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# THE PRIMARY IRON AND STEEL INDUSTRY

## 1959

DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division



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THE PRIMARY IRON AND STEEL INDUSTRY  
1959

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## PUBLICATIONS

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

**A — Annual**

**M — Monthly**

**S.C. — Special Compilation**

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## EXPLANATORY NOTES

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

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials 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 establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable 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 retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) 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 piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece 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 financial year basis.

### Salaries and Wages

Salaries and wages refer to gross earnings 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 withdrawals 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 quantities 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 supplies not chargeable to capital account are included.

### Factory Shipments

Factory shipments refer to shipments of goods made from own materials either 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-products 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 reporting firm are included. Goods bought or 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 year 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.<sup>1</sup>

### **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 or allotted to 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.

<sup>1</sup> 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*.

For the 1959 Census, the short form was used again, but further steps were taken to ease the 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, nor does it contain detailed data on volume and value of materials used. For purposes 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 receiving the short form number in excess of 20,000 and account for more than 54 per cent of the total number of establishments and a little more than 3 per cent of the total value of shipments.



# THE PRIMARY IRON AND STEEL INDUSTRY

1959

Statistics for the Primary Iron and Steel Industry include data for all establishments in Canada which were engaged chiefly in the manufacture of (a) pig iron, (b) ferro-alloys, (c) steel ingots and steel castings, (d) hot-rolled steel products, (e) cold-drawn steel bars, strips and shapes. Forty-nine plants were included in this industry in 1959 and reports received covered 61 different divisions or departments, including 5 blast furnace departments, 3 ferro-alloy plants, 37 steel furnace divisions and 16 rolling or drawing mills.

Factory sales of pig iron, ferro-alloys, steel ingots and castings and finished rolled products were 32.6 per cent higher in value in 1959 than in 1958, the totals being \$782,494,003 and \$590,317,696 respectively. Eighteen plants in Ontario (comprising 26 separate plants or departments) accounted for 81.1 per cent of the total for Canada, or \$634,450,504; 15 plants in Quebec (comprising 16 separate plants or departments) accounted for 8.2 per cent or \$64,162,386; 3 plants in Nova Scotia (comprising 5 separate plants or departments) for 7.1 per cent or \$55,753,549, while the remaining \$28,127,564 or 3.6 per cent was accounted for by 13 plants in Manitoba, Alberta and British Columbia (comprising 14 separate plants or departments).

In 1959 a total of 34,942 people were employed in this industry as compared with the 1958 total of 30,261. Seventy-four per cent of the employees, or 25,775, worked in plants in Ontario, 3,742 in Quebec, 3,629 in Nova Scotia and 1,796 in Manitoba, Alberta and British Columbia. Payments in salaries and wages during 1959 amounted to \$183,000,151, an increase of 23.6 per cent from the previous year's total of \$148,023,062.

Materials used in manufacturing processes cost \$354,160,093 in 1959 compared with \$250,699,538 in 1958, and the cost of fuel and electricity was \$36,076,238 against \$28,905,568 in 1958, a 39.6 per cent increase in the expenditures for materials, fuel and power.

## PIG IRON

Output of 4,182,775 net tons of pig iron in 1959 was 36.7 per cent higher than the 3,059,579 tons reported for the previous year; however, it should be noted that the 1959 total is not exactly comparable with previous years as it includes for the first time the "remelt iron" product produced in the smelting of titanium ores. Production of basic iron amounted to 3,552,926 tons or 84.9 per cent of the total; foundry iron amounted to 228,843 tons and malleable iron to 401,006 tons — see footnotes to Table 4.

Producers' sales of pig iron in 1959 totalled 662,341 tons at \$36,280,610 compared with 429,353 tons at \$24,878,802 in 1958; however, as mentioned in the previous paragraph the 1959 total includes

for the first time the "remelt iron" product produced in the smelting of titanium ores and, therefore, the totals for the two years are not exactly comparable.

Imports of pig iron during the calendar year declined to 21,210 tons from the 26,498 tons in 1958. Exports increased to 468,335 tons from 336,591 tons reported in the previous year — see footnote to Table 10.

## FERRO-ALLOYS

Ferro-alloys were made in 1959 by nine establishments, 5 of which recovered ferrosilicon as a by-product in the manufacture of abrasives. Output of ferro-alloys in 1959 amounted to 135,526 tons, an increase of 12.0 per cent over the 112,589 tons reported in 1958.

Altogether, ferrosilicon was made in eight different plants, ferrochrome-silicon in one, ferromanganese in one, silicomanganese in one, ferrochrome in two and ferrophosphorus in one.

## STEEL INGOTS AND CASTINGS

Steel production increased by about 35 per cent to 5,901,487 tons in 1959 over the 4,359,466 tons in 1958, the output of steel ingots rising to 5,799,356 tons from 4,262,122 tons; castings production also rose to 102,131 from 97,344 tons. Factory sales of ingots and castings totalled 298,249 tons at \$59,005,124.

Thirty-seven steel plants were in operation during the year. At the end of 1959 these plants had 125 furnaces, including 30 basic open-hearth furnaces with an annual rated capacity of 4,522,900 tons, 89 electric furnaces rated at 1,037,500 tons and 1 converter at 300 tons. Also included in the total were 5 oxygen vessels or converters of the Linz-Donawitz type with a combined capacity of 1,440,000 tons.

Operating steel furnaces in 1959 used 3,511,207 net tons of pig iron, 2,951,186 tons of scrap iron or steel, 188,041 tons of dolomite, 208,144 tons of lime, 77,206 tons of silica sand 9,264 tons of magnesite, 71,039 tons of ferro-alloys, 419,945 tons of iron ore and 140,736 tons of limestone.

## ROLLED AND DRAWN STEEL

In 1959 there were 13 mills occupied chiefly in hot-rolling of steel products and 3 mills making only cold-drawn and cold-rolled shapes. Of course, some of the former also cold-rolled steels as part of their operations. Nine of these mills were in Ontario, 2 in Nova Scotia, 2 in Quebec and 1 each in Manitoba, Alberta and British Columbia.

Rolling mill sales in 1959 rose to \$655,398,012 from \$491,355,783 in 1958. The main items sold during the year under review were 795,274 tons of

hot-rolled bars at \$116,993,886; 408,835 tons of plates at \$53,394,313; 371,588 tons of rails and rail fastenings at \$42,819,648; 325,993 tons of semi-finished forms such as blooms, billets, etc., at \$32,821,954; 265,194 tons of structural shapes at \$34,528,656; 380,132 tons of wire rods at \$46,182,505; 47,382 tons of cold-reduced bars at \$14,000,034; 43,940 tons of cold-rolled strip at \$6,045,752; 347,906 tons of skelp (hot and cold-rolled) at \$37,379,904; and other rolled products, including hot and cold-rolled sheets and strip, tin plate, galvanized sheets, etc., totalling 1,612,352 tons at \$260,780,503.

**Note:** Three major changes in concept affecting the data for this industry were introduced in 1954. The first one involved a change in the method of counting establishments; the second concerned a change in valuing shipments of wire rods transferred to makers' own processing plants; while the third concerned the method for calculating "Value added". These three changes are reviewed in the first three footnotes below. A further change affecting 1957 data is covered in footnote 4.

1. Prior to 1954, blast furnace departments, steel furnace divisions and rolling mills which were units of a single works filed separate reports and these departments were counted individually as establishments. These units continued to file separate reports in 1954, 1955 and 1956 but the method of counting establishments was changed so that the separate operations or units at a single works were collectively considered as one establishment. In 1957 the concept was further expanded and the integrated and semi-integrated mills filed only a single report covering all operations (excluding coke ovens). On this account, the number of establishments since 1954 shown in Table 2 is less than in previous years.

2. Prior to 1954, shipments of wire rods transferred to makers' own fabricating plants were considered as "shipments for own use" and, therefore, not included in

"Factory sales". For the most part these shipments were made to makers' fabricating plants which are classified to the Wire and Wire Goods Industry. The normal practice for statistical purposes has been to consider shipments of this kind from one industry group to another as part of the total sales of the producing industry and as materials by the consuming industry. The treatment of wire rods constituted an exception which has affected the calculation of "Value added" for these two industries. Therefore, in order to bring the treatment of wire rods in line with usual statistical procedures, producers in 1954 and subsequent years were asked to consider the sales of wire rods to own fabricating plants as "Factory sales". For this reason the value of products shown in this bulletin for the years 1954-59 in Tables 2, 29 and 37 is higher by the value applied to these shipments.

3. Figures for value added by manufacture, shown in Table 2, prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity from the gross selling value of products. Since 1954 information not previously available on the value of year-end inventory holdings at plant and plant warehouses has been taken into account in calculating the value added figure. In 1954 and 1955 the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse — see also footnote 4 below.

4. Totals shown in the "Materials used" sections of this industry for 1957 and later years reflect the inclusion of several items of equipment not previously included, namely ingot moulds and stools in the Steel Ingots and Castings Division — see Table 18 and rolls and dies in the Rolled Steel Products Division — see Table 30. The inclusion of these affects, of course, the comparability of the "Materials used" totals reported in 1957 and later years with those shown for previous years. The result of this contribution to the "Materials used" component in the calculation for "Value added" forces, as well, a corresponding decrease in the total developed for the latter in 1957 and later years — see Table 2.

## SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

.. figures not available.

... figures not appropriate or not applicable.

— nil or zero.

P preliminary figures.



TABLE 1. Provincial Distribution of Active Plants in the Primary Iron and Steel Industry, 1959

Province	Estab- lish- ments	Pig iron		Steel ingots and castings		Rolling and drawing mills	Ferro- alloys <sup>1</sup>
		Plants	Blast furnaces	Plants	Steel furnaces		
		number					
Nova Scotia .....	3	1	3	2	8	2	—
Quebec .....	15	—	—	12	26	2	2
Ontario .....	18	4	12	12	67	9	1
Manitoba .....	3	—	—	2	8	1	—
Alberta .....	3	—	—	3	4	1	—
British Columbia .....	7	—	—	6	12	1	—
Canada .....	49	5	15	37	125	16	3

<sup>1</sup> Not including artificial abrasive plants which made ferrosilicon as a by-product.

TABLE 2. Principal Statistics of the Primary Iron and Steel Industry, Significant Years, 1929-59 and by Provinces, 1958 and 1959

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost of materials at plant	Value added by manufacture <sup>1</sup>	Gross selling value of products at works
	number		dollars				
1929 .....	45	11,218	18,534,681	6,691,961	32,514,596	33,025,138	72,231,995
1933 .....	50	5,200	6,049,189	2,699,837	7,598,931	8,193,781	18,492,549
1937 .....	55	14,054	19,926,498	6,934,008	33,805,631	33,841,030	74,580,669
1939 .....	54	13,827	20,410,517	6,069,661	29,629,376	40,235,444	75,934,481
1942 .....	61	33,245	60,874,818	18,734,178	110,551,516	102,820,061	232,105,755
1945 .....	63	29,378	57,862,489	16,002,441	86,417,375	89,859,343	192,279,159
1949 .....	55	29,097	82,958,229	22,352,965	147,229,391	136,152,628	305,734,984
1955 .....	50 <sup>2</sup>	32,507	136,879,403	31,182,580	212,288,266	281,030,420	526,318,453 <sup>3</sup>
1956 .....	50 <sup>2</sup>	36,043	162,880,867	38,311,951	301,298,582	352,522,996	680,860,470 <sup>3</sup>
1957 .....	51 <sup>2</sup>	35,944	170,779,346	36,755,262	329,582,384 <sup>4</sup>	344,565,954	704,565,791 <sup>3</sup>
1958							
Nova Scotia .....	3	3,999	17,036,986	2,759,196	25,557,796	24,282,826	54,815,366
Quebec .....	16	3,560	15,194,173	2,818,784	21,094,850	34,070,779	58,836,090
Ontario .....	19	21,249	109,585,754	22,299,430	196,541,814	235,796,736	456,943,390
Manitoba .....	2	1,453	6,206,149	1,028,158	7,475,078	10,773,246	19,722,850
Alberta .....	3						
British Columbia .....	7						
Canada .....	50 <sup>2</sup>	30,261	148,023,062	28,905,568	250,699,538 <sup>4</sup>	304,923,587 <sup>4</sup>	590,317,696 <sup>3</sup>
1959							
Nova Scotia .....	3	3,629	16,931,552	2,924,166	29,851,584	22,876,715	55,753,549
Quebec .....	15	3,742	16,809,969	3,202,284	23,262,716	38,380,122	64,162,386
Ontario .....	18	25,775	140,448,660	28,464,493	289,627,758	317,296,144	634,450,504
Manitoba .....	3	1,796	8,809,970	1,485,295	11,418,035	15,254,534	28,127,564
Alberta .....	3						
British Columbia .....	7						
Canada .....	49 <sup>2</sup>	34,942	183,000,151	36,076,238	354,160,093 <sup>4</sup>	393,807,515 <sup>4</sup>	782,494,003 <sup>3</sup>

<sup>1</sup> See footnote 3 of introductory text.

<sup>2</sup> See footnote 1 of introductory text.

<sup>3</sup> See footnote 2 of introductory text.

<sup>4</sup> See footnote 4 of introductory text.

