	6,418
22	Textile mill products	1,742	4,797	179	763	1,563	4,034
23	Apparel and related products	141	689	113	576	28	113
25	Furniture and fixtures	105	486	74	379	30	107
26	Paper and allied products	1,597	4,120	138	589	1,459	3,531
27	Printing and publishing	241	959	120	563	121	396
28	Chemicals and allied products	4,355	11,443	1,075	3,231	3,279	8,212
30	Rubber and plastics products, n.e.c	335	1,105	119	524	216	581
31	Leather and leather products	103	252	37	115	65	137
32	Stone, clay and glass products	707	2,568	237	1,319	469	1,249
33	Primary metal industries	1,304	4,016	360	1,479	945	2,537
34	Fabricated metal products	613	2,316	323	1,546	290	770
35	Machinery, except electrical	586	2,171	260	1,297	326	874
36	Electrical machinery	865	2,756	310	1,302	555	1,454
37	Transportation equipment	935	2,736	291	1,030	644	1,706
38	Instruments and related products	290	962	79	363	211	599
39	Miscellaneous manufacturing, including ordnance	397	1,437	196	913	202	524
	STANDARD METROPOLITAN STATISTICAL AREAS						
	Albany-Schenectady-Troy, N.Y., total	1,089	3,599	253	1,213	836	2,386
26	Paper and allied products	366	975	23	63	343	912
32	Stone, clay and glass products	117	343	38	138	79	205
	Allentown-Bethlehem-Easton, Pa.-N.J., total	2,236	7,604	666	2,818	1,570	4,786
20	Food and kindred products	59	226	23	105	37	121
34	Fabricated metal products	100	360	36	158	64	202
35	Machinery, except electrical	144	401	37	148	108	253
36	Electrical machinery	80	250	17	64	63	186
	Atlanta, Ga	123	542	99	446	24	96
	Baltimore, Md., total	6,643	18,982	846	3,291	5,797	15,691
20	Food and kindred products	492	1,396	103	338	389	1,058
23	Apparel and related products	21	96	11	52	10	44
26	Paper and allied products	96	275	13	43	83	232
28	Chemicals and allied products	877	2,803	237	730	640	2,073
33	Primary metal industries	3,270	9,126	262	1,125	3,008	8,001
34	Fabricated metal products	92	344	35	174	57	170
35	Machinery, except electrical	83	249	9	47	74	202
36	Electrical machinery	72	216	13	45	60	171
37	Transportation equipment	294	825	14	78	280	747
	Birmingham, Ala., total	592	2,045	550	1,895	43	150
33	Primary metal industries	540	1,840	540	1,840	-	-
	Boston, Mass., total	6,102	17,936	961	4,318	5,141	13,618
20	Food and kindred products	921	2,472	50	240	872	2,232
23	Apparel and related products	22	83	3	20	18	63
26	Paper and allied products	713	1,904	4	19	709	1,885
30	Rubber and plastics products, n.e.c	399	1,046	20	61	379	985
31	Leather and leather products	315	849	14	67	301	782
34	Fabricated metal products	269	940	74	364	194	576

See footnotes at end of table.

SUPPLEMENTAL TABLE 7. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962**—Continued

