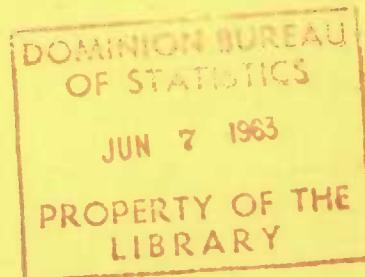


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CATALOGUE No.

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ANNUAL



IRON AND STEEL MILLS

1960

Formerly The Primary Iron and Steel Industry. Note: Statistics of the activities of coke plants operated as divisions of this industry have been transferred to this publication from The Coke and Gas Industry (Catalogue No. 45-203) which has been discontinued. See introductory text for details.

DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division

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IRON AND STEEL MILLS

1960

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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.

EXPLANATORY NOTES

This report is one in a series of about 140 publications which present the results of the 1960 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. Adoption of the revised Standard Industrial Classification for 1960 compilations has necessitated changes in titles of many reports in this annual series. The content of many industries has also been affected (see following note on Industrial Classification).

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 1960 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, ware-

housing 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 or 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.¹

Standard Industrial Classification

The revised Standard Industrial Classification which has been introduced with the 1960 Census of Manufactures provides for a breakdown of the universe into 140 industries arranged in 20 major groups compared with 135 industries in 17 major groups in the old classification which was used in the compilations for the years 1949 to 1959 inclusive. It incorporates changes considered desirable on the basis of experience in using the earlier classification as well as those which take account of changes in the structure of Canadian industries associated with the rapid developments of the past decade. Full details are contained in the Standard Industrial Classification Manual, Catalogue No. 12-501, which is available from either the Queen's Printer or the Dominion Bureau of Statistics. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Many industries remain unchanged in the new classification but in many instances there have been substantial changes in content because of the shifting of establishments from one industry to another or in re-grouping of establishments. Where

¹ 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*.

changes have occurred the principal statistics for 1957, 1958 and 1959 have been re-compiled to provide data on a basis comparable with those for 1960.

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.

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. This practice was followed again in 1960.

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.

IRON AND STEEL MILLS

1960

Data presented in this report under the heading of Iron and Steel Mills reflect implementation of the revised Standard Industrial Classification (S.I.C.) which is being used by the Dominion Bureau of Statistics in its compilation of 1960 industry statistics—see item "Standard Industrial Classification" in the Explanatory Notes section of this report. For statistical purposes the industry titled Iron and Steel Mills in the revised Standard Industrial Classification covers four main types of establishments: (1) Establishments primarily engaged in manufacturing pig iron and ferro-alloys. (2) Steel works primarily engaged in manufacturing ingots, steel castings and in continuous castings of steel. (3) Rolling mills primarily engaged in hot and cold rolling of steel into primary shapes. (4) Coke ovens operated in connection with blast furnaces. In some cases the blast furnace, steel mill, rolling mill and coke oven or some combination of two or more of them are carried on as one integrated operation and the manufacturing processes may be carried on beyond the rolling mill stage.

In many instances, adoption of the new standard Industrial Classification effected a radical shifting of manufacturing establishments as between industry groupings. Significant elements in the shift in the case of the industry reviewed in this report were the inclusion in this industry of the coke and gas divisions of the integrated steel mills previously included as separate establishments in the old S.I.C. industry The Coke and Gas Industry; the treatment of interplant materials and shipments by companies operating more than one establishment; and the transfer of establishments manufacturing cast steel railway car wheels to the Railroad Rolling Stock Industry. In order to provide a statistical comparison an attempt has been made to re-compile 1957, 1958 and 1959 data on the revised Standard Industrial Classification basis. Figures on this basis are shown in Table 1 B.

There were 48 establishments classified as Iron and Steel Mills in 1960: there being 3 in Nova Scotia, 14 in Quebec, 18 in Ontario, 2 in Manitoba, 1 in Saskatchewan, 3 in Alberta and 6 in British Columbia. Employees in the industry numbered 36,472; salaries and wages totalled \$193,892,738; fuel and electricity cost \$29,174,439; materials used in manufacturing processes cost \$359,638,415; and factory shipments were valued at \$756,456,392.