TABLE 3. Inventories,<sup>1</sup> 1959

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
Opening:				
Nova Scotia .....	9,779,866	1,493,373	823,150	12,096,389
Quebec .....	6,184,849	714,758	2,930,846	9,830,453
Ontario .....	54,767,623	27,095,106	23,943,499	105,806,228
Manitoba, Alberta and British Columbia .....	4,886,648	845,315	818,513	6,550,476
<b>Canada .....</b>	<b>75,618,986</b>	<b>30,148,552</b>	<b>28,516,008</b>	<b>134,283,546</b>
Closing:				
Nova Scotia .....	8,694,775	1,469,100	746,339	10,910,214
Quebec .....	6,469,577	1,243,986	3,084,354	10,797,917
Ontario .....	59,657,754	27,317,189	24,659,307	111,634,250
Manitoba, Alberta and British Columbia .....	6,054,446	813,125	881,003	7,748,574
<b>Canada .....</b>	<b>80,876,552</b>	<b>30,843,400</b>	<b>29,371,003</b>	<b>141,090,955</b>

<sup>1</sup> Book value of all manufacturing inventories owned and held at plant and plant warehouses.

## (a) PIG IRON

TABLE 4. Production<sup>1</sup> of Pig Iron and Sales<sup>1</sup> by Producers, 1958 and 1959

Grade	Delivered in molten condition	Machine- cast	Total tonnage made	Sales	
				Quantity	Income from sales
	net tons				\$
1958					
Basic .....	2, 439, 570	226, 135	2, 665, 705	113, 332	6, 094, 505
Foundry <sup>2</sup> .....	486	43, 269	43, 755	56, 946	3, 344, 036
Malleable .....	12, 156	337, 963	350, 119	259, 530	15, 440, 261
Totals .....	2, 452, 212	607, 367	3, 059, 579	429, 708	24, 878, 802
1959					
Basic .....	3, 427, 715	125, 211	3, 552, 926	112, 237	6, 052, 632
Foundry <sup>2</sup> .....	124	228, 719	228, 843	161, 949	8, 102, 294
Malleable .....	26, 077	374, 929	401, 006	388, 155	22, 125, 684
Totals .....	3, 453, 916	728, 859	4, 182, 775	662, 341	36, 280, 610

<sup>1</sup> Commencing with 1959 includes the "remelt iron" product produced in the smelting of titanium ores.

<sup>2</sup> Includes silvery pig.

# PRODUCTION OF IRON AND STEEL IN CANADA, 1949-1959

(THOUSAND NET TONS)

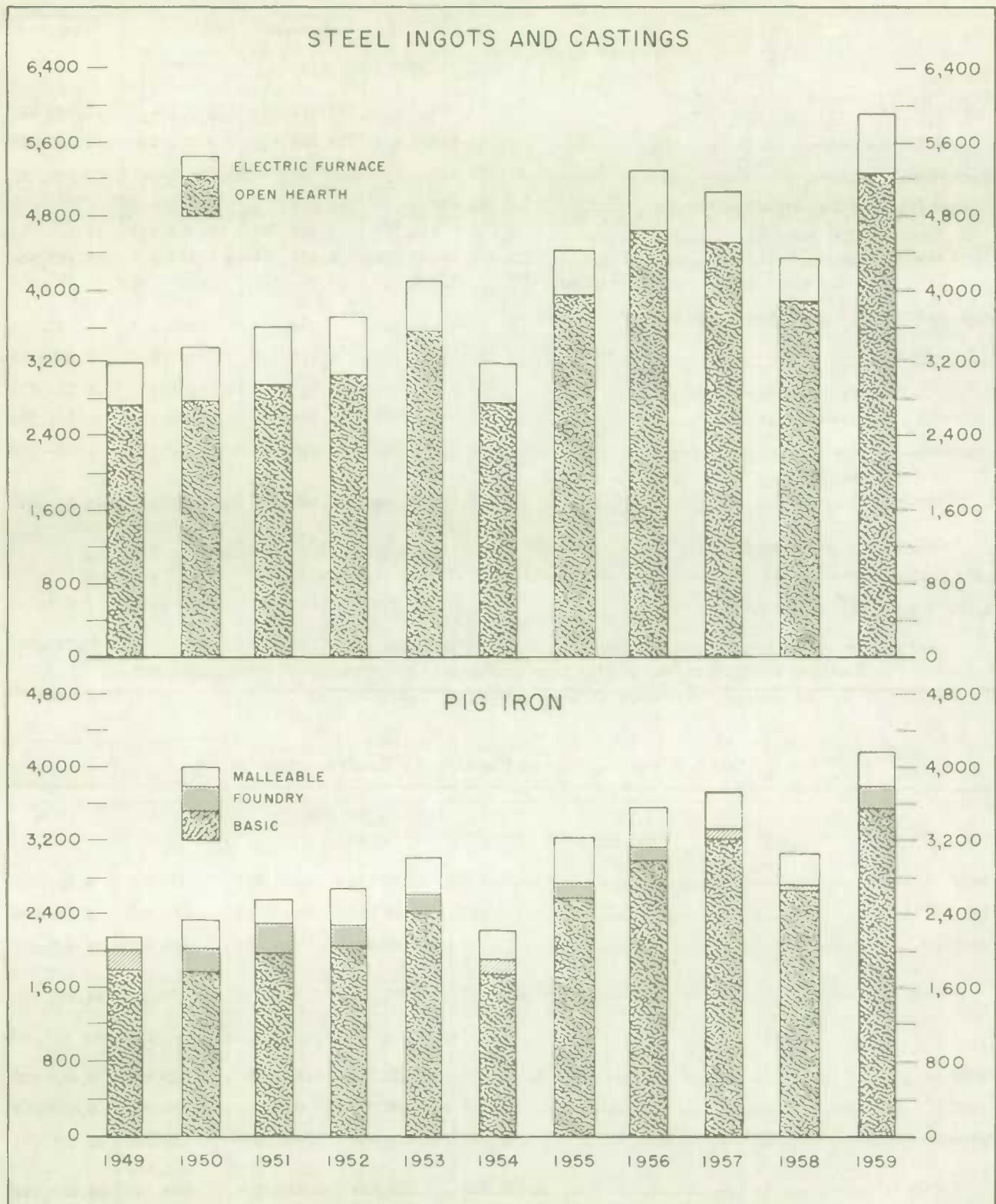




TABLE 5. Materials<sup>1</sup> Charged to Iron Blast Furnaces, 1958 and 1959

Materials	1958		1959	
	Quantity	Cost at furnace	Quantity	Cost at furnace
	net tons	\$	net tons	\$
Crude iron ore used in making pig iron:				
(a) From Canadian mines .....	831,712	8,116,263	1,461,281	14,239,504
(b) From foreign mines .....	2,552,639	24,959,431	2,452,830	24,290,213
Pyrite cinder .....	—	—	—	—
Iron ore (sintered, pelletized, etc.):				
(a) From Canadian mines .....	684,737	7,298,142	1,269,269	14,447,654
(b) From foreign mines .....	180,784	2,739,874	259,981	4,000,553
(c) From own processing (not including mine sinter plant) ..	1,205,626	13,502,474	1,719,355	19,707,257
Mill cinder, roll scale, slag and flue dust (not sintered, pelletized, etc.) .....	160,746	940,396	135,914	1,186,242
Scrap .....	126,239	1,469,057	101,705	1,783,212
Limestone—(a) From Canadian quarries .....	458,710	1,147,559	476,501	1,289,670
(b) From foreign sources .....	301,998	486,540	338,793	551,434
Dolomite—(a) From Canadian quarries .....	222,754	365,452	227,873	386,608
(b) From foreign sources .....	—	—	—	—
Coke (including own make-blast furnace charge only) .....	2,470,378	37,876,890	3,128,643	47,863,372
Firebrick, fireclay and other refractories .....	..	435,079	..	433,868
Other materials and process supplies .....	...	2,747,130	...	3,105,562
Less credit for flue dust produced .....	197,010	692,218	307,364	994,541
<b>Total cost of materials and process supplies .....</b>	<b>...</b>	<b>101,392,069</b>	<b>...</b>	<b>132,290,608</b>

<sup>1</sup> Does not include charges into furnaces used in the smelting of titanium ores.

TABLE 6. Production<sup>1</sup> of Pig Iron, by Grades, 1950-59

Year	Basic	Foundry	Malleable	Total
	net tons			
1950 .....	1,763,440	238,263	315,418	2,317,121
1951 .....	1,988,942	306,264	257,687	2,552,893
1952 .....	2,053,691	220,754	407,140	2,681,585
1953 .....	2,436,504	182,821	392,943	3,012,268
1954 .....	1,740,712	167,797	302,520	2,211,029
1955 .....	2,591,662	176,710	446,995	3,215,367
1956 .....	2,990,222	150,354	427,627	3,568,203
1957 .....	3,209,411	104,830	404,109	3,718,350
1958 .....	2,665,705	43,755	350,119	3,059,579
1959 <sup>2</sup> .....	3,552,926	228,843	401,006	4,182,775

<sup>1</sup> See footnote 2 to Table 15 and footnote 2 to Table 4.

<sup>2</sup> Commencing with 1959 includes the "remelt iron" product produced in the smelting of titanium ores.

TABLE 7. Production<sup>1</sup> of Pig Iron, by Months, 1958 and 1959

Month	1958			1959		
	For own use	For sale	Total	For own use	For sale	Total
	net tons					
January .....	244,168	16,351	260,519	274,401	24,883	299,284
February .....	217,002	15,562	323,564	257,676	24,966	282,642
March .....	251,461	16,571	268,032	319,180	31,420	350,600
April .....	225,210	29,760	254,970	289,880	76,958	366,838
May .....	268,190	19,498	287,688	318,674	52,770	371,444
June .....	218,005	71,720	289,725	282,318	69,266	351,584
July .....	250,237	43,048	293,285	272,337	80,498	352,835
August .....	161,603	38,498	200,101	311,910	47,269	359,179
September .....	126,548	59,778	186,326	283,218	79,203	362,421
October .....	184,608	44,851	229,459	289,022	71,790	360,812
November .....	203,904	49,543	253,447	299,390	53,712	353,102
December .....	278,935	24,528	303,463	322,428	49,606	372,034
<b>Totals .....</b>	<b>2,629,871</b>	<b>429,708</b>	<b>3,059,579</b>	<b>3,520,434</b>	<b>662,341</b>	<b>4,182,775</b>

<sup>1</sup> See footnotes to Table 4.

**Note:** Above breakdown developed from a special monthly report on primary iron and steel including a revision for December necessary to affect reconciliation with annual totals shown in Table 4.

TABLE 8. Sales<sup>1</sup> of Pig Iron by Producers, 1950 - 59

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
	net tons	\$		net tons	\$
1950 .....	636,558	27,484,529	1955 .....	609,978	30,539,000
1951 .....	726,357	36,891,960	1956 .....	649,213	34,501,520
1952 .....	752,963	37,998,156	1957 .....	734,353	40,953,372
1953 .....	626,624	31,510,562	1958 .....	429,708	24,878,802
1954 .....	455,552	22,142,040	1959 <sup>2</sup> .....	662,341	36,280,610

<sup>1</sup> See footnotes to Table 4.<sup>2</sup> In 1959 includes "remelt iron" product produced in the smelting of titanium ores.

TABLE 9. Iron Ore, Fuel and Flux Charged to Iron Blast Furnaces,<sup>1</sup> 1950-59

Year	Iron ore <sup>2</sup>	Mill cinder, scale, etc. <sup>3</sup>	Iron and steel scrap	Coke	Limestone	Dolomite
net tons						
1950 .....	4,173,513	287,032	42,510	2,139,615	865,492	148,798
1951 .....	4,645,021	345,497	65,390	2,377,968	954,546	171,757
1952 .....	4,882,153	320,470	106,754	2,493,903	981,489	212,237
1953 .....	5,235,650	673,879	85,799	2,804,996	1,079,781	295,984
1954 .....	3,749,109	577,577	82,399	1,969,669	778,200	258,463
1955 .....	5,311,382	706,053	125,845	2,817,048	1,067,697	286,485
1956 .....	6,522,558	272,134	173,914	3,051,914	1,091,143	303,108
1957 .....	6,729,131	200,552	179,629	3,158,891	1,104,565	297,515
1958 .....	5,455,498	160,746	126,239	2,470,378	760,708	222,754
1959 .....	7,162,716	135,914	101,705	3,128,643	815,294	227,873

<sup>1</sup> Does not include charges into furnaces used in the smelting of titanium ores in the production of titanium slag.

<sup>2</sup> Since 1956 includes some ore in processed form previously reported under heading of "Mill cinder, scale, etc.".

<sup>3</sup> Since 1956 includes these products in not sintered form only.

TABLE 10. Imports into Canada and Exports<sup>1</sup> of Pig Iron, 1950-59

Year	Imports		Exports	
	Net tons	Value	Net tons	Value
		\$		\$
1950 .....	29,628	1,116,387	194,528	8,357,945
1951 .....	22,126	1,000,915	223,635	12,303,679
1952 .....	1,665	99,215	375,987	19,167,532
1953 .....	25,484	1,246,449	345,415	16,984,257
1954 .....	20,009	1,004,056	202,603	10,021,672
1955 .....	14,518	989,657	254,472	13,272,635
1956 .....	12,637	803,979	257,627	14,117,044
1957 .....	7,041	516,960	577,600	33,078,351
1958 .....	26,498	1,302,388	336,591	18,260,280
1959 .....	21,210	1,214,287	468,335	25,221,166

<sup>1</sup> As a result of an amendment in the statistical classification for pig iron introduced by the External Trade Section in the latter part of 1957 the totals for exports of pig iron for 1957 and later years shown in the above table reflect the inclusion of the "remelt iron" or "ingot iron" product produced as a by-product in the smelting of titanium ores. For this reason the totals shown for 1957 and later years are not exactly comparable with previous years.