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD METROPOLITAN STATISTICAL AREAS—Con.						
	Boston, Mass.—Con.						
35	Machinery, except electrical	814	2,109	39	191	775	1,918
36	Electrical machinery	280	946	46	240	234	706
37	Transportation equipment	301	866	44	173	257	693
38	Instruments and related products	196	542	117	321	80	221
	Bridgeport, Conn., total	1,378	3,919	260	1,065	1,118	2,854
30	Rubber and plastics products, n.e.c	253	631	(S)	(S)	(S)	(S)
33	Primary metal industries	185	507	22	105	163	402
34	Fabricated metal products	90	299	27	119	63	180
35	Machinery, except electrical	135	385	73	214	63	171
	Buffalo, N.Y., total	2,987	10,991	610	2,795	2,378	8,196
20	Food and kindred products	187	733	75	329	112	404
26	Paper and allied products	94	318	12	47	81	271
32	Stone, clay and glass products	127	612	87	472	40	140
33	Primary metal industries	1,855	6,682	224	1,000	1,631	5,682
34	Fabricated metal products	121	477	36	172	85	305
35	Machinery, except electrical	59	250	34	156	25	94
37	Transportation equipment	219	767	34	183	185	584
	Canton, Ohio	429	1,686	98	433	331	1,253
	Chattanooga, Tenn.-Ga., total	57	235	22	116	35	119
34	Fabricated metal products	13	67	13	67	-	-
	Chicago, Ill., total	9,174	36,408	2,296	10,328	6,878	26,080
20	Food and kindred products	796	3,301	152	749	644	2,552
23	Apparel and related products	43	178	12	58	31	120
25	Furniture and fixtures	140	569	32	153	108	416
27	Printing and publishing	240	893	35	163	206	730
28	Chemicals and allied products	624	2,391	123	556	502	1,835
32	Stone, clay and glass products	483	1,994	195	920	289	1,074
33	Primary metal industries	2,963	11,326	433	1,922	2,530	9,404
34	Fabricated metal products	811	3,458	386	1,746	425	1,712
35	Machinery, except electrical	846	3,615	330	1,520	516	2,095
36	Electrical machinery	743	2,926	123	607	620	2,319
37	Transportation equipment	209	739	157	538	52	201
39	Miscellaneous manufacturing, including ordnance	162	743	46	231	117	512
	Cincinnati, Ohio-Ky., total	320	1,237	101	447	218	790
28	Chemicals and allied products	59	222	25	105	34	117
	Cleveland, Ohio, total	1,636	6,348	433	1,937	1,202	4,411
33	Primary metal industries	1,182	3,894	108	492	1,074	3,402
35	Machinery, except electrical	45	193	15	73	30	120
	Dallas, Tex	7	30	5	23	2	7
	Denver, Colo	218	699	58	264	160	435
	Detroit, Mich., total	3,691	14,534	1,819	7,764	1,872	6,770
20	Food and kindred products	157	634	60	290	97	344
28	Chemicals and allied products	116	457	68	294	48	163
32	Stone, clay and glass products	79	368	60	296	19	72
33	Primary metal industries	2,346	9,079	1,301	5,335	1,045	3,744
34	Fabricated metal products	191	901	141	677	50	224
35	Machinery, except electrical	246	1,021	71	343	175	678
37	Transportation equipment	370	1,308	69	320	300	988

See footnotes at end of table.

SUPPLEMENTAL TABLE 7. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962**—Continued

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD METROPOLITAN STATISTICAL AREAS—Con.						
	Gary-Hammond-East Chicago, Ind., total	6,468	22,353	331	1,364	6,137	20,989
28	Chemicals and allied products	68	208	7	39	60	169
33	Primary metal industries	6,065	20,847	197	790	5,868	20,057
34	Fabricated metal products	66	278	41	188	26	90
	Grand Rapids, Mich	112	449	20	107	92	342
	Greensboro-High Point, N.C., total	137	554	78	382	58	172
22	Textile mill products	38	110	6	30	32	80
	Hartford, Conn., total	1,457	4,397	207	1,048	1,250	3,349
20	Food and kindred products	50	177	27	111	24	66
34	Fabricated metal products	58	226	22	120	37	106
35	Machinery, except electrical	231	790	62	314	169	476
	Indianapolis, Ind., total	486	1,961	242	1,090	243	871
20	Food and kindred products	56	249	43	201	13	48
35	Machinery, except electrical	39	180	39	180	-	-
	Jersey City, N.J., total	3,755	9,672	502	2,012	3,253	7,660
20	Food and kindred products	609	1,740	162	647	447	1,093
26	Paper and allied products	191	465	29	74	162	391
28	Chemicals and allied products	582	1,518	100	365	482	1,153
33	Primary metal industries	157	453	52	208	105	245
35	Machinery, except electrical	129	387	30	141	99	246
36	Electrical machinery	92	239	8	37	84	202
	Kansas City, Mo.-Kans	515	1,482	78	331	437	1,151
	Lancaster, Pa., total	438	1,708	191	937	247	771
20	Food and kindred products	72	302	49	225	23	77
34	Fabricated metal products	46	147	9	46	36	101
	Lawrence-Haverhill, Mass.-N.H	562	1,572	52	264	510	1,308
	Los Angeles-Long Beach, Calif., total	643	1,812	86	394	557	1,418
20	Food and kindred products	91	270	19	86	72	184
28	Chemicals and allied products	220	433	3	16	217	417
37	Transportation equipment	126	418	17	66	108	352
	Louisville, Ky.-Ind., total	196	819	97	432	99	387
20	Food and kindred products	45	186	26	106	20	80
	Memphis, Tenn.,-Ark	100	349	38	175	62	174
	Miami, Fla., total	779	2,059	149	590	629	1,469
20	Food and kindred products	61	222	35	152	26	70
	Milwaukee, Wis., total	814	3,511	252	1,227	563	2,284
33	Primary metal industries	157	650	36	181	121	469
34	Fabricated metal products	90	389	26	119	64	270
35	Machinery, except electrical	189	795	41	195	147	600
	Minneapolis-St. Paul, Minn., total	723	2,744	190	953	533	1,791
20	Food and kindred products	221	707	22	99	199	608
28	Chemicals and allied products	65	262	33	154	32	108
34	Fabricated metal products	57	276	28	162	29	114
35	Machinery, except electrical	53	217	18	94	35	123
37	Transportation equipment	62	222	6	26	57	196

See footnotes at end of table.

