c. 3


# THE BRIDGE BUILDING AND STRUCTURAL STEEL INDUSTRY, 1959 

The results of the annual Census of Industry are published by the Dominion Bureau of Stalisdics in a series of industry reports which are released each year as the compilations are completeri Reports for industries classifled to the Iron and Steel Products Major Group are listed below, along with chrent and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is avallable on request from the informalion Services Division, Dominion Bureau of Statistics, Ottawa, of from the Queen's Printer, Ottawa.

|  | A-Annual M - Monthly S.C. - Special Complation |  |
| :---: | :---: | :---: |
| Catalogue number | Title | Price |
| 41-201 | Iron and Steel Products - General Review (A) | 50 |
| 42-202 | The Agricultural Implements Industry (A) | 50 |
| 41-205 | The Bollers and Plate Work Industry (A). | 50 |
| 41-207 | The Bridge Building and Structural Steel Industry (A) | 25 |
| 41-208 | The Hardware, Tools and Cutlery Industry (A)............ | 50 |
| 41-209 | The Heating and Cooking Apparatus Industry (A) | 50 |
| 42-208 | The Machinery Industry (A) | 50 |
| 42-207 | The Machine Shops Industry (A) | . 50 |
| 41-210 | The Iron Castings Industry (A) | . 50 |
| 41-203 | The Primary Iron and Steel Industry (A) | 75 |
| 41-213 | The Sheet Metal Products Industry (A) | . 50 |
| 41-216 | The Wire and Wire Goods Industry (A) | . 50 |
| 41-217 | The Miscellaneous Iron and Steel Products Industry (A) | . 50 |
| 41-001 | Ptimary Iron and Steel (M) .................................................................. per year | 3.00 |
| 41-002 | Steel Ingots and Pig Iron (Preliminary) (M)............................................. per year | 1.00 |
| 41-003 | Production of Pig Iron and Steel (M) ...................................................... per year | 1.00 |
| 41-004 | Iron Castings and Cast Iron Pipes and Fittings (M) ............................... per year | 1.00 |
| 41-005 | Stoves and Furnaces (M) .................................................................... per year | 1.00 |
| 41-006 | Steel Wire and Specified Wire Products (M)........................................................ | 1.00 |
| 41-212 | Scrap Iton and Steel (A) ...................................................................................... | . 25 |
| -3-203 | Farm Implement and Equipment Sales (A) | 50 |
| 64-202 | Household Facilities and Equipment (A). | . 50 |
| 43-006 | Air Conditioning and Refrigeration Equipment (M)................................... per year | 1.00 |
| (S.C.) | Sanitaryware (M) .................................................................................. per year | 1.00 |
| (S.C.) | Scrap Iron and Steel (M) ......................................................................... per year | 1.00 |
| (S.C.) | Domestic Water Tank Heaters (M)........................................................... per year | 1.00 |
| (S.C.) | Domestic and Farm Water Systems (M).................................................... per year | 1.00 |
| (S.C.) | Builders' Hardware (M)........................................................................... per year | 1.00 |
| (S.C.) | Heating Boilers and Radiators (M) ......................................................... per year | 1.00 |
| (S.C.) | Domestic Range Boilers (M) ................................................................. per year | 1.00 |
| (S.C.) | Cemented Tungsten Carbide (M) .......................................................... per year | 1.00 |
| (S.C.) | Welding Electrodes (M).......................................................................... per year | 1.00 |
| (S.C.) | Grinding Balls (A).. | 25 |
| (S.C.) | Fans, Unit Heaters and Ventilators (A). | . 25 |
| 31-201 | General Review of the Manufacturing Industries (A) | 2.00 |
| 31-001 | Inventories, Shipments and Orders in Manufacturing Industries (M) ......... per year | 4.00 |
| 65-004 | Trade of Canada - Exports (M)............................................................... per year | 7.50 |
| 65-007 | Trade of Canada - Imports (M) ............................................................. per year | 7.50 |

Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information Sorvices Division, Dominion Bureau of Statistics, or to the Queen's Printer, Ottawa, Conada.

## EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1959 Consus of Manufactures. Most reports in this serles refer to specific industries, but there are summary reports for Canada and the provinces and for malor Industry groups. An annual Census of Manufactures has been carrled out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these repots refer to number of establishments, employees, salaries and wages, cost of materials, suppiles, fuel and electriclty, gross value of shipments, inventorles and value added by manufacturing. Detalls of materlals used and products shipped are also given. Descriptions of the principal industry statistics. with special reference to 1959 are as follows:

## Period Covered

Firms are asked to submit figures for the calendar year. If at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

## Establishment

Data for the annual census is collected on an establlshment basis. A firm with more than one dant is required to flle a report for each plant. In thest cases an establishment is a complete factory. sometimes, however, a plant is divided into two of giore establishments when it carries out operations classiflable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retall actlvitles carrled on at the plant location, etc., are not included. Plants engaged solely in repair work (except In the case of furniture, shipbuilding, boat building, afrcraft and rallway rolling stock industrles) are not included but plants occupied in assembling parts into complete units are included.

## Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or plece-work bas is. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new Ganstruction work, in retail of wholesale operations, on outside plece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a inancial year basis.

## Salaries and Wages

Salarles and wages refer to gtoss eamings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.
salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdiawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

## Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantlifes are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

## Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies for resale without further processing are not included. Maintenance and repair supplles not chargeable to capital account are included.

## Factory Shipments

Factory shipments refer to shipments of goods made from own materials elther in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-pruducts shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reparting firm are included. Goods bought of received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or
plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the yeat under review.

## Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

## Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production. ${ }^{\prime}$

## Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of statistics. provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified of allotted tc specific industries on the basis of the value of principal products made or shipped.

## Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at $\$ 50,000$ value of shipments. About $40 \%$ of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

[^0]For the 1959 Census, the short form was used again, but further steps were taken to ease tha respondents' burden. First, the general limit for short forms was raised to $\$ 100,000$ value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between $\$ 100,000-\$ 500,000$ value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, not does it contain detailed data on volume and value of materials used. For purposus of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

The general request for the principal items of products on the short form for 1959 permitted a fairly complete compilation of the detailed quantities and values of commodity shipments. In the case of the detailed quantities and values of materials, fuel and electricity, however, and the monthly distribution of production workers, only the totals of data actually reported on the intermediate and long forms are contained in published reports and no attempt was made as in past years to estimate the generally small proportion of individual totals represented by detailed items omitted from the short forms.

The new approach has relieved an additional 12,000 establishments from filling out the regular long form. Establishments now recel ving the short form number in excess of 20,000 and account tor more than 54 per cent of the total number of estaslishments and a little more than 3 per cent of tha total value of shipments.

# THE BRIDGE BUILDING AND STRUCTURAL STEEL <br> INDUSTRY, 1959 

The value of work done by concerns in the 3ridge Building and Structural Steel Industry amounter to $\$ 217,650,544$ in 1959 an increase of 3.2 per cent over the $\$ 210,882,702$ reported in the previous year.

This industry includes firms which were occupied chiefly in fabricating or erecting steel for bridges, building, etc. and in 1959 covered the operations of 61 plants, of which 28 were located in Ontario, 16 in Quebec, 5 in Sritish Columbia, 5 in Alberta, 3 in Manitoba, 2 in Nova Scotia, and 1 in each of New Brunswick and Saskatchewan.

These firms gate employment to 14,725 persons who were paid $\$ 69,341,631$ in salaries and wages. Fuel and electricity cost $\$ 2,001,209$ and expenditures for materials for use in manufacturing amounted to $\$ 102,852,464$.