TABLE 11. Stocks of Pig Iron Held at Year-End by Producers<sup>1</sup> in Canada, 1950-59

Year	Net tons	Year	Net tons
1950 .....	85,372	1955 .....	136,415
1951 .....	81,220	1956 .....	113,629
1952 .....	58,959	1957 .....	233,569
1953 .....	135,781	1958 .....	239,598
1954 .....	127,894	1959 .....	165,846

<sup>1</sup> Does not include stocks held by smelters of titanium ores in the production of titanium slag.



**TABLE 12. Consumption of Pig Iron in Canada by Industries and by Provinces, 1956-59**  
(As Reported by Consumers)

	1956	1957	1958	1959 <sup>1</sup>
	net tons			
(a) By industries				
Steel ingots and castings .....	2,902,367	2,875,324	2,610,517	3,511,207
Iron castings .....	246,079	183,733	136,865	
Boilers and platework .....	20,353	16,322	15,490	
Agricultural implements .....	11,213	8,489	8,240	
Machinery .....	24,636	18,919	12,632	
Motor vehicles .....	6,131	9,850	4,933	7,844
Motor vehicle parts .....	32,306	31,149	28,379	
Railway rolling stock .....	1,470	2,077	2,878	2,550
Brass and copper products .....	3,838	3,319	3,450	
Shipbuilding .....	569	306	321	
Hardware and tools .....	1,522	1,345	1,291	
Miscellaneous iron and steel .....	12,270	10,138	9,000	
Heating and cooking apparatus .....	7,540	6,154	6,337	
Electrical apparatus and supplies .....	4,994	3,382	1,838	
Bridge and structural steel .....	1,373	1,164	1,052	
Miscellaneous .....	10,295	11,600	19,282	32,559
Totals .....	3,286,956	3,183,271	2,862,505	
(b) By provinces				
Prince Edward Island and Newfoundland .....	25	—	135	
Nova Scotia .....	472,684	501,491	400,095	
New Brunswick .....	3,236	2,503	2,465	
Quebec .....	84,801	66,961	55,518	
Ontario .....	2,718,291	2,604,946	2,397,482	
Manitoba .....	5,648	5,251	3,840	
Saskatchewan .....	59	—	—	
Alberta .....	854	959	2,179	
British Columbia .....	1,358	1,160	791	
Canada .....	3,286,956	3,183,271	2,862,505	

<sup>1</sup> Data for 1959 are not yet complete.

**TABLE 13. Blast Furnaces in Canada, 1957-59**

Name of company	Location of plant	Number of stacks	Total annual capacity	Number of days in blast		
				1957	1958	1959
Dominion Foundries & Steel Ltd. ....	Hamilton, Ont. ....	1	320,000	365	365	365
		1	320,000	365	365	365
		<b>2</b>	<b>640,000</b>	—	—	—
Dominion Iron & Steel Limited .....	Sydney, Nova Scotia ...	1	237,000	365	363	365
		1	265,000	365	364	365
		1	182,000	236	—	63
Canadian Furnace Company, Limited .....	Port Colborne, Ont. ....	<b>3</b>	<b>684,000</b>	—	—	—
The Steel Company of Canada, Limited ...	Hamilton, Ont. ....	1	190,000	359	160	243
		<b>1</b>	<b>190,000</b>	—	—	—
The Steel Company of Canada, Limited ...	Hamilton, Ont. ....	1	123,000	364	223	304
		1	313,000	364	270	364
		1	472,000	365	259	285
		1	542,000	274	259	288
		<b>4</b>	<b>1,450,000</b>	—	—	—
Algoma Steel Corporation, Limited .....	Sault Ste. Marie, Ont. ..	1	109,000	237	—	—
		1	218,000	359	190	315
		1	177,000	236	150	259
		1	440,000	364	365	352
		1	540,000	338	263	365
Totals .....		<b>5</b>	<b>1,484,000</b>	—	—	—
<b>Totals for Canada .....</b>		<b>15</b>	<b>4,448,000</b>	—	—	—

TABLE 14. World Production of Pig Iron and Ferro-alloys, by Countries

Country	1955	1956	1957	1958	1959
thousands of net tons					
United States .....	79,264	77,575	80,798	58,808	62,124
Canada .....	3,334	3,815	3,948	3,170	4,017
Mexico .....	361	431	456	527	539
Brazil .....	1,185	1,262	1,288	1,543	1,378
Chile .....	282	405	414	366	315
Austria .....	1,664	1,916	2,162	2,005	2,028
Belgium .....	5,941	6,347	6,159	6,082	6,506
Luxembourg .....	3,401	3,651	3,711	3,621	3,795
France .....	12,216	12,835	13,315	13,385	13,939
Saar .....	3,176	3,342	3,492	3,422	3,537
Italy .....	1,912	2,200	2,430	2,388	2,416
Netherlands .....	739	729	773	1,007	1,257
Norway .....	368	492	613	560	672
Sweden .....	1,317	1,464	1,574	1,431	1,548
Finland .....	127	113	142	111	106
United Kingdom .....	13,966	14,750	15,998	14,532	14,090
Spain .....	1,089	1,019	1,102	1,478	1,879
Hungary .....	966	820	922	1,213	1,236
Germany — Western .....	18,108	19,504	20,359	18,467	20,409
Eastern .....	1,668	1,735	1,833	1,957	2,092
Russia .....	36,376	39,683	40,741	43,651	47,399
Czechoslovakia .....	3,307	3,618	3,927	4,160	4,712
Poland .....	3,439	3,864	4,058	4,260	4,794
Rumania .....	635	638	660	831	923
Yugoslavia .....	585	711	812	860	995
Union of South Africa .....	1,434	1,495	1,564	1,744	1,992
Australia .....	2,011	2,323	2,483	2,552	2,564
Turkey .....	221	239	240	254	258
India .....	2,123	2,194	2,140	2,367	3,403
Japan .....	5,982	6,904	7,866	8,473	10,852
Other countries .....	4,354	5,888	6,684	6,838	7,950
<b>Totals .....</b>	<b>211,548</b>	<b>221,963</b>	<b>232,664</b>	<b>212,063</b>	<b>229,725</b>

Source: "Annual Statistical Report" published by the American Iron and Steel Institute, New York, U.S.A.

(b) FERRO - ALLOYS  
TABLE 15. Production<sup>1</sup> of Ferro-alloys,<sup>2</sup> 1950 - 59

Year	Net tons	Year	Net tons
1950 .....	180,499	1955 .....	189,805
1951 .....	266,252	1956 .....	240,480
1952 .....	232,117	1957 .....	204,483
1953 .....	153,660	1958 .....	112,589
1954 .....	116,141	1959 .....	135,526

<sup>1</sup> Factory shipments since 1953.

<sup>2</sup> Up to 1949 silvery pig iron was treated as a ferro-alloy for statistical purposes; since 1950 however, tonnages of the latter are included with pig iron.

TABLE 16. Producers of Ferro-alloys, 1959

Name of company	Plant location	Kind of ferro-alloy made
Canadian Carborundum Company, Limited .....	Niagara Falls, Ontario .....	Ferrosilicon (by-product)
Chromium Mining & Smelting Corp., Limited .....	Sault Ste. Marie, Ontario .....	Ferrosilicon, sil-X, chrom-X ferrochrome, ferrochrome-silicon
Electro Metallurgical Company, Division of Union Carbide Canada Ltd. ....	(a) Beauharnois, Quebec .....	Ferrosilicon
	(b) Welland, Ontario .....	Ferrosilicon, ferrochrome, ferromanganese, silico-manganese
Electric Reduction Company of Canada, Limited .....	Buckingham, Quebec .....	Ferrophosphorus
Exolon Company .....	Thorold, Ontario .....	Ferrosilicon (by-product)
Lionite Abrasives Limited .....	Niagara Falls, Ontario .....	Ferrosilicon (by-product)
Norton Company .....	Chippawa, Ontario .....	Ferrosilicon (by-product)
Simonds Canada Abrasive Co., Limited .....	Arvida, Quebec .....	Ferrosilicon (by-product)

## (c) STEEL INGOTS AND DIRECT STEEL CASTINGS

TABLE 17. Production of Steel Ingots and Steel Castings, and Sales by the Producers, 1958 and 1959

	1958			1959		
	Total tonnage of steel made (all kinds), including alloys	Sales		Total tonnage of steel made (all kinds), including alloys	Sales	
		Quantity	Income from sales		Quantity	Income from sales
	net tons		\$	net tons		\$
Steel ingots:						
Basic open-hearth <sup>1</sup> .....	3,875,470	1,913	145,780	5,267,282	194,755	13,825,810
Electric .....	386,652	7,579	952,583	532,074	6,489	1,257,480
<b>Totals, steel ingots</b> .....	<b>4,262,122</b>	<b>9,492</b>	<b>1,098,363</b>	<b>5,799,356</b>	<b>201,244</b>	<b>15,083,290</b>
Steel castings:						
Basic open-hearth .....	15,880	14,971	7,473,083	14,834	13,128	6,036,874
Converter .....	20	20	9,000	7	7	4,500
Electric .....	81,444	80,768	34,000,648	87,290	83,870	37,878,460
<b>Totals, steel castings</b> .....	<b>97,344</b>	<b>95,759</b>	<b>41,482,731</b>	<b>102,131</b>	<b>97,005</b>	<b>43,921,834</b>
<b>Totals, steel ingots and castings</b>	<b>4,359,466</b>	<b>105,251</b>	<b>42,581,094</b>	<b>5,901,487</b>	<b>298,249</b>	<b>59,005,124</b>
Any other products .....	..	..	882,950	..	..	1,054,286
<b>Totals, all products</b> .....	<b>..</b>	<b>..</b>	<b>43,464,044</b>	<b>..</b>	<b>..</b>	<b>60,059,410</b>
Alloy steel included in above:						
Ingots .....	182,902	2,566	374,369	270,991	3,322	956,038
Castings .....	19,470	19,531	13,762,895	22,936	22,381	17,055,009
<b>Totals</b> .....	<b>202,372</b>	<b>22,097</b>	<b>14,137,264</b>	<b>293,927</b>	<b>25,703</b>	<b>18,011,047</b>

<sup>1</sup> Includes production from oxygen vessels.



TABLE 18. Materials Used in Steel Furnaces, 1958 and 1959

Material	1958		1959	
	Quantity	Cost of purchased materials	Quantity	Cost of purchased materials
	net tons	\$	net tons	\$
Pig iron:				
Own make .....	2,602,751	...	3,500,718	...
Purchased .....	7,766	437,810	10,489	419,998
Scrap iron or steel:				
Own make .....	1,112,744	...	1,559,599	...
Purchased .....	999,611	32,517,440	1,391,587	49,059,684
Spiegeleisen .....	157	12,110	18	1,405
Ferromanganese—High carbon (over 3 per cent carbon) .....	28,555	6,785,368	34,989	7,925,158
Medium carbon .....	2,511	973,496	4,141	1,488,491
Low carbon (maximum 0.75 per cent carbon) .....	176	115,784	307	195,158
Silico manganese .....	6,300	1,622,380	8,775	2,228,458
Ferrosilicon—Low silicon grade (under 45 per cent silicon) ...	327	38,996	289	27,181
Medium silicon grade .....	8,112	1,166,968	11,050	1,601,023
High silicon grade (over 55 per cent silicon) ...	931	230,007	1,324	337,141
Sil-x .....	50	13,809	60	16,097
Ferrochrome (including chrom-X)—High carbon .....	1,558	509,701	3,149	933,536
Low carbon (maximum 2 per cent carbon) .....	3,156	1,643,557	4,578	2,148,890
Ferromolybdenum .....	88	210,109	122	310,403
Ferrophosphorus .....	204	20,296	284	28,971
Ferroselenium .....	2	34,333	2	33,467
Ferrotitanium .....	210	76,689	252	84,683
Ferrotungsten .....	38	81,061	63	120,986
Ferrovanadium .....	71	252,741	124	463,725
Ferrozirconium .....	28	12,217	33	12,929
Calcium silicon .....	214	112,860	251	110,766
Calcium manganese silicon .....	105	57,563	141	79,301
Other ferro-alloys .....	764	300,449	1,087	434,250
Iron ore, crude .....	261,926	5,095,122	215,117	3,732,851
Iron ore, calcined, roasted or treated .....	111,217	1,674,640	204,828	3,072,849
Manganese ore .....	—	—	—	—
Chrome ore .....	367	26,248	711	51,321
Tungsten ore .....	110	81,783	225	170,786
Aluminum ingots, shot, etc. ....	1,149	551,921	1,656	810,662
Copper ingots, cakes, shot, etc. ....	427	197,124	548	297,510
Nickel ingots, cathodes, shot, etc. ....	1,476	2,055,349	1,951	2,740,121
Other metals .....	207	315,587	237	286,707
Coal (charged to steel furnaces; not for fuel) .....	621	26,958	876	52,309
Coke (charged to steel furnaces; not for fuel) .....	2,618	42,218	3,204	52,647
Charcoal .....	19	1,612	19	1,650
Bentonite .....	4,201	158,463	5,139	183,834
Dolomite—Raw, crushed .....	77,098	413,623	97,638	547,741
Calcined .....	75,192	1,980,254	90,403	2,351,634
Fluorspar .....	14,539	425,058	20,063	584,074
Ganister .....	4,226	23,252	3,504	22,266
Graphite .....	871	88,799	1,155	114,689
Lime .....	138,957	1,957,336	208,144	3,166,968
Limestone .....	124,189	328,555	140,736	431,131
Linseed oil .....	32,315 <sup>1</sup>	37,890	38,168 <sup>1</sup>	44,140
Magnesite .....	6,036	401,665	9,264	632,280
Electrodes .....	...	1,762,256	...	1,594,547
Silica sand—For moulds .....	94,169	724,464	76,180	693,184
For sand blasting .....	44	619	1,086	13,761
Other foundry sands .....	4,999	77,595	6,035	69,669
Sulphur .....	58	11,771	171	29,545
Firebrick, fireclay and other refractories .....	...	8,923,535	...	12,053,084
Calcium molybdate .....	29	80,475	6	19,560
Molybdenum trioxide (molybdic oxide) briquettes .....	226	361,916	455	687,575
Ingot moulds (including hot tops) and stools .....	...	6,603,157	...	8,898,089
All other materials .....	...	9,339,720	...	12,010,614
<b>Total value of purchased materials .....</b>	<b>...</b>	<b>90,994,709</b>	<b>...</b>	<b>123,479,499</b>

<sup>1</sup> Imperial gallons.