SUPPLEMENTAL TABLE 7. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962**—Continued

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD METROPOLITAN STATISTICAL AREAS—Con.						
	New Haven, Conn., total	1,308	3,491	143	636	1,165	2,855
33	Primary metal industries	91	269	9	44	82	225
34	Fabricated metal products	80	295	62	244	18	51
	New York, N.Y., total	5,978	20,427	1,933	9,325	4,044	11,102
20	Food and kindred products	1,617	5,360	447	2,200	1,171	3,160
22	Textile mill products	224	889	133	625	91	264
25	Furniture and fixtures	83	397	62	316	21	81
26	Paper and allied products	375	1,156	83	412	292	744
27	Printing and publishing	128	568	65	330	63	238
28	Chemicals and allied products	560	1,601	82	352	478	1,249
30	Rubber and plastics products, n.e.c.	94	306	24	114	70	192
32	Stone, clay and glass products	392	1,346	128	615	265	731
33	Primary metal industries	620	1,899	104	462	517	1,437
34	Fabricated metal products	247	906	98	491	149	415
35	Machinery, except electrical	107	485	42	277	64	208
36	Electrical machinery	327	1,175	157	717	170	458
37	Transportation equipment	467	1,424	87	393	380	1,031
38	Instruments and related products	145	520	34	165	110	355
39	Miscellaneous manufacturing, including ordnance.	256	929	104	532	152	397
	Newark, N.J., total	8,764	22,925	1,564	6,017	7,201	16,908
20	Food and kindred products	820	2,101	76	309	745	1,792
26	Paper and allied products	598	1,455	19	73	579	1,382
28	Chemicals and allied products	2,305	5,961	587	1,800	1,718	4,161
30	Rubber and plastics products, n.e.c.	80	266	29	129	51	137
31	Leather and leather products	68	182	32	89	36	93
33	Primary metal industries	314	1,057	138	547	176	510
34	Fabricated metal products	218	888	143	692	75	196
35	Machinery, except electrical	291	1,025	136	634	155	391
36	Electrical machinery	356	1,053	116	449	240	604
37	Transportation equipment	223	627	36	156	186	471
39	Miscellaneous manufacturing, including ordnance.	93	347	64	271	29	76
	Paterson-Clifton, Passaic, N.J., total	3,334	9,381	870	3,005	2,464	6,376
20	Food and kindred products	184	499	31	126	153	373
26	Paper and allied products	433	1,044	6	30	426	1,014
27	Printing and publishing	30	112	23	86	7	26
28	Chemicals and allied products	908	2,363	306	714	602	1,649
30	Rubber and plastics products, n.e.c.	144	487	66	281	78	206
33	Primary metal industries	213	607	66	262	148	345
34	Fabricated metal products	88	296	45	198	43	98
36	Electrical machinery	90	289	(S)	(S)	(S)	(S)
38	Instruments and related products	80	214	13	51	67	163
	Philadelphia, Pa.-N.J., total	14,927	41,684	1,768	7,758	13,159	33,926
20	Food and kindred products	1,227	3,411	152	689	1,075	2,722
22	Textile mill products	690	2,027	38	189	652	1,838
23	Apparel and related products	159	487	41	217	118	270
25	Furniture and fixtures	64	225	9	43	55	182
26	Paper and allied products	2,127	5,171	41	153	2,085	5,018
27	Printing and publishing	100	355	19	75	81	280
28	Chemicals and allied products	2,765	6,930	210	882	2,554	6,048
29	Petroleum and coal products	1,099	2,468	(S)	(S)	(S)	(S)
30	Rubber and plastics products, n.e.c.	384	1,146	53	276	331	870
32	Stone, clay and glass products	792	2,863	358	1,563	433	1,300
33	Primary metal industries	2,926	8,531	211	839	2,715	7,692
34	Fabricated metal products	632	2,207	253	1,093	378	1,114
35	Machinery, except electrical	643	1,883	114	493	528	1,390
36	Electrical machinery	603	1,707	124	493	480	1,214
37	Transportation equipment	324	925	27	130	297	795
38	Instruments and related products	78	252	9	46	69	206
39	Miscellaneous manufacturing, including ordnance.	178	687	81	438	98	249

See footnotes at end of table.