The principal products were 347,233 tons of structural work for buildings at $\$ 119,223,954$; 117,365 tons of other structural work, such as bridges, transmission towers, etc. at $\$ 58,304,245$; mechanical work, including cranes, trolleys, boilers. machinery, etc., at $\$ 8,166,776$ and plate and tank work at $\$ 19,568,966$.

TABLE 1. Principal Statistics of the Bridge Building and Structural Steel Iadustry, Significant Years 1929-59, and by Provinces, 1958 and 1959

| Year and province | Estab-lishments | Employees | Salaries and wages | Cost uf fuel and electricity at wotks | Cost at plant of materials used | Value added by manufacture ${ }^{1}$ | Gross selling value of products |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number |  | dollars |  |  |  |  |
| 1929 | 10 | 4,977 | 8,937,427 | 364, 936 | 14, 557, 679 | 19, 256, 873 | 34,179,488 |
| 1!34 | 18 | 1,659 | 2, 089, 552 | 170, 764 | $2,765,535$ | 1,763,844 | 4,700, 143 |
| 1937 | 19 | 3,418 | 5,004, 456 | 247, 801 | 8,657,728 | 7,944,795 | 16,850, 324 |
| 1939 | 21 | 2.949 | 4, 54,6,648 | 232,377 | 6,786,893 | 8,821,322 | 15,840, 592 |
| 1943 | 22 | 10,974 | 23, 175, 872 | 1,005,517 | 24, 014, 652 | 47, 495, 665 | 72, 515,834 |
| 1946...................................... | 25 | 6, 091 | 15, 825, 390 | 639, 503 | 18.896, 434 | 20,586, 758 | 40, 122,695 |
| 1949 | 29 | 7. 149 | $18,576,533$ | 802, 391 | 30, 936, 308 | 43,953,532 | 75, 692, 231 |
| 1955 | 49 | 11,863 | 46, 557, 144 | 1,527, 085 | 79, 731.908 | $76,453,347$ | 157, 712.340 |
| 1956 | 51 | 13,707 | $58,440,200$ | 1.813,402 | 103, 229,597 | 99, 728, 554 | 204, 771, 553 |
| 1957 | 58 | 15,974 | 70, 956, 268 | 2, 068, 714 | 117.061,82.4 | 112.319,961 | 231, 450, 499 |
| 1958 |  |  |  |  |  |  |  |
| Quebec | 18 | 5. 167 | 23, 431, 145 | 633,517 | 32, 756, 416 | 37, 578, 394 | 70,968, 327 |
| Ontario | 31 | 5,563 | 25,660, 226 | 830,604 | 36, 633, 531 | 46. 258, 317 | 83, 722, 452 |
| Alberta | 5 | 1,106 | 4,499,938 | 87,028 | 8, 744, 984 | 4, 342, 239 | 13, 174, 251 |
| British Columbia $\qquad$ <br> Nova Scotia | 6 | 1,431 | 6,954,504. | 170,117 | 11, 469, 061 | 11,643, 619 | 23,282,797 |
| Nova | 2 | 1,264 | 5.482, 151 | 138, 250 | 11,098, 291 | 8, 498,334 | 19,734,875 |
| New Brunswick <br> Canadia | 1 63 | 14,531 | 66, 027,964 | 1, 859,516 | 100,702, 283 | 108,320,903 | 210,882,702 |
|  |  | $5,215$ | 24. 231.519 |  | $34,958,368$ | $42,571,541$ |  |
| Ontario | 28 | 5,478 | 26, 534, 427 | 912,867 | 37, 548, 706 | 43, 978, 940 | 82, 440, 513 |
| Alberta ................................... | 5 | 1,226 | $5,330,930$ | 88. 189 | 9,840, 364 | 7,082,991 | 17, 011,544 |
| British Columbia $\qquad$ | 5 | 1,277 | 6,383, 372 | 174, 541 | 9,360,062 | 8, 484, 226 | 18,018,829 |
| Manitobe | 3 | 1,529 | $6,861,383$ | 150,229 | 11,144, 964 | $10,679,173$ | 21,974,366 |
| New Brunswick $\qquad$ <br> Saskatchewan | 1 | 1,529 | 6,861,383 | 150, 229 | 11, 144, 964 | 10,679,173 | 21,974,366 |
| Camada .............................. | 61 | 14,725 | 69,341, 631 | 2, 001, 209 | 102,852,464 | 112, 796, 871 | 217,650, 544 |