TABLE 19. Production of Steel Ingots and Steel Casting, by Grades, 1950 - 59

Year	Steel ingots		Steel castings			Total steel ingots and castings
	Open-hearth	Electric	Open-hearth	Converter	Electric	
	net tons					
1950 .....	2, 771, 842	526, 229	22, 488	232	62, 784	3, 383, 575
1951 .....	2, 917, 005	530, 127	30, 758	282	90, 548	3, 568, 720
1952 .....	3, 017, 692	560, 066	34, 680	379	90, 294	3, 703, 111
1953 .....	3, 522, 039	487, 509	30, 406	254	75, 860	4, 116, 068
1954 .....	2, 727, 730 <sup>1</sup>	386, 061	22, 364	95	58, 780	3, 195, 030
1955 .....	3, 917, 151 <sup>1</sup>	529, 190	25, 953	165	62, 213	4, 534, 672
1956 .....	4, 628, 777 <sup>1</sup>	551, 644	32, 107	307	88, 367	5, 301, 202
1957 .....	4, 500, 737 <sup>1</sup>	430, 673	27, 076	20	109, 643	5, 068, 149
1958 .....	3, 875, 470 <sup>1</sup>	386, 652	15, 880	20	81, 444	4, 359, 466
1959 .....	5, 267, 282 <sup>1</sup>	532, 074	14, 834	7	87, 290	5, 901, 487

<sup>1</sup> Includes production from oxygen vessels.

TABLE 20. Production of Steel Ingots and Steel Castings, by Months, 1955 - 59

Month	1955	1956	1957	1958	1959
	net tons				
January .....	316, 814	433, 700	470, 005	402, 915	461, 113
February .....	321, 237	400, 638	426, 668	375, 267	436, 932
March .....	384, 614	440, 725	477, 646	412, 432	476, 154
April .....	360, 754	434, 066	452, 565	377, 965	487, 885
May .....	378, 877	462, 131	439, 093	413, 431	489, 387
June .....	389, 268	445, 588	430, 513	403, 310	467, 607
July .....	360, 765	441, 563	430, 348	366, 139	482, 256
August .....	386, 730	452, 274	437, 389	270, 511	487, 271
September .....	374, 472	434, 373	405, 560	247, 900	503, 146
October .....	417, 266	466, 175	383, 335	261, 133	536, 909
November .....	415, 477	444, 434	361, 139	387, 696	542, 858
December .....	428, 398	445, 535	353, 888	440, 767	529, 969
<b>Totals</b> .....	<b>4, 534, 672</b>	<b>5, 301, 202</b>	<b>5, 068, 149</b>	<b>4, 359, 466</b>	<b>5, 901, 487</b>

**Note:** Above breakdown developed from a special monthly report on primary iron and steel including a revision for December necessary to affect reconciliation with annual totals shown in Table 17.

TABLE 21. Annual Production of Steel Ingots and Steel Castings, by Provinces, 1950 - 59

Year	Nova Scotia	Quebec	Ontario	Manitoba	Alberta	British Columbia	Canada
	net tons						
1950 .....	685, 480	71, 531	2, 526, 770	69, 467	723	29, 604	3, 383, 575
1951 .....	709, 451	120, 310	2, 619, 072	78, 666	1, 037	40, 184	3, 568, 720
1952 .....	649, 359	122, 627	2, 801, 706	85, 213	1, 574	42, 632	3, 703, 111
1953 .....	638, 097	97, 450	3, 263, 633	76, 180	699	40, 009	4, 116, 068
1954 .....	462, 594	84, 777	2, 536, 952	65, 912	676	44, 119	3, 195, 030
1955 .....	583, 340	99, 122	3, 716, 833	84, 055	5, 042	46, 280	4, 534, 672
1956 .....	706, 264	131, 266	4, 267, 179	113, 056	31, 945	51, 492	5, 301, 202
1957 .....	740, 364	157, 251	4, 004, 620	76, 243	43, 827	45, 844	5, 068, 149
1958 .....	597, 752	117, 907	3, 504, 215	68, 921	36, 046	34, 625	4, 359, 466
1959 .....	674, 226	120, 274	4, 905, 424	98, 954	56, 235	46, 374	5, 901, 487

TABLE 22. Sales of Steel Ingots and Steel Castings by Producers, 1950-59

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
	net tons	\$		net tons	\$
1950 .....	313,780	38,652,613	1955 .....	201,114	43,682,247
1951 .....	295,279	52,227,452	1956 .....	164,288	55,326,132
1952 .....	265,723	57,178,291	1957 .....	187,806	65,553,873
1953 .....	133,389	44,745,077	1958 .....	105,251	42,581,094
1954 .....	86,066	35,434,713	1959 .....	298,249	59,005,124

TABLE 23. Production of Alloy Steel Ingots and Castings, 1950-59

Year	Ingots	Castings	Total
	net tons		
1950 .....	196,239	16,498	212,737
1951 .....	211,137	19,985	231,122
1952 .....	217,577	25,298	242,875
1953 .....	191,977	23,874	215,851
1954 .....	132,976	20,852	153,828
1955 .....	217,207	21,928	239,135
1956 .....	218,611	27,774	246,385
1957 .....	213,101	29,110	242,211
1958 .....	182,902	19,470	202,372
1959 .....	270,991	22,936	293,927

TABLE 24. Metal, Ore and Flux Charged to Steel Furnaces, 1950-59

Year	Pig iron	Ferro-manganese alloys <sup>1</sup>	Other ferro-alloys	Scrap iron and steel	Iron ore	Limestone	Dolomite	Fluorspar
	net tons							
1950.....	1,667,504	32,691	12,097	1,995,326	244,512	265,941	136,666	21,800
1951.....	1,837,731	34,361	15,152	2,106,714	304,403	257,635	151,147	23,374
1952.....	1,958,258	36,486	16,513	2,122,270	277,804	276,202	149,310	22,576
1953.....	2,311,378	39,055	15,167	2,200,518	275,883	301,078	171,525	22,730
1954.....	1,767,307	29,571	11,962	1,629,866	203,119	182,972	135,987	16,002
1955.....	2,554,433	39,870	17,443	2,366,107	405,709	219,147	182,803	18,610
1956.....	2,902,367	46,556	20,567	2,865,563	472,476	232,065	202,352	18,979
1957.....	2,875,324	46,220	21,787	2,625,963	421,755	199,681	190,039	16,935
1958.....	2,610,517	37,699	15,539	2,112,355	373,143	124,189	152,290	14,539
1959.....	3,511,207	48,230	22,809	2,951,186	419,945	140,736	188,041	20,063

<sup>1</sup> Including spiegeleisen, silicospiegeleisen, ferromanganese (all grades) and silicomanganese.



TABLE 25. Steel Furnaces in Canada, December 31, 1959

	Type	Number of units	Size	Total annual capacity
				tons
<b>Nova Scotia:</b>				
Dominion Steel and Coal Corporation, Ltd., Sydney .....	O.H.	1	225	166,000
	O.H.	5	195	761,000
	Elec.	1	11	33,000
<b>Totals</b> .....		<b>7</b>	<b>—</b>	<b>960,000</b>
Maritime Steel Foundries Ltd., New Glasgow .....	Elec.	1	4	3,000
<b>Quebec:</b>				
Canadian Unitcast-Steel Ltd., Sherbrooke .....	Elec.	1	4	7,000
Canadian Steel Foundries Ltd., Montreal .....	O.H.	3	25	45,900
	Elec.	1	4	7,000
	Elec.	1	2½	4,600
	Elec.	1	½	1,000
<b>Totals</b> .....		<b>6</b>	<b>—</b>	<b>58,500</b>
Dominion Brake Shoe Co. Ltd., Joliette .....	Elec.	1	2½	9,000
	Elec.	1	3½	16,000
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>25,000</b>
Dominion Engineering Works Ltd., Lachine .....	Elec.	1	5	2,500
	Elec.	1	15	3,800
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>6,300</b>
Dominion Steel and Coal Corporation Ltd., Montreal .....	Elec.	3	30	90,000
Griffin Steel Foundries Ltd., St. Hyacinthe .....	Elec.	2	6	27,700
La Compagnie F.X. Drolet Ltd., Quebec .....	Conv.	1	1	300
Lynn MacLeod Metallurgy Ltd., Thetford Mines .....	Elec.	1	2	6,000
Manganese Steel Castings Ltd., Sherbrooke .....	Elec.	1	2	1,800
Shawinigan Chemicals Ltd., Shawinigan Falls .....	Elec.	1	½	900
	Elec.	1	2	3,600
	Elec.	1	1	1,800
<b>Totals</b> .....		<b>3</b>	<b>—</b>	<b>6,300</b>
Crucible Steel of Canada Ltd., Sorel .....	Elec.	1	30	23,400
	Elec.	1	13	10,100
	Elec.	1	4	2,300
<b>Totals</b> .....		<b>3</b>	<b>—</b>	<b>35,800</b>
Sorel Steel Foundries Ltd., Sorel .....	Elec.	1	1½	5,000
<b>Ontario:</b>				
Algoma Steel Corp. Ltd., Sault Ste. Marie .....	O.H.	1	150	125,000
	O.H.	3	180	425,000
	O.H.	2	330	450,000
	Oxygen vessels	2	100	600,000
<b>Totals</b> .....		<b>8</b>	<b>—</b>	<b>1,600,000</b>
Atlas Steels Limited, Welland .....	Elec.	1	6	7,200
	Elec.	1	10	12,000
	Elec.	2	25	64,000
	Elec.	2	45	86,400
	Elec. (Induct)	1	—	800
<b>Totals</b> .....		<b>7</b>	<b>—</b>	<b>170,400</b>
Burlington Steel Co. Ltd., Hamilton .....	Elec.	1	7	26,400
Canada Electric Castings Ltd., Orillia .....	Elec.	2	2	6,000
Dominion Foundries and Steel Ltd., Hamilton .....	Elec.	2	10	36,000
	Elec.	2	50	140,000
	Elec.	1	2½	9,000
	Oxygen vessels	3	60	840,000
<b>Totals</b> .....		<b>8</b>	<b>—</b>	<b>1,025,000</b>

TABLE 25. Steel Furnaces in Canada, December 31, 1959 — Concluded

	Type	Number of units	Size	Total annual capacity
				tons
<b>Ontario — Concluded</b>				
Fahralloy Canada Ltd., Orillia .....	Elec.	1	1/2	1,500
	Elec.	1	1 1/2	2,300
	Elec.	1	2	3,100
	Elec.	1	—	300
<b>Totals</b> .....		<b>4</b>	<b>—</b>	<b>7,200</b>
Ford Motor Co. of Canada Ltd., Windsor .....	Elec.	1	5	10,500
	Elec.	15	4	88,100
	Elec.	1	1	4,400
<b>Totals</b> .....		<b>17</b>	<b>—</b>	<b>103,000</b>
The Indiana Steel Products Co. of Canada Ltd., Kitchener .....	Elec.	1	1/4	2,000
William Kennedy and Sons Ltd., Owen Sound .....	Elec.	1	1 3/4	2,400
	Elec.	1	4	8,000
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>10,400</b>
Neelon Steel Limited, Lebel .....	Elec.	1	6	8,400
Steel Co. of Canada, Hamilton .....	O.H.	4	115	428,000
	O.H.	5	190	832,000
	O.H.	4	315	1,240,000
<b>Totals</b> .....		<b>13</b>	<b>—</b>	<b>2,500,000</b>
Welland Electric Steel Foundry Ltd., Welland .....	Elec.	1	2	} 2,500
	Elec.	1	1	
	Elec.	1	1/4	
<b>Totals</b> .....		<b>3</b>	<b>—</b>	<b>2,500</b>
<b>Manitoba:</b>				
Manitoba Rolling Milling Co. Ltd., Selkirk .....	O.H.	2	20	50,000
	Elec.	1	6	26,000
	Elec.	1	10	38,000
<b>Totals</b> .....		<b>4</b>	<b>—</b>	<b>114,000</b>
Dominion Brake Shoe Co. Ltd., Manitoba Steel Foundry Div., Selkirk .....	Elec.	1	3	3,000
	Elec.	1	5	4,000
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>7,000</b>
Griffin Steel Foundries Ltd., Transcona .....	Elec.	2	7	33,200
<b>Alberta:</b>				
Dominion Bridge Co. Ltd., Calgary .....	Elec.	1	1 1/2	4,300
Foothills Steel Foundry & Iron Works, Calgary .....	Elec.	1	1	3,000
Premier Steel Mills Ltd., Edmonton .....	Elec.	2	15	72,000
<b>British Columbia:</b>				
A-1 Steel & Iron Foundry, Vancouver .....	Elec.	1	1 1/2	2,000
	Elec.	1	1/2	2,000
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>4,000</b>
Consolidated Mining & Smelting Co. of Canada, Trail .....	Elec.	1	1	2,500
	Elec.	1	3	6,000
<b>Totals</b> .....		<b>2</b>	<b>—</b>	<b>8,500</b>
Reliance Foundry Co. Ltd., Vancouver .....	Elec.	1	1	2,000
	Elec.	1	1 1/2	3,000
	Elec.	1	1 1/2	3,000
<b>Totals</b> .....		<b>3</b>	<b>—</b>	<b>8,000</b>
Vancouver Steel Co. Ltd., Vancouver .....	Elec.	1	15	43,400
Victoria Machinery Depot Co. Ltd., Victoria .....	Elec.	2	2	5,700
Canadian Sumner Iron Works Ltd., Vancouver .....	Elec.	2	1	3,600