SUPPLEMENTAL TABLE 7. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962**—Continued

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD METROPOLITAN STATISTICAL AREAS—Con.						
	Pittsburgh, Pa., total	3,061	10,589	775	2,963	2,285	7,626
33	Primary metal industries	2,924	10,023	688	2,582	2,236	7,441
	Providence-Pawtucket-Warwick, R.I.-Mass., total	3,327	9,398	408	1,676	2,920	7,722
20	Food and kindred products	147	473	20	128	127	345
22	Textile mill products	836	2,477	79	386	756	2,091
33	Primary metal industries	483	1,305	13	63	470	1,242
34	Fabricated metal products	182	478	122	289	60	189
35	Machinery, except electrical	117	309	25	88	91	221
38	Instruments and related products	45	132	12	52	33	80
39	Miscellaneous manufacturing, including ordnance	149	530	28	156	121	374
	Reading, Pa., total	654	2,270	184	826	470	1,444
20	Food and kindred products	51	182	13	72	38	110
33	Primary metal industries	102	381	33	149	69	232
	Richmond, Va., total	316	1,142	95	435	221	707
26	Paper and allied products	62	202	8	35	54	167
	St. Louis, Mo.-Ill., total	1,431	4,742	362	1,534	1,070	3,208
20	Food and kindred products	60	248	34	145	26	103
26	Paper and allied products	49	169	25	88	24	81
27	Printing and publishing	15	69	5	22	10	47
28	Chemicals and allied products	172	608	70	308	102	300
32	Stone, clay and glass products	165	515	25	96	141	419
33	Primary metal industries	755	2,262	84	364	671	1,898
34	Fabricated metal products	30	138	21	100	9	38
	San Francisco-Oakland, Calif., total	2,453	5,428	216	608	2,237	4,820
26	Paper and allied products	1,168	2,329	78	165	1,090	2,164
28	Chemicals and allied products	340	843	47	121	293	722
33	Primary metal industries	212	637	42	157	170	480
	San Jose, Calif	43	129	14	58	29	71
	Seattle-Everett, Wash., total	821	2,619	138	681	683	1,938
20	Food and kindred products	88	405	17	127	71	278
34	Fabricated metal products	112	350	21	104	91	246
	Springfield-Chicopee-Holyoke, Mass.-Conn., total	1,230	3,827	331	1,363	899	2,464
26	Paper and allied products	531	1,582	141	531	390	1,051
34	Fabricated metal products	105	334	31	129	73	205
39	Miscellaneous manufacturing, including ordnance	98	311	26	99	72	212
	Syracuse, N.Y., total	384	1,362	138	571	246	791
20	Food and kindred products	52	199	18	79	34	120
34	Fabricated metal products	37	140	20	82	17	58
	Toledo, Ohio-Mich., total	275	979	112	394	163	585
20	Food and kindred products	74	264	43	156	31	108
34	Fabricated metal products	26	112	6	34	20	78
	Utica-Rome, N.Y., total	467	1,525	67	337	400	1,188
33	Primary metal industries	158	468	22	113	136	355
34	Fabricated metal products	64	238	16	89	48	149

See footnotes at end of table.

SUPPLEMENTAL TABLE 7. **Residual and Distillate Fuel Oil Used for Heat and Power, by Selected SMSA's and Industry Groups: 1962**—Continued

(Selected standard metropolitan statistical areas are those with 40,000 or more manufacturing employees)

Code	Standard consolidated area, standard metropolitan statistical area, and industry group	Total		Distillate fuel oil		Residual fuel oil	
		Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)	Quantity (1,000 barrels)	Value ($1,000)
	STANDARD METROPOLITAN STATISTICAL AREAS—Con.						
	Washington, D.C.-Md.-Va., total	307	1,065	71	313	237	752
20	Food and kindred products	108	359	14	63	94	296
	Wilmington, Del.-N.J.-Md	2,420	6,791	332	1,191	2,088	5,600
	Worcester, Mass., total	1,007	3,452	391	1,558	616	1,894
20	Food and kindred products	54	239	25	134	28	105
33	Primary metal industries	393	1,229	175	562	218	667
34	Fabricated metal products	112	462	35	180	77	282
35	Machinery, except electrical	158	447	54	167	104	280
	York, Pa., total	871	2,794	310	1,155	561	1,639
34	Fabricated metal products	33	112	8	37	25	75
	Youngstown-Warren, Ohio, total	2,272	8,669	680	2,663	1,592	6,006
33	Primary metal industries	2,188	8,275	637	2,440	1,551	5,835

Note: Detail may not add to totals because of independent rounding. Standard metropolitan statistical area totals include the estimates for all component major industry groups, regardless of whether or not separate data are shown for the individual major groups.

- Represents zero. n.e.c. Not elsewhere classified. (S) Withheld because the estimate did not meet publication standards for one or more of the following reasons: The standard error associated with the figure was too high (generally in excess of 25 percent); cost of fuel less than $50 thousand; to avoid disclosing figures of individual companies; or on the basis of a general consistency review.

[1]Excludes Middlesex and Somerset Counties (New Jersey).

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