' Gross value less cost of materials, fuel and electricity.
vote: Profits or losses cannot be calculated from above figures as data are not available for general expense itoms such as interest, rent, deprectation, taxes, insurance, advertising, etc.

TABLE 2. Inventories ${ }^{1}$ by Provinces, 1959

|  | Raw <br> materials <br> and supplies | Goods in <br> process | Finished <br> goods of own <br> manufacture |
| :--- | ---: | ---: | ---: | ---: |

${ }^{1}$ (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.
(b) Beginning with 1954 , information on the value of year-end inventory holdings at plant warehouses is being collected as part of the annual census of Industry. These data were formerly collected by a separate survey. The summarized results for the Bridge Bullding and Structural Steel Industry, for the year under review are shown in the above table.
(c) The opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the comnosition of the industry suchas: tho additior of new estahlishments, the disappearance of old ones or the transfer of exabibitmenis co ochar tacuntries zor siatifical poryosas.
${ }^{2}$ Adinsted to allow for progress naymentas.


| Product | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Selling value at works | Quantity | Selling value at works |
|  | tons | \$ | tons | \$ |
| Structural work: |  |  |  |  |
| Buildings...... | 316,811 | 104.788.297 | 347,233 | 119,223,964 |
| Bridges | 43.236 | 24.437.989 | 75, 769 | 43,008,658 |
| Transmission towers | 37,427 | 13,510,380 | 15,181 | 4,904,703 |
| All other | 33,149 | 11,982,686 | 26,435 | 10,390,884 |
| Total structural work | 430,623 | 154, 719,352 | 464, 598 | 177,528,209 |
| Other production: |  |  |  |  |
| Plate and tank work, including tanks, hoppers, digesters, etc. Mechanical work including cranes, trolleys, boilers, machinery | -• | $20.951,154$ | - | 19,568,966 |
| Mechanical work, including cranes, trolleys, bollers, machinery, etc. $\qquad$ | - | 10,604,700 | $\cdots$ | 8,166,776 |
| Custom work and repairs ............................................................ | . | 1,073,650 |  | 1,409, 028 |
| Other products ${ }^{2}$......................................................................... |  | 14, 640, 192 | - | 18.185.072 |
| Work done during year on products not completed at year-end.... |  | 61, 344,833 |  | $52,660,464$ |
| Total value of structural work and other production | - . | $263,333,881$ | - ${ }^{\text {- }}$ | 277,518.515 |
| Less value of work done in previous years on products completed during the year | *. | 52,451,179 | $\cdots$ | 59,867,971 |
| Total production for year |  | 210, 882, 702 |  | $217,650,544$ |

${ }^{2}$ Includes barges, reinforcing steel, castings, eta.
.. Figures not available.
... Figures not appropriate or not applicasia.
 and Platework Industry.

TIBLE 4. Materials Used in the Bridge Building and Structural Steel Work Industry, 1958 and 1959