TABLE 26. Summary of Steel Furnace Capacity, December 31, 1959

	Number of furnaces	Total annual capacity net tons
Basic open-hearth .....	30	4,522,900
Oxygen Vessels .....	5	1,440,000
Electric .....	89	1,037,500
Converter .....	1	300
<b>Totals .....</b>	<b>125</b>	<b>7,000,700</b>
Steel ingots:		
Basic open-hearth .....	—	4,477,000
Oxygen Vessels .....	—	1,440,000
Electric .....	—	700,000
<b>Totals .....</b>	<b>—</b>	<b>6,617,000</b>
Steel castings .....	—	383,700
<b>Total ingots and castings .....</b>	<b>—</b>	<b>7,000,700</b>

TABLE 27. Summary of Steel Furnace Capacity, by Provinces, December 31, 1955-59

	Total annual capacity				
	1955	1956	1957	1958	1959
	net tons				
Nova Scotia .....	653,000	789,500	934,500	933,000	963,000
Quebec .....	244,900	272,750	340,900	298,000	269,700
Ontario .....	4,380,800	4,502,600	4,771,700	5,182,700	5,461,300
Manitoba .....	121,000	121,000	121,000	121,000	154,200
Alberta .....	39,900	48,100	77,300	77,300	79,300
British Columbia .....	79,300	79,300	72,700	74,500	73,200
<b>Canada .....</b>	<b>5,518,900</b>	<b>5,813,250</b>	<b>6,318,100</b>	<b>6,686,500</b>	<b>7,000,700</b>

TABLE 28. World Ingot and Castings Production, by Countries

Country	1955	1956	1957	1958	1959
	thousands of net tons				
United States .....	117,036	115,216	112,715	85,255	93,446
Canada .....	4,500	5,266	5,006	4,329	5,848
Mexico .....	580	648	758	1,089	1,168
Argentina .....	240	224	243	270	234
Brazil .....	1,285	1,469	1,703	1,764	2,000
Austria .....	2,009	2,290	2,766	2,637	2,767
Belgium .....	6,504	7,033	6,916	6,623	7,016
Luxemburg .....	3,556	3,808	3,850	3,725	4,038
France .....	13,872	14,769	15,540	16,099	16,774
Saar .....	3,489	3,720	3,819	3,812	3,984
Italy .....	5,945	6,509	7,372	6,911	7,447
Netherlands .....	1,073	1,159	1,306	1,585	1,841
Sweden .....	2,369	2,674	2,744	2,639	3,131
United Kingdom .....	22,313	23,138	24,304	21,920	22,608
Spain .....	1,336	1,370	1,485	1,713	2,051
Yugoslavia .....	888	977	1,157	1,233	1,432
Germany—Western .....	23,503	25,560	27,015	25,116	28,466
Eastern .....	2,751	3,020	3,189	3,357	3,536
Russia .....	50,265	52,910	56,217	60,847	66,028
Czechoslovakia .....	5,000	5,381	5,694	6,074	6,653
Hungary .....	1,799	1,570	1,516	1,795	1,939
Poland .....	4,868	5,526	5,849	6,209	6,750
Rumania .....	847	997	941	1,064	1,496
Union of South Africa .....	1,553	1,770	1,916	2,019	2,088
Australia .....	2,458	2,916	3,420	3,536	3,514
Turkey .....	207	212	193	176	235
India .....	1,910	1,946	1,921	2,027	2,615
Japan .....	10,370	12,242	13,855	13,360	18,329
Other countries .....	4,695	6,519	7,163	9,267	17,659
<b>Totals .....</b>	<b>297,222</b>	<b>310,840</b>	<b>320,575</b>	<b>296,451</b>	<b>335,093</b>

Note: See Table 49 for "World Ingot and Castings Production per Capita, by Countries, 1959".

Source: "Annual Statistical Report" published by the American Iron and Steel Institute, New York, U.S.A.



TABLE 29. Products Made in Steel Rolling and Drawing Mills, 1958 and 1959

Product	Total tonnage made	Factory sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
	net tons		\$
1958			
<b>A. Hot-rolled products</b>			
Semi-finished rolled forms:			
All semi-finished forms intended for further rolling, including blooms, billets, slabs and sheet bars:			
(a) For sale in Canada .....	<sup>1</sup>	99,791	8,086,691
(b) For export .....	1,587	1,552	158,472
Blooms, billets and axle blanks for forging purposes only, whether for own use or for sale to others including export .....	171,217	166,079	20,274,609
Rounds or billets for seamless tubes including export .....			
<b>Total semi-finished rolled forms</b> .....	<b>172,804</b>	<b>267,422</b>	<b>28,519,772</b>
Rails .....	365,429	377,604	41,586,604
Wire rods, No. 5 gauge to 47/64 inch in diameter (excluding straight lengths over 5/16 inch in diameter) .....	268,848	270,210 <sup>2</sup>	30,592,181
Structural steel shapes:			
Heavy, including sheet piling, beams, angles, channels, tees, zeels, etc., having one leg or web of 3" and over, and a thickness of 1/8" and over .....	137,672	146,362	18,604,775
Light, including light shapes, angles, channels, etc., having a section smaller than that provided under previous item .....	79,465	78,933	10,536,098
<b>Total structural steel shapes</b> <sup>3,4</sup> .....	<b>217,137</b>	<b>225,295</b>	<b>29,140,873</b>
Bars:			
Bars, hot-rolled, of all grades and of all sections, including bolt, nut, rivet, spike, chain, horseshoe and other miscellaneous bars, but omitting all bars reported immediately below .....	338,745	299,323	49,798,988
Bars for concrete reinforcing, including twisted and other deformed bars .....	293,373	285,693	36,416,769
Long angle splice bars, tie plate bars and all other long rail joint bars .....	72,955	—	—
<b>Total hot-rolled bars</b> <sup>3</sup> .....	<b>705,073</b>	<b>585,016</b>	<b>86,215,757</b>
Plates (excluding plate for pipes and tubes) .....	230,309	226,750	30,618,858
Skelp <sup>5</sup> (hot and cold rolled plate, sheets, strip and bars for pipes and tubes) .....	345,043	339,964	37,918,965
Other hot-rolled sheets and strip including material for further cold reduction and all other hot-rolled forms .....	1,147,238	250,611	31,780,676
<b>B. Cold-rolled and coated products</b> <sup>5</sup>			
Bars, cold-rolled and cold-drawn .....	35,826	36,243	11,376,423
Cold-rolled strip .....	40,853	41,184	11,576,190
Other cold-rolled and coated products, including cold-reduced sheets, black plate for tinning and other black plate, galvanized sheets and strip, <sup>6</sup> tin plate, silicon sheet and strip, but excluding cold-rolled skelp .....	1,174,823	774,015	133,166,970
<b>C. Other products</b>			
Rail fastenings — Rail joints, including splice bars and fish plates ..	14,078	14,088	2,066,753
Tie plates .....	56,118	56,189	7,338,111
Other products made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. ..	..	..	9,457,650
<b>Total value of production</b> .....	<b>..</b>	<b>..</b>	<b>491,355,783</b>

See footnotes at end of table.

TABLE 29. Products Made in Steel Rolling and Drawing Mills, 1958 and 1959 — Concluded

Product	Total tonnage made	Factory sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
	net tons		\$
1959			
<b>A. Hot-rolled products</b>			
Semi-finished rolled forms:			
All semi-finished forms intended for further rolling, including blooms, billets, slabs and sheet bars:			
(a) For sale in Canada .....	<sup>1</sup>	98,789	8,253,619
(b) For export .....	34,637	32,785	3,050,124
Blooms, billets and axle blanks for forging purposes only, whether for own use or for sale to others including export .....	197,415	194,419	21,518,211
Rounds or billets for seamless tubes including export .....			
<b>Total semi-finished rolled forms</b> .....	<b>232,052</b>	<b>325,993</b>	<b>32,821,954</b>
Rails .....	286,989	286,419	31,636,649
Wire rods, No. 5 gauge to 47/64 inch in diameter (excluding straight lengths over 5/16 inch in diameter) .....	382,106	380,132 <sup>2</sup>	46,182,505
Structural steel shapes:			
Heavy, including sheet piling, beams, angles, channels, tees, zeels, etc., having one leg or web of 3" and over, and a thickness of 1/8" and over .....	187,542	183,506	23,662,128
Light, including light shapes, angles, channels, etc., having a section smaller than that provided under previous item .....	81,031	81,688	10,866,528
<b>Total structural steel shapes<sup>3,4</sup></b> .....	<b>268,573</b>	<b>265,194</b>	<b>34,528,656</b>
Bars:			
Bars, hot-rolled, of all grades and of all sections, including bolt, nut, rivet, spike, chain, horseshoe and other miscellaneous bars but omitting all bars reported immediately below .....	523,383	470,052	76,044,204
Bars for concrete reinforcing, including twisted and other deformed bars .....	331,136	325,222	40,949,682
Long angle splice bars, tie plate bars and all other long rail joint bars .....	95,346	—	—
<b>Total hot-rolled bars<sup>5</sup></b> .....	<b>949,865</b>	<b>795,274</b>	<b>116,993,886</b>
Plates .....	416,099	408,835	53,394,313
Skelp <sup>6</sup> (hot and cold rolled plate, sheets, strip and bars for pipes and tubes) .....	352,517	347,906	37,379,904
Other hot-rolled sheets and strip including material for further cold reduction and all other hot-rolled forms .....	1,772,395	462,341	57,291,460
<b>B. Cold-rolled and coated products<sup>5</sup></b>			
Bars, cold-rolled and cold-drawn .....	47,360	47,382	14,000,034
Cold-rolled strip .....	44,373	43,940	6,045,752
Other cold-rolled and coated products, including cold-reduced sheets, black plate for tinning and other black plate, galvanized sheets and strip, <sup>6</sup> tin plate, silicon sheet and strip, but excluding cold-rolled skelp .....	1,807,884	1,150,011	203,489,043
<b>C. Other products</b>			
Rail fastenings—Rail joints, including splice bars and fish plates ....	14,853	14,818	2,212,917
Tie plates .....	70,376	70,351	8,970,082
Other products made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. ....	..	..	10,450,857
<b>Total value of production</b> .....	<b>..</b>	<b>..</b>	<b>655,398,012</b>

<sup>1</sup>Not collected separately.<sup>2</sup>Includes shipments transferred to own fabricating mills of producing firms. These tonnages not included prior to 1954—see footnote 2 of introductory text.<sup>3</sup>Not comparable with previous years, as prior to 1951 light structurals were classified under hot-rolled bars.<sup>4</sup>Includes sheet piling which prior to 1956 was reported under "All other hot-rolled products"; accordingly not comparable with tonnages reported under this category in earlier years; however, data appearing in this bulletin have been revised to accommodate this change in classification—see Tables 31 and 32.<sup>5</sup>Note that skelp as listed provides for both hot-rolled and cold-rolled material.<sup>6</sup>Includes the tonnages made in rolling mills only.

TABLE 30. Materials Used for All Purposes in Steel Rolling and Drawing Mills, 1958 and 1959

Materials used	Companies' own make	Purchased	
		Quantity	Total cost at mill of purchased materials used
	net tons (2,000 pounds)		\$
<b>1958</b>			
Steel ingots .....	4, 226, 714	748	260, 000
Steel blooms .....	35	—	—
Steel billets .....	88, 203	99, 891	9, 188, 880
Steel slabs .....	—	—	—
Steel bars .....	5, 962	29, 282	4, 761, 853
Wire rods .....	—	3, 074	414, 066
Rails, old .....	—	58, 277	2, 899, 499
Axles, old .....	—	6, 222	314, 419
Scrap iron and steel, other .....	—	414	12, 838
Tin .....	—	1, 767	3, 267, 676
Zinc spelter .....	—	14, 959	3, 194, 740
Acids—Chromic .....	—	71	39, 849
Hydrochloric (muriatic) .....	—	707	52, 653
Sulphuric, 100% .....	—	22, 987	584, 156
Ammonium chloride (salammoniac) .....	—	42	7, 429
Cleaners (Pennsalt, etc.) .....	—	563	125, 377
Inhibitors (Rodine, etc.) .....	—	10	8, 415
Palm oil .....	—	230	57, 426
Phenone .....	—	14	24, 680
Rolling oils, other .....	—	1, 906	662, 449
Salt .....	—	11	268
Zinc ammonium chloride .....	—	200	45, 372
Refractories .....	—	—	618, 520
Rolls and dies <sup>1</sup> .....	—	—	4, 219, 111
Silica sand .....	—	108	1, 066
All other materials and supplies .....	—	—	17, 603, 187
Containers and other packaging materials .....	—	—	2, 231, 895
<b>Total .....</b>	<b>...</b>	<b>...</b>	<b>50, 595, 824</b>
<b>1959</b>			
Steel ingots .....	5, 622, 904	158, 009	12, 491, 272
Steel blooms .....	55	—	—
Steel billets .....	102, 843	101, 267	9, 713, 320
Steel slabs .....	—	—	—
Steel bars .....	6, 609	38, 547	5, 886, 435
Wire rods .....	—	3, 638	527, 442
Rails, old .....	—	72, 321	3, 746, 855
Axles, old .....	—	7, 052	388, 539
Scrap iron and steel, other .....	—	1, 078	35, 102
Tin .....	—	2, 376	4, 646, 917
Zinc spelter .....	—	22, 684	5, 448, 473
Acids—Chromic .....	—	111	61, 783
Hydrochloric (muriatic) .....	—	797	66, 024
Sulphuric, 100% .....	—	34, 138	869, 434
Ammonium chloride (salammoniac) .....	—	145	25, 683
Cleaners (Pennsalt, etc.) .....	—	774	179, 282
Inhibitors (Rodine, etc.) .....	—	29	13, 136
Palm oil .....	—	272	66, 655
Phenone .....	—	24	50, 100
Rolling oils, other .....	—	2, 171	511, 502
Salt .....	—	8	306
Zinc ammonium chloride .....	—	1	231
Refractories .....	—	—	739, 320
Rolls and dies <sup>1</sup> .....	—	—	6, 663, 249
Silica sand .....	—	493	43, 447
All other materials and supplies .....	—	—	31, 979, 133
Containers and other packaging materials .....	—	—	3, 403, 338
<b>Total .....</b>	<b>...</b>	<b>...</b>	<b>87, 556, 978</b>

<sup>1</sup> See footnote 4 of introductory text.



TABLE 31. Net Production<sup>1</sup> in Canada of Hot-rolled Steel Products, 1955 - 59

Item	1955	1956	1957	1958	1959
	net tons				
Blooms, billets and slabs .....	214,615	118,780	158,924	172,804	232,052
Rails .....	228,991	336,662	393,926	365,429	286,989
Bars for rail fastenings .....	89,755	120,381	102,114	72,955	95,346
Wire rods .....	357,775	403,834	291,300	268,848	382,106
Structural shapes .....	241,698	316,000	347,693	217,137	268,573
Bars .....	652,739	827,598	763,419	632,118	854,519
Plates (excluding plates for pipes and tubes) .....	253,640	326,208	349,626	230,309	416,099
Sheets, hoops, bands and strips (excluding skelp) .....	1,194,556	1,403,974	1,194,670	1,147,238	1,772,395
Other hot-rolled forms (including hot-rolled skelp) .....	256,593	346,207	363,032	349,755	359,635
<b>Totals .....</b>	<b>3,490,362</b>	<b>4,199,644</b>	<b>3,964,704</b>	<b>3,456,593</b>	<b>4,667,714</b>

<sup>1</sup> Inter-mill shipments have been excluded.

TABLE 32. Alloy Steel Products Made and Sold by Rolling Mills, 1958 and 1959

	1958		1959	
	Tonnage made	Tonnage sold	Tonnage made	Tonnage sold
	net tons			
Bars .....	69,661	49,792	69,425	91,521
Other products, including plates, billets, forgings, sheet piling and wire rods, etc. ....	84,927	56,450 <sup>1</sup>	119,586	61,902 <sup>1</sup>
<b>Total alloy steel .....</b>	<b>154,588</b>	<b>106,242<sup>1</sup></b>	<b>189,011</b>	<b>153,423</b>

<sup>1</sup> Includes alloy grinding balls in 1958 and 1959. Comparable data not included in previous years.

TABLE 33. Products Rolled from Axles, etc., 1958 and 1959

	1958		1959	
	Tonnage made	Tonnage sold	Tonnage made	Tonnage sold
	net tons			
Bars .....	45,862	46,789	61,997	59,151
Other products .....	8,999	8,825	8,634	8,260
<b>Totals .....</b>	<b>54,861</b>	<b>55,614</b>	<b>70,631</b>	<b>67,411</b>

TABLE 34. Steel Ingots and Castings Shipped for Export by Producers, 1958 and 1959

	1958	1959
	net tons	
Steel ingots .....	—	37,155
Steel castings .....	2,436	3,448

TABLE 35. Production and Factory Sales of Steel Rails, 1950 - 59

Year	Tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
1950 .....	286,672	286,753	21,305,231
1951 .....	257,244	254,911	19,910,580
1952 .....	253,675	251,894	21,223,964
1953 .....	303,318	299,808	26,465,922
1954 .....	241,922	232,484	21,421,531
1955 .....	228,991	241,254	22,352,384
1956 .....	336,662	333,979	33,027,029
1957 .....	393,926	383,174	39,978,592
1958 .....	365,429	377,604	41,586,604
1959 .....	286,989	286,419	31,636,649

TABLE 36. Production and Factory Sales of Finished Rail Fastenings, 1950 - 59

Year	Tie plates			Fish plates and splice bars		
	Quantity made	Factory sales		Quantity made	Factory sales	
		Quantity	Income from sales		Quantity	Income from sales
	net tons		\$	net tons		\$
1950 .....	53,807	53,510	4,603,788	14,151	13,912	1,377,614
1951 .....	67,588	66,783	6,464,668	18,655	18,577	2,008,149
1952 .....	74,519	73,605	7,822,057	16,344	15,803	1,891,455
1953 .....	50,181	50,202	5,530,240	14,939	14,159	1,754,308
1954 .....	39,386	38,027	4,152,574	13,175	12,786	1,545,914
1955 .....	66,856	67,683	7,272,282	15,582	16,812	1,986,547
1956 .....	88,590	86,592	10,103,650	18,487	18,675	2,465,669
1957 .....	78,555	80,575	10,148,065	17,022	16,793	2,502,295
1958 .....	56,118	56,189	7,338,111	14,078	14,088	2,066,753
1959 .....	70,376	70,351	8,970,082	14,853	14,818	2,212,917

TABLE 37. Production and Factory Sales<sup>1</sup> of Wire Rods of Iron or Steel, 1950-59

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
1950 .....	293,866	120,429	8,542,496
1951 .....	318,266	122,514	9,695,144
1952 .....	315,789	128,900	10,554,693
1953 .....	286,471	113,095	10,887,948
1954 .....	275,121	274,870	26,848,014
1955 .....	357,775	382,258	33,298,084
1956 .....	403,834	403,602	42,565,418
1957 .....	291,300	292,563	34,408,714
1958 .....	268,848	270,210	30,592,181
1959 .....	382,106	380,132	48,182,505

<sup>1</sup> Includes shipments transferred to own mills of producing firms in 1954 and subsequent years. These tonnages not included before 1954 — see footnote 2 of introductory text.

TABLE 38. Production and Factory Sales of Blooms, Billets and Slabs, 1950-59

Year	Except for forging <sup>1</sup>			For forging <sup>2</sup>		
	Total tonnage made	Factory sales		Total tonnage made	Factory sales	
		Tonnage sold	Income from sales		Tonnage sold	Income from sales
	net tons		\$	net tons		\$
1950 .....	2,332,336	259,898	16,955,029	114,548	103,007	8,349,232
1951 .....	2,498,536	308,888	21,066,928	147,004	138,446	12,446,727
1952 .....	2,587,942	277,588	22,385,697	141,490	122,165	12,560,467
1953 .....	2,760,518	176,515	14,803,628	110,342	103,471	10,424,976
1954 .....	2,201,222	91,378	6,821,718	72,503	59,539	5,927,220
1955 .....	2,864,919	227,833	16,552,854	77,806	70,813	6,561,780
1958 .....	3,490,564	133,991	9,290,169	113,328	102,978	11,282,987
1957 .....	'	141,062	11,153,452	156,065	146,407	17,108,405
1958 .....	'	101,343	8,245,163	171,217	166,079	20,274,609
1959 .....	'	131,574	11,303,743	197,415	194,419	21,518,211

<sup>1</sup> Shipment to other Canadian rolling mills are included.

<sup>2</sup> Includes blanks or pierced billets for seamless tubes.

<sup>3</sup> Not collected since 1957.



**TABLE 39. Production and Factory Sales of Hot-rolled Bars<sup>1</sup> of All Kinds, 1950-59**

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
1950 .....	684,934	552,006	56,694,325
1951 .....	763,005	587,160	73,105,972
1952 .....	786,972	600,302	81,124,625
1953 .....	732,275	592,078	75,013,792
1954 .....	528,521	445,519	56,525,130
1955 .....	742,494	621,819	79,841,771
1956 .....	947,979	795,675	112,281,656
1957 .....	865,533	718,864	107,391,265
1958 .....	705,073	585,016	86,215,757
1959 .....	949,865	795,274	116,993,886

<sup>1</sup> Included light structurals before 1951; therefore data since 1951 are not exactly comparable with previous years.

**TABLE 40. Production of Structural Steel Shapes<sup>1</sup> of All Kinds, 1950-59**

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
1950 .....	153,144	151,710	13,377,229
1951 .....	250,362	239,669	23,261,471
1952 .....	231,091	223,071	23,248,170
1953 .....	283,203	273,591	28,725,067
1954 .....	193,673	190,521	20,056,183
1955 .....	241,698	249,762	26,694,977
1956 .....	316,000	315,564	36,361,986
1957 .....	347,693	341,975	42,823,449
1958 .....	217,137	225,295	29,140,873
1959 .....	268,573	265,194	34,528,656

<sup>1</sup> (a) Includes light structurals since 1951—see footnote to Table 39.

(b) In 1956 this category was revised to include sheet piling. Data in above table for previous years have been revised to accommodate this change in classification.

**TABLE 41. Production and Factory Sales of Steel Plate,<sup>1</sup> 1950-59**

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
1950 .....	150,857	146,559	12,640,871
1951 .....	184,707	183,994	17,977,171
1952 .....	234,115	234,799	26,071,334
1953 .....	221,818	220,539	23,136,938
1954 .....	201,939	201,524	20,568,611
1955 .....	253,640	251,870	26,162,331
1956 .....	326,208	319,666	36,936,168
1957 .....	349,626	344,616	45,017,409
1958 .....	230,309	226,750	30,618,858
1959 .....	416,099	408,835	53,394,313

<sup>1</sup> Excludes plate for pipes and tubes.

TABLE 42. Imports of Primary Forms of Iron and Steel, 1959

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Pig iron:				
Silvery .....	United States	7,516	—	—
Other .....	United States	546	—	—
	United Kingdom	45	—	—
	Australia	419	—	—
	China	4,995	—	—
	Spain	4,620	—	—
	U.S.S.R.	7,485	—	—
Ingots and semi-finished:				
Ingots .....	United States	659	371	161.7
Billets, blooms, slabs and sheet bars .....	United States	475	558	586.5
	United Kingdom	—	1	22.0
Bars and sections:				
Hot rolled bars, n.o.p. ....	United States	13,090	1,638	116.9
	United Kingdom	3,407	608	192.3
	Austria	—	18	—
	Australia	855	—	—
	Belgium	17,197	—	—
	France	5,042	—	—
	Germany	6,374	—	—
	Italy	105	—	—
	Japan	1,024	—	—
	Sweden	341	3	19.7
Hot rolled bars for agricultural implements .....	United States	3,865	293	—
	United Kingdom	215	—	—
	Germany	58	—	—
Rounds over 4 7/8, squares over 4" .....	United States	566	71	2.6
	United Kingdom	723	26	—
	Belgium	46	—	—
Concrete reinforcing bars .....	United States	373	—	—
	Belgium	30,509	—	—
	France	11,930	—	—
	Germany	3,573	—	—
	Japan	10,576	—	—
Sash or casement sections .....	United States	2,179	—	—
	United Kingdom	443	—	—
	Belgium	125	—	—
Cold rolled bars n.o.p. ....	United States	1,767	1,500	121.6
	United Kingdom	4,152	4	75.7
	Belgium	219	—	—
	Germany	—	109	—
	Sweden	35	—	.2
Cold rolled bars for agricultural implements .....	United States	880	34	1.2
Tool steel:				
Tool steel, all forms and sizes .....	United States	2,606	1,142	—
	United Kingdom	185	489	—
	Austria	22	70	—
	France	—	86	—
	Germany	—	18	—
	Sweden	44	264	—
Structurals:				
Wide flange beams .....	United States	144,009	—	—
	United Kingdom	65,162	—	—
	Belgium	24,196	—	—
	France	1,162	—	—
	Germany	2,888	—	—
Sheet piling .....	United States	10,499	—	—
	United Kingdom	4,615	—	—
	Belgium	8,280	—	—
	France	93	—	—
	Germany	1,133	—	—
Structurals, n.o.p. ....	United States	27,455	—	22.4
	United Kingdom	10,644	—	.8
	Belgium	37,649	—	—
	France	13,312	—	—
	Germany	1,020	—	—
	Japan	192	—	—
	Norway	91	—	—