| Material | 1958 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Cost at works | Quantity | Cost at works |
| Steel (except alloy steel): <br> Castings (rough and semi-finished received from foundry): |  |  |  |  |
|  |  |  |  |  |
| Iron (gray and malleable) ................................. ton | 339 | 115,502 | 325 | 121.655 |
| Steel ............................................................. | 567 | 312,619 | 583 | 301.421 |
| Bars ................................................................... | 61,942 | $9.088,449$ | 87.422 | 11,661,604 |
| Plates ( $3 / 16 \mathrm{ln}$, and thicker) | 95,866 | $15.480,887$ | 92,785 | $13,890,640$ |
| Sheets (under 3/16 in.): |  |  |  |  |
| Black .-............................................................. ${ }^{\text {. }}$ | 6.685 | 1.021.022 | 7, 157 | 1,079.416 |
| Galvanized | 4.329 | 793.440 | 7,198 | 1,308,287 |
| Strips (less than 14 in. wide).............................. | 5,585 | 758,978 | 3.352 | 422,748 |
| Structural shapes | 344,372 | 50,014,879 | 380,504 | 53,044,305 |
| Wire ...................................................................... | 1,196 | 145,454 | 1.325 | 283,836 |
|  |  |  |  |  |
| Alloy steel (other than stainless and tool steel): Billets, bars and rods $\qquad$ | $\cdots$ | 505.414 | * | 478.935 |
| Other shapes .................................................. | $\square$ |  | - |  |
| Stainless - Billets, bars and rods $\qquad$ Other shapes | $\cdots$ | 6,272 66,360 | $\ldots$ | $\begin{array}{r} 677 \\ 245,065 \end{array}$ |
| Tool steel (all types including high speed): |  |  |  |  |
|  | $\cdots$ | 23,013 | $\cdots$ | 23.825 |
| Other shapes |  | 5,702 | $\cdots$ | - |
| Other iron and steel | . . ${ }^{\text {d }}$ | 3,935,369 | *. | 2,466,464 |
| Non-ferrous metals in all forms: |  |  |  |  |
| Aluminum - Sheet $\qquad$ pounds Dther forms $\qquad$ | 28,698 25,148 | 16,508 10,101 | 32,814 267,291 | 19,267 95,908 |
| Brass and bronze .......... | 113,966 | 68,360 | 50,297 | 37, 554 |
| Copper - Sheet | 2,400 | 1.282 | - | - |
| Lead ............. | 39,608 | 6.636 | 32,852 | 4,436 |
| 7inc | 2,047, 172 | 215,667 | 1,800,611 | 203.409 |
| Other non-ferrous metals |  | 84.265 |  | 77,363 |
| Otar materials and supplies: <br> Paints, oils and varnishes. $\qquad$ <br> wamber $\qquad$ M bd. ft. <br> 4: other materials ${ }^{\text { }}$ $\qquad$ |  |  |  |  |
|  |  | 769.213 | $\cdots$ | 719.733 |
|  | 1,080 | 110,543 | . | 251,168 |
|  | ... | 17,146,348 | ... | 16,114,748 |
| Total materials and supplies ....................... | ... | 100, 702, 283 | -•• | 102,852,464 |

[^1].. Figures not available.
... Figures not appropriate or not applicable.

TABLE 5. Principal Statistics of the Bridge Building and Structural Steel Industry, grouped according to Size of Establishment, 1958 and 1959


TABLE 6. Capital and Repair Expenditures in the Bridge Building and Structural Steel Work Industry, 1955-59

|  | Capital expenditures |  | Subtotal | Repair and maintenance expenditures |  | Sub- <br> total | ```Total capital and repair expenditures``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Construction | Machinery and equipment |  | Construction | Machinery and equipment |  |  |
|  |  |  | th | usands of do | ars |  |  |
| 1955 | 1. 201 | 1.995 | 3.196 | 414 | 1.539 | 1.953 | 5.149 |
| 1956 | 1,706 | 3,613 | 5,319 | 591 | 1.833 | 2.424 | 7.743 |
| 1957 | 5,755 | 6,391 | 12,146 | 782 | 2,030 | 2.812 | 14,958 |
| 1958 | 3.345 | 4.911 | 8. 256 | 652 | 2.231 | 2.283 | 11.139 |
| $1959{ }^{\text {P }}$ | 1.732 | 3.266 | 4.998 | 583 | 2.598 | 3,181 | 8,179 |

p Preliminary figures.

TABLE 7. Employees, Salaries and Wages, by Provinces, in the Bridge Building and Structural Work Industry, 1958 and 1959

| Province | Employees |  |  |  |  | Salaries and wages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Supervisory and office |  | Production workers |  | Total | Supervisory and office | Production workers | Total |
|  | Male | Female | Male | Female |  |  |  |  |
|  | number |  |  |  |  | dollars |  |  |
| Quebec | 986 | 219 | 3. 962 | - | 5,167 | 7.316,290 | 16,114,855 | 23,431,145 |
| Ontario | 1.187 | 261 | 4,098 | 17 | 5,563 | 7.614,161 | 18,046,065 | $25,660,226$ |
| Alberta | 249 | 57 | 800 | - | 1,106 | 1,521,845 | 2.978, 093 | 4,499,938 |
| British Columbia | 287 | 65 | 1.078 | 1 | 1.431 | 1,864, 184 | 5,090,320 | 6,954,504 |
| Other provinces | 293 | 73 | 898 | - | 1,264 | 1.735.921 | 3,746.230 | 5,482, 151 |
| Canada | 3,002 | 675 | 10,836 | 18 | 14.531 | 20,052.401 | 45,975,563 | 66, 027,964 |
| Quebec | 1.115 | 251 | 3,849 | - | 5. 215 | 8.125,322 | 16,106.197 | 24,231.519 |
| Ontario | 1.109 | 256 | 4,103 | 10 | 5.478 | 7.419,953 | 19,114.474 | 26.534 .427 |
| Alberta | 246 | 69 | 910 | 1 | 1,226 | 1,537,032 | 3.793.898 | 5,330,930 |
| British Columbla | 291 | 57 | 927 | 2 | 1,277 | 1,932,475 | 4,450,897 | 6,383,372 |
| Other provinces | 322 | 76 | 1.131 | - | 1.529 | 1,913,377 | 4.948,006 | 6,861,383 |
| Canada | 3,083 | 709 | 10,920 | 13 | 14.725 | 20,928,159 | 48,413,472 | 69,341,631 |

TABLE: 8. Production Workers, by Months, 1959

| Montts | Establishments reporting monthly detail ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Male |  | Female |
|  | In shops | On erection |  |
| January | 7,392 | 2. 192 | 8 |
| February | 7,510 | 2,245 | 8 |
| March | 7.627 | 2, 246 | 8 |
| April | 7,818 | 2,296 | 8 |
| May | 8.278 | 2.622 | 8 |
| June | 8,612 | 2,690 | 8 |
| July | 8,306 | 2,697 | 8 |
| August | 8,561 | 2,944 | 8 |
| September | 8,499 | 2,752 | 8 |
| October ... | 8,006 | 2,612 | 8 |
| November | 7,510 | 2.386 | 8 |
| December | 7,251 | 1.978 |  |
| Average for establishments reporting monthly detail |  |  | 8 |
| Average estimated for small establishments ${ }^{2}$ |  |  | 5 |
| Average for all establishments | 10. |  | 13 |

[^2]TABLE 9. Fuel and Electricitr Usol in the Bridge and Structural Steel Work Industry, 1959

| Kind | Quantity | Cost at plant |
| :---: | :---: | :---: |
|  |  | \$ |
| 1. Establishments reporting commodity detail: ${ }^{\text {2 }}$ |  |  |
| Bituminous coal: |  |  |
| (a) From Canadian mines ............................................................. to. to. | 14,498 | 199.370 |
| (b) Imported | 2,714 | 37,082 |
| Anthracite coal ................................................................................... | 101 | 2, 225 |
| Lignite coal | 1.952 | 15.058 |
| Coke ................................................................................................... ${ }^{\text {. }}$ | 87 | 1,653 |
| Gasoline (including gasoline used in cars and trucks) ........................... Imp. gal. | $1.185,187$ | 389,447 |
| Fuel oll including kerosene or coal oil ............................................... | 3,137, 842 | 416,174 |
| Gas: |  |  |
| (a) Liquefied petroleum gases ......................................................... ${ }^{\text {a }}$ | 26,950 | 6, 175 |
| (b) Other manufactured gas ........................................................... M cu.f. | 2.987 | 5,820 |
| (c) Natural gas | 170, 350 | 131, 626 |
| Other fuel | - | 626 |
| Electricity purchased ....................................................................... kwh. | $61.290,911$ | 719.264 |
| 2. Fistimate for establishments for which no data were collected: ${ }^{2}$ Cost of fuel and electricity |  |  |
| 3. All establishments: |  |  |
| Total cost of fuel and electricity | . . ${ }^{\text {d }}$ | 2,001. 209 |