TABLE 42. Imports of Primary Forms of Iron and Steel, 1959 - Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Structurals - Concluded:-				
Bar size structurals, n.o.p. ....	United States	4,779	—	89.4
	United Kingdom	1,647	—	13.6
	Belgium	20,728	—	—
	France	4,099	—	—
	Germany	4,711	—	—
	Japan	56	—	—
	Sweden	—	—	8.9
Bar size structurals for agricultural implements .....	United States	1,722	—	—
	Belgium	18	—	—
Plates:				
60" and under in width .....	United States	7,767	312	167.7
	United Kingdom	3,988	—	257.4
	Australia	271	—	—
	Austria	11	—	—
	Belgium	5,708	—	—
	France	1,026	—	—
	Germany	3,019	—	—
	Japan	8,223	—	—
	Sweden	—	—	43.5
Over 60" up to and including 100" in width .....	United States	17,167	149	227.6
	United Kingdom	10,749	—	100.3
	Australia	82	—	—
	Belgium	3,571	—	—
	France	888	—	—
	Germany	10,696	—	—
	Japan	15,019	—	—
	Sweden	—	—	49.0
Over 100" in width .....	United States	4,551	74	60.1
	United Kingdom	1,264	—	31.4
	Belgium	2	—	—
	Germany	581	—	—
Flanged or dished .....	United States	2,295	—	37.3
	United Kingdom	11	—	4.6
Floor plate .....	United States	8,549	—	—
	United Kingdom	1,972	—	—
	Belgium	114	—	—
	Germany	5	—	—
	Italy	51	—	—
	Japan	157	—	—
Sheets and strip (except stainless):				
Hot rolled under 24" in width .....	United States	9,567	369	—
	United Kingdom	556	2	—
	Belgium	3,957	—	—
	France	1,004	—	—
	Germany	213	—	—
	Italy	25	—	—
	Japan	16	—	—
	Sweden	—	—	—
Hot rolled 24" to 51" in width .....	United States	6,880	15	—
	United Kingdom	683	—	—
	Australia	67	—	—
	Austria	3	—	—
	Belgium	894	—	—
	France	207	—	—
	Germany	158	—	—
	Japan	1,471	—	—
Hot rolled over 51" in width .....	United States	21,632	2	—
	United Kingdom	462	—	—
	Belgium	638	—	—
	Germany	21	—	—
	Japan	244	—	—
Cold rolled under 24" in width .....	United States	7,071	130	—
	United Kingdom	629	—	—
	Belgium	198	—	—
	Germany	163	—	—
	Japan	10	—	—
	Netherlands	1	—	—
	Sweden	216	3	—



TABLE 42. Imports of Primary Forms of Iron and Steel, 1959 - Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Sheets and strip (except stainless)—Concluded:				
Cold rolled 24" to 51" in width .....	United States	17,787	25	—
	United Kingdom	7,898	—	—
	Australia	1	—	—
	Union of South Africa	1,066	—	—
Cold rolled over 51" in width .....	United States	9,696	—	—
	United Kingdom	94	—	—
Enamelling grade .....	United States	14,769	—	—
	United Kingdom	1,724	—	—
Aluminized .....	United States	2,000	—	—
Coated (other than metal or asbestos bonded) .....	United States	8,931	—	—
	United Kingdom	385	—	—
	Belgium	3	—	—
	Germany	43	—	—
Asbestos bonded (includes galvanized and corrugated) .....	United States	4,878	—	—
	United Kingdom	571	—	—
Metal coated, n.o.p. ....	United States	509	—	—
	United Kingdom	48	—	—
	Germany	124	—	—
Electro galvanized .....	United States	1,568	—	—
	United Kingdom	64	—	—
	Japan	6	—	—
Galvanized, hot dipped .....	United States	3,333	—	—
	United Kingdom	1,251	—	—
	Belgium	61	—	—
	Germany	29	—	—
	Japan	380	—	—
	Netherlands	2	—	—
Electrical 2.90 silicon or over .....	United States	—	17,228	—
	United Kingdom	—	199	—
	Belgium	—	106	—
Electrical, n.o.p. ....	United States	—	1,169	—
	United Kingdom	—	9	—
Saw steel .....	United States	166	1,420	—
	United Kingdom	5	32	—
	France	—	7	—
	Germany	—	4	—
	Sweden	6	180	—
Hot rolled wasters .....	United States	1,440	—	—
	United Kingdom	166	—	—
Cold rolled wasters .....	United States	5,101	—	—
	United Kingdom	6,376	—	—
Black plate .....	United States	615	—	—
Tin plate, hot dipped .....	United States	879	—	—
	United Kingdom	172	—	—
Tin plate electrolytic .....	United States	461	—	—
	United Kingdom	3,955	—	—
Tin plate wasters .....	United States	38	—	—
Terne plate long .....	United States	7,579	—	—
	United Kingdom	85	—	—
Terne plate short .....	United States	447	—	—
Strip for hoop .....	United States	744	—	—
	United Kingdom	201	—	—
	Belgium	30	—	—
	Germany	55	—	—
Stainless sheets and strip:				
Hot rolled stainless, under 24" in width 18 gauge and heavier..	United States	—	—	4.8
	United Kingdom	—	—	5.4
Hot rolled stainless, under 24" in width lighter than 18 gauge..	United States	—	—	4.4
Hot rolled stainless 24" to 51" in width 18 gauge and heavier..	United States	—	—	85.3
	United Kingdom	—	—	940.4
	Sweden	—	—	159.4

TABLE 42. Imports of Primary Forms of Iron and Steel 1959 — Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Stainless sheets and strip—Concluded:				
Hot rolled stainless 24" to 51" in width lighter than 18 gauge.	United States	—	—	26.7
	United Kingdom	—	—	292.4
Hot rolled stainless, over 51" in width 18 gauge and heavier ..	United States	—	—	39.6
	Sweden	—	—	23.7
Hot rolled stainless, over 51" in width lighter than 18 gauge ..	United States	—	—	1.3
Cold rolled stainless under 24" in width 18 gauge and heavier	United States	—	—	226.9
	United Kingdom	—	—	.3
	Japan	—	—	25.6
Cold rolled stainless under 24" in width lighter than 18 gauge	United States	—	—	742.6
	United Kingdom	—	—	.7
	Sweden	—	—	.4
Cold rolled stainless n.o.p. ....	United States	—	—	1,147.0
	United Kingdom	—	—	1,000.9
	France	—	—	197.5
	Japan	—	—	59.3
	Sweden	—	—	31.7
Plate, sheet and strip for pipes and tubes:				
Hot rolled 15 3/8" and under in width .....	United States	14,724	—	—
	United Kingdom	2,423	—	—
Hot rolled over 15 3/8" in width .....	United States	650	—	—
Plate for pipe .....	United States	605	—	—
	United Kingdom	248	—	—
	Italy	41	—	—
Cold rolled .....	United States	1,697	—	.6
Pipes and tubes:				
Spiral weld pipe .....	United States	1,270	—	—
Cast .....	United States	1,438	—	—
	United Kingdom	25,464	—	—
Repair of pressure parts of boilers:				
Seamless hot finished .....	United States	967	282	.7
	United Kingdom	1,150	392	—
	Germany	1,551	511	—
	Italy	19	—	—
	Sweden	162	—	—
Seamless cold drawn .....	United States	135	83	10.7
	United Kingdom	74	18	5.7
Welded .....	United States	348	11	2.7
	United Kingdom	2,202	—	—
	Germany	10	—	—
	Japan	18	—	—
	Switzerland	1,005	—	—
Seamless cold drawn, n o.p. ....	United States	5,694	1,280	160.8
	United Kingdom	3,062	227	119.7
	France	9	—	14.0
	Germany	68	12	—
	Netherlands	4	—	—
	Sweden	129	152	37.5
Seamless hot finished 12" O.D. and under .....	United States	4,111	4,612	13.5
	United Kingdom	15,142	1,065	—
	France	43	—	—
	Germany	2,180	54	—
	Italy	338	12	—
	Japan	155	—	—
	Sweden	11	287	—
Seamless hot finished over 12" O.D. ....	United States	1,169	23	—
	United Kingdom	11,041	66	—
	Germany	10	—	—
	Italy	72	—	—

TABLE 42. Imports of Primary Forms of Iron and Steel, 1959 - Continued

Commodity	Country of origin	tons (2,000 pounds)		
		Carbon	Alloy	Stainless
Repair of pressure parts of boilers - Concluded.				
Welded 4" O.D. and under .....	United States	7,974	—	69.4
	United Kingdom	4,835	—	8.6
	Belgium	457	—	—
	France	1,919	—	—
	Germany	3,756	—	—
	Japan	833	—	—
	Netherlands	1,542	—	—
	Sweden	15	—	.8
Welded over 4" O.D. ....	United States	39,046	7	34.4
	United Kingdom	669	—	—
	Germany	893	—	—
	Japan	85	—	—
Tubing not over 1/2" O.D. (welded, cold drawn, hot finished) .....	United States	801	—	—
	United Kingdom	179	—	—
	France	33	—	—
	Germany	2	—	—
	Sweden	1	—	—
Conduit .....	United States	430	—	—
Casing .....	United States	7,743	62	—
	United Kingdom	6,390	—	—
	France	1,123	—	—
	Germany	3,018	—	—
	Italy	227	—	—
	Japan	13,845	—	—
Wire products:				
Wire rope .....	United States	225	—	19.6
	United Kingdom	3,023	—	.1
	Belgium	366	—	—
	Denmark	39	—	.2
	France	64	—	—
	Germany	730	—	—
	Japan	707	—	1.5
	Netherlands	1,071	—	—
	Norway	1	—	—
	Sweden	19	—	—
Wire for wire rope .....	United States	524	—	1.1
	United Kingdom	14,889	—	1.4
	Germany	3,688	—	—
	Japan	356	—	—
Wire for springs, cushions, etc. ....	United States	18	—	—
	United Kingdom	14	—	—
	Australia	2	—	—
	Japan	189	—	—
Wire for corset clasps, dress stays, etc. ....	United States	85	—	—
	United Kingdom	25	—	—
	Germany	17	—	—
Coated or covered n.o.p. (plastic, paper, paint, tinned, coppered, etc.) .....	United States	536	2	10.7
	United Kingdom	196	—	1.0
	Belgium	4	—	—
	France	17	—	—
	Germany	75	—	—
	Italy	3	—	—
	Japan	124	—	—
Galvanized fencing wire .....	United States	23	—	—
	United Kingdom	1,373	—	—
	Austria	21	—	—
	Belgium	32	—	—
	France	31	—	—
	Germany	1,855	—	—
	Japan	492	—	—
	Netherlands	34	—	—



TABLE 42. Imports of Primary Forms of Iron and Steel, 1959 - Concluded

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Wire products - Concluded:				
Galvanized, n.o.p. ....	United States	1,196	-	-
	United Kingdom	1,955	-	-
	Austria	9	-	-
	Belgium	197	-	-
	France	29	-	-
	Germany	238	-	-
	Italy	5	-	-
	Japan	351	-	-
	Netherlands	163	-	-
	Sweden	1	-	-
All other .....	United States	2,388	83	63.5
	United Kingdom	2,156	14	44.3
	Austria	53	-	-
	Belgium	886	-	-
	Denmark	2	-	-
	France	1,390	-	-
	Germany	274	-	5.8
	Japan	1,523	-	-
	Netherlands	111	-	-
	Sweden	90	5	.5
Welding rods (cut lengths) .....	United States	3,195	1,055	341.1
	United Kingdom	603	16	-
	Australia	2	-	-
	Germany	10	2	-
	Sweden	418	-	19.1
Welding rod in coil form (excludes wire for manufacture of welding rods) .....	United States	441	152	28.8
	United Kingdom	16	-	-
	Austria	1	-	-
	Belgium	21	-	-
Wire rods (all sizes) .....	United States	930	3	21.1
	United Kingdom	2,236	-	-
	Belgium	8,793	-	-
	France	8,460	-	-
	Germany	9,086	-	2.3
Rails and railway track material:				
Rails 60 lb. and under per lineal yard .....	United States	110	-	-
	United Kingdom	45	-	-
	Belgium	101	-	-
	Germany	1,000	-	-
Rails over 60 lb. up to and including 100 lb. per lineal yard .....	United States	732	-	-
	United Kingdom	84	-	-
Rails over 100 lb. per lineal yard .....	United States	32,127	-	-
	Germany	108	-	-
Track material:				
Fish plates, angle bars, etc. ....	United States	15,486	-	-
	United Kingdom	248	-	-
	Belgium	7	-	-
	Germany	41	-	-
Switch points, guard rails, etc. ....	United States	47	-	-
	United Kingdom	14	-	-
Axles for railway rolling stock .....	United States	187	-	-
	United Kingdom	1,200	-	-
Steel tires for railway rolling stock .....	United States	167	-	-
	United Kingdom	316	-	-
Steel wheels for railway rolling stock .....	United States	9,372	-	-
	United Kingdom	15,961	-	-
Total imports .....		1,160,616	39,226	8,471.9

TABLE 43. Exports of Primary Iron and Steel, 1959

Commodity	Total tonnage tons (2,000 pounds)
Pig iron <sup>1</sup> .....	468,335
Ingots, blooms and billets .....	74,124
Bars .....	26,796
Rods .....	9,102
Plates, sheets and strips .....	230,040
Rails .....	37,409
Structural shapes .....	12,568
Pipe and tubing:	
Wrought iron .....	17,388
Cast iron .....	4,805
Galvanized .....	2,611
Other .....	63,033
Castings, iron and steel .....	9,913
Forgings .....	3,878
<b>Total</b> .....	<b>960,002</b>

<sup>1</sup> See footnote to Table 10.