[^3]List of Firms in the Bridge Building and Structural Steel Work Industry, 1959


# List of Firms in the Bridge Building and Structural Steel Work Industry, 1959 - Concluded 

| Name of firm | Location of plant |
| :---: | :---: |
| Ontario-Concluded: |  |
| Runnymede Steel Construction Ltd. | 3370 Dundas St. W., Toronto |
| Sarnia Bridge Co. Limited | 251 Campbell St., Sarnia |
| Scarboro Steel Works Limited | 102 Manville Rd., Scarboro |
| Standard Iron \& Steel Works Limited | 3430 Dundas St. W., Toronto |
| Standard Steel Construction Co. Division of United Steel Corporation Ltd. $\qquad$ | Port Robinson |
| York Steel Construction Ltd. .-........................................................... | 75 Ingram Drive, Toronto 9 |
| Manitoba: |  |
| Bridge \& Tank Western Limited | Sutherland \& Maple, Winnipeg |
| Dominion Bridge Company, Limited | Dublin Ave.. Winnipeg |
| Sutherland Steel Ltd. .......................................................................... | 123 Anabella St., Winnipeg |
| Saskatchewan: |  |
| Saskatchewan Steel Fabricators Ltd | 1050 St. John St., Regina |
| Alberta: |  |
| Calgary Structural Steel Ltd. | 223-53rd. Ave. S.E., Calgary |
| Carry, C.W. Ltd. | 10530-103 St., Edmonton |
| Dominion Bridge Company Limited | 803-24th Ave. S.E., Calgasy |
| Dominion Bridge Company Limited.................................................. | 120th. St. \& 107th. Ave., Edmonton |
| Western Metal Fabricators Ltd | 1501-2nd Ave. S. . Lethbridge |
| British Columbia: |  |
| Allied Steel Frabricators Limited ............................................... | 700 Derwent Way Annacis Industrial Estate, New Westminster |
| Coast Steel Frabricators Ltd | 7950 Venture St., Burnaby |
| Dominion Bridge Co. Ltd. | 2450 Boundary Road, Burnaby |
| Gilchrist Engineering \& Steel Fabricators Ltd., | 2525 Skeena. Vancouvet 10 |
| Western Bridge and Steel Fabricators Litd. ................................ | 145 W. 1st Ave., Vancouver 10 |




[^0]:    ${ }^{2}$ To arrive at the National Accounts concept of "gross domestic product at factor cost" , it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, Survey of Production.

[^1]:    ${ }^{2}$ No detailed information on materials used was collected from firms generally reporting value of shipments of less than $\$ 500,000$. The total value of materials used by these firms was $\$ 2,011,961$ and this amount is included with "All other materials".

[^2]:    ${ }^{1}$ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of $\$ 500,000$ and over.
    ${ }^{3}$ For establishments generally reporting value of shipments of less than $\$ 500,000$, no data on number of workers were collected. Average was estimated by using change in value of shipments to arrive at value of payroll which was then used in conjunction with estimated average earnincs to arrive at number of workers.

[^3]:    ${ }^{1}$ Establishments generally reporting value of shipments of $\$ 500,000$ and over.

    * Establishments generally reporting value of shipments of less than $\$ 500,000$.
    ... Figures not appropriate or not applicable.