TABLE 44. Principal Statistics of the Primary Iron and Steel Industry, grouped according to Size of Establishment, 1958 and 1959

Establishments reporting a value of factory shipments	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
	number				dollars	
<b>1958</b>						
Under \$10,000 .....	1	69	233,722	20,543	108,985	207,005
\$ 100,000 to \$ 199,999 .....	2					
200,000 " 499,999 .....	9	296	1,251,590	191,821	909,266	2,738,280
500,000 " 999,999 .....	6	559	2,312,758	222,708	1,281,587	4,315,510
1,000,000 " 4,999,999 .....	20	2,949	11,938,244	2,797,352	21,383,404	49,732,080
5,000,000 and over .....	12	26,375	132,190,523	25,673,144	226,986,296	533,324,821
Head offices .....	—	13	96,225	—	—	—
<b>Totals</b> .....	<b>50</b>	<b>30,261</b>	<b>148,023,062</b>	<b>28,905,568</b>	<b>250,669,538</b>	<b>590,317,696</b>
<b>1959</b>						
Under \$10,000 .....	1	25	93,000	13,956	70,493	189,448
\$ 100,000 to \$ 199,999 .....	2					
200,000 " 499,999 .....	6	266	1,242,297	97,832	658,450	2,101,189
500,000 " 999,999 .....	6	410	1,677,907	272,597	1,328,833	4,140,599
1,000,000 " 4,999,999 .....	17	2,724	11,415,531	2,573,890	15,580,795	37,466,717
5,000,000 and over .....	17	31,504	168,385,191	33,117,963	336,521,522	738,596,050
<b>Totals</b> .....	<b>49</b>	<b>34,942</b>	<b>182,910,151</b>	<b>36,076,238</b>	<b>354,160,093</b>	<b>782,494,003</b>

**TABLE 45. Employees and Earnings in the Primary Iron and Steel Industry, by Provinces, 1958 and 1959**

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
1958	number					dollars		
Nova Scotia .....	412	43	3,544	—	3,999	2,621,345	14,415,641	17,036,986
Quebec .....	594	120	2,846	—	3,560	3,697,799	11,496,374	15,194,173
Ontario .....	3,067	908	17,102	172	21,249	25,130,741	84,455,013	109,585,754
Manitoba .....	193	24	1,236	—	1,453	1,169,671	5,036,478	6,206,149
Alberta .....								
British Columbia .....	193	24	1,236	—	1,453	1,169,671	5,036,478	6,206,149
Canada .....								
	4,266	1,095	24,728	172	30,261	32,619,556	115,403,506	148,023,062
1959								
Nova Scotia .....	418	44	3,167	—	3,629	2,745,477	14,186,075	16,931,552
Quebec .....	680	105	2,957	—	3,742	3,892,637	12,917,332	16,809,969
Ontario .....	3,247	983	21,338	207	25,775	27,542,449	112,906,211	140,448,660
Manitoba .....	231	31	1,534	—	1,796	1,542,059	7,267,911	8,809,970
Alberta .....								
British Columbia .....	231	31	1,534	—	1,796	1,542,059	7,267,911	8,809,970
Canada .....								
	4,576	1,163	28,996	207	34,942	35,722,622	147,277,529	183,000,151

**TABLE 46. Production Workers, by Months, 1958 and 1959**

Month	1958			1959		
	Male	Female	Total	Male	Female	Total
	number					
January .....	25,985	186	26,171	25,857	192	26,049
February .....	26,093	185	26,278	26,341	213	26,554
March .....	26,149	178	26,327	27,213	207	27,420
April .....	26,286	190	26,476	28,032	203	28,235
May .....	26,106	187	26,293	29,051	200	29,251
June .....	26,551	184	26,735	29,731	201	29,932
July .....	26,789	189	26,978	29,868	221	30,089
August .....	20,275	142	20,417	30,093	219	30,312
September .....	19,795	132	19,927	30,420	222	30,642
October .....	19,830	133	19,963	30,801	209	31,010
November .....	26,683	173	26,856	30,643	198	30,841
December .....	26,223	185	26,408	30,267	193	30,460
<b>Averages .....</b>	<b>24,728</b>	<b>172</b>	<b>24,900</b>	<b>28,996</b>	<b>207</b>	<b>29,203</b>

**TABLE 47. Capital and Repair Expenditures in the Primary Iron and Steel Industry, 1955 - 59**

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Con-struction	Machinery and equipment		Con-struction	Machinery and equipment		
	thousands of dollars						
1955 .....	6,615	27,930	34,545	5,170	42,966	48,136	82,681
1956 .....	7,613	54,083	61,696	6,531	56,215	62,746	124,442
1957 .....	14,366	56,648	71,014	7,011	62,243	69,254	140,268
1958 .....	15,420	40,433	55,853	6,474	47,192	53,666	109,519
1959 <sup>P</sup> .....	20,828	56,576	77,404	7,857	64,459	72,316	149,720



TABLE 48. Fuel and Electricity Used<sup>1</sup> in the Primary Iron and Steel Industry, 1958 and 1959

Kind		1958		1959	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian .....	ton	49,223	519,923	39,733	452,542
Imported .....	"	34,692	377,730	31,851	337,687
Anthracite coal .....	"	—	—	—	—
Lignite coal .....	"	—	—	—	—
Coke .....	"	30,651	209,117	33,438	236,184
Gasoline .....	Imp. gal.	421,997	126,167	493,218	141,527
Fuel oil, including kerosene .....	"	95,901,390	8,833,352	125,218,478	10,972,045
Wood .....	cord	76	892	97	1,374
Gas—Liquefied petroleum gases .....	Imp. gal.	9,986	2,161	42,551	8,426
Other manufactured gas <sup>1</sup> .....	M cu. ft.	23,573,689	7,095,091	31,481,394	9,433,440
Natural .....	Mcf.	1,932,825	1,157,565	2,761,568	1,611,046
Other fuel .....	—	..	257,466	..	17,576
Electricity purchased .....	kwh.	1,716,472,905	10,326,104	2,193,273,074	12,864,391
<b>Totals</b> .....	—	...	<b>28,905,568</b>	...	<b>36,076,238</b>
Electricity generated for own use .....	kwh.	85,874,309	—	109,908,937	—

<sup>1</sup> Does not include blast furnace gas made for own use.

TABLE 49. World Ingot and Castings Production, Per Capita, by Countries, 1959

(Based on data in Table 28 and U.N. population statistics)

Country	Population mid-year 1959 est.	Production per capita
	'000	pounds
United States .....	177,702	1,051
Canada .....	17,442	670
Mexico .....	33,304	70
Argentina .....	20,614	23
Brazil .....	64,216	62
Austria .....	7,049	785
Belgium and Luxemburg .....	9,428	2,344
France .....	45,097	743
Italy .....	49,055	303
Netherlands .....	11,346	324
Sweden .....	7,454	840
United Kingdom .....	51,985	870
Spain .....	29,894	137
Yugoslavia .....	18,421	155
Germany—Western <sup>1</sup> .....	55,009	1,034
Eastern <sup>2</sup> .....	17,298	408
Russia .....	210,500	627
Czechoslovakia .....	13,564	981
Hungary .....	9,917	391
Poland .....	29,257	461
Rumania .....	18,256	163
Union of South Africa .....	14,673	285
Australia .....	10,061	698
Turkey .....	26,881	17
India .....	402,750	13
Japan .....	92,740	395

<sup>1</sup> Includes West Berlin and Saar.<sup>2</sup> Includes East Berlin.

## Directory of Firms in the Primary Iron and Steel Industry, 1959

Name of firm	Location of plant
<b>(a) Pig Iron:</b>	
Dominion Steel & Coal Corporation Limited .....	Sydney, Nova Scotia —
Algoma Steel Corporation, Limited .....	Sault Ste. Marie, Ontario —
Canadian Furnace Co. Limited .....	Port Colborne, Ontario —
Dominion Foundries & Steel, Limited .....	Depew St., Hamilton, Ontario —
Steel Company of Canada, Limited .....	Hamilton, Ontario —
<b>(b) Ferro-alloys:<sup>1</sup></b>	
Chromium Mining & Smelting Corporation, Limited .....	Beauharnois, Quebec —
Electro Metallurgical Company, Division of Union Carbide Canada Ltd. ....	Welland, Ontario; Beauharnois, Quebec —
<b>(c) Steel ingots and steel castings:</b>	
Maritime Steel Foundries, Limited .....	379 Glasgow St., New Glasgow, Nova Scotia —
Dominion Steel & Coal Corporation Limited .....	Sydney, Nova Scotia —
Canadian Unitcast-Steel, Ltd. ....	455 Belvedere St., Sherbrooke, Quebec —
Canadian Steel Foundries Limited .....	5227 Notre Dame St. E, Montreal, 5, Quebec —
Dominion Steel & Coal Corporation Limited .....	5870 St. Patrick St., Montreal, Quebec —
Dominion Brake Shoe Company, Limited .....	Laval St., Joliette, Quebec —
Dominion Engineering Works Limited .....	Lachine, Quebec —
Griffin Steel Foundries Ltd. ....	St. Hyacinthe, Quebec —
La Compagnie F.X. Drolet .....	206, rue du Pont, Québec, Québec —
Lynn MacLeod Metallurgy Limited .....	Blvd. Smith, Thetford Mines, Quebec —
Manganese Steel Castings, Limited .....	104 Abenakis St., Sherbrooke, Quebec —
Shawinigan Chemicals, Limited .....	Shawinigan Falls, Quebec —
Crucible Steel of Canada Ltd. ....	Sorel, Quebec —
Sorel Steel Foundries, Limited .....	160 Du Roi, Sorel, Quebec —
Algoma Steel Corporation, Limited .....	Sault Ste. Marie, Ontario —
Atlas Steels, Limited .....	East Main St., Welland, Ontario —
Burlington Steel Company, Limited .....	Sherman Avenue North, Hamilton, Ontario —
Canada Electric Castings, Limited .....	West St., S. Orillia, Ontario —
Dominion Foundries & Steel, Limited .....	Depew St., Hamilton, Ontario —
Fahralloy, Canada Limited .....	Wyandotte St., Orillia, Ontario —
Ford Motor Company of Canada, Limited .....	Windsor, Ontario —
Indiana Steel Products Co. of Canada, Ltd., The .....	Kitchener, Ontario —
Kennedy & Sons, Limited, The Wm. ....	First Avenue West, Owen Sound, Ontario —
Neelon Steel Limited .....	Lebel, Ontario —
Steel Company of Canada, Limited .....	Wilcox St., Hamilton, Ontario —
Welland Electric Steel Foundry Limited .....	123 Victoria St., Welland, Ontario —
Griffin Steel Foundries Ltd. ....	Transcona, Manitoba —
Dominion Brake Shoe Company Limited, Manitoba Steel Foundry Division .....	Selkirk, Manitoba —
Dominion Bridge Co. Ltd. ....	P.O. Box 430, Calgary, Alberta —
Foothills Steel Foundry & Iron Works Ltd. ....	66th Ave. & Centre St. S., Calgary, Alberta —
Premier Steel Mills Ltd. ....	Edmonton, Alberta —
Canadian Sumner Iron Works, Limited .....	East Broadway, Vancouver, British Columbia —
Consolidated Mining & Smelting Company of Canada, Limited ..	Tadanac, British Columbia —
Reliance Foundry Company, Limited .....	149 Fourth Avenue West, Vancouver, British Columbia —
A-1 Steel & Iron Foundry Ltd. ....	29 West 3rd Ave., Vancouver, British Columbia —
Victoria Machinery Depot Co. Ltd. ....	343 Bay St., Victoria, British Columbia —
Vancouver Steel Co. Ltd. ....	Burnaby, British Columbia —

<sup>1</sup> Not including the firms which made ferro-alloys as a secondary product.

## Directory of Firms in the Primary Iron and Steel Industry, 1959 - Concluded

Name of firm	Location of plant
<b>(d) Hot-rolled iron and steel:</b>	
Enamel & Heating Products Ltd. ....	Amherst, Nova Scotia
Dominion Steel & Coal Corporation Limited .....	Sydney, Nova Scotia
Dominion Steel & Coal Corporation Limited .....	5870 St. Patrick St., Montreal, Quebec —
Steel Company of Canada, Limited .....	2320 Notre Dame St. W., Montreal, Quebec
Algoma Steel Corporation, Limited .....	Sault Ste. Marie, Ontario —
Atlas Steels, Limited .....	Welland, Ontario —
Burlington Steel Company, Limited .....	Sherman Ave. North, Hamilton, Ontario
Dominion Foundries & Steel, Limited .....	Depew Street, Hamilton, Ontario
Steel Company of Canada, Limited .....	Wilcox Street, Hamilton, Ontario —
Vanadium Alloys Steel Canada Limited .....	London, Ontario —
Manitoba Rolling Mill Company, Limited .....	Selkirk, Manitoba —
Premier Steel Mills Ltd. ....	Edmonton, Alberta —
Vancouver Rolling Mills Ltd. ....	Vancouver, British Columbia —
<b>(e) Cold-rolled steel:</b>	
Stanley Steel Company, Limited .....	57 Gerrard St., Hamilton, Ontario —
<b>(f) Cold-drawn steel:</b>	
Canadian Drawn Steel Company, Limited .....	Gerrard St., Hamilton, Ontario —
Union Drawn Steel Company, Limited .....	Burlington St. E., Hamilton, Ontario —







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