Note:

1. Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used,

including fuel and electricity, from the total value of factory shipments. Since 1954 information not previously available on the value of year end inventory holdings at plant and plant warehouse has been taken into account in calculating the value added figure. For 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.

2. The S.I.C. in effect prior to 1960 provided for a separate Coke and Gas Industry as part of the Products of Petroleum and Coal Group. This industry included, in addition to gas plants operated as utilities, those coke plants operated as divisions of (a) chemical plants and (b) wholly integrated steel mills. The new S.I.C. implemented in 1960 consolidated these divisional coke operations with the major activity in the appropriate industry and at the same time transferred the gas plants operated as utilities out of manufacturing to the Electric Power, Gas and Water Utilities Group. The net effect of these changes was the complete abolition of the Coke and Gas Industry as a separate industry in the new S.I.C.; however, details on supply and disposition of coke reported by coke producers are available in a monthly report Coal and Coke Statistics, Catalogue No. 45-002 and an annual report The Coal Mining Industry, Catalogue No. 26-206.

3. The consolidation of the divisional coke operations, mentioned in note 2, had a major impact on the overall cost of materials and products reported by the new S.I.C. industry Iron and Steel Mills. For example, under the old S.I.C. concept coke produced by the coke divisions of integrated mills was considered as a shipment of the old S.I.C. Coke and Gas Industry and a material of the old S.I.C. Primary Iron and Steel Industry. Under the new S.I.C. concept coke produced by coke divisions of integrated mills is treated as an intermediate product and consequently not valued. The cost of coke is now reflected in the cost of coal used, which is the primary material under the new S.I.C. concept. Similarly for coke oven gas formerly used by the Primary Iron and Steel Industry as a fuel, under the new S.I.C. concept this is also treated as an intermediate product. Other non-intermediate products, such as ammonium sulphate, benzene, toluene, etc., previously reported by coke divisions are included as part of shipments in the new industry concept.

TABLE 1A. Principal Statistics of the Primary Iron and Steel Industry, Significant Years, 1929-59
 Basis: Standard Industrial Classification in use prior to 1960

Year and province	Establishments	Employees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
		number			dollars		
1929	45	11,218	18,534,681	6,691,961	32,514,596	33,025,438	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	32,507	136,879,403	31,182,580	212,288,266	281,030,420	526,318,453
1956	50	36,043	162,880,867	38,311,951	301,298,582	352,522,996	680,860,470
1957	51	35,944	170,779,346	36,755,262	329,582,384	344,565,954	704,565,791
1958	50	30,261	148,023,062	28,905,568	250,699,538	304,923,587	590,317,696
1959	49	34,942	183,000,151	36,076,238	354,160,093	393,807,515	782,494,003

¹ See note to text.

Note: Profits or losses cannot be calculated from above figures as data are not available for general expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 1B. Principal Statistics, Iron and Steel Mills, by Provinces, 1957-60

Basis: Standard Industrial Classification revised 1960

Year and province	Establishments	Employees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
		number			dollars		
1957							
Nova Scotia	3	4,878	20,182,310	2,275,338	34,180,832		57,703,843
Quebec	15	4,444	18,780,436	3,975,738	42,202,137		78,343,917
Ontario	18	26,205	131,438,991	20,990,924	257,632,429		573,011,470
Other provinces	14	1,612	6,589,615	1,230,496	13,322,879		24,544,459
Canada	50	37,139	176,991,352	28,472,496	347,338,277		733,603,689
1958							
Nova Scotia	4	4,280	18,607,755	1,814,753	26,414,687		57,150,724
Quebec	15	3,397	14,604,487	2,531,664	28,496,612		54,363,462
Ontario	19	22,216	114,321,022	16,290,057	203,089,590		477,501,278
Other provinces	12	1,453	6,206,149	1,028,158	9,683,060		21,828,087
Canada	50	31,346	153,739,413	21,664,632	276,683,949		610,843,551
1959							
Nova Scotia	3	3,878	18,361,412	1,772,606	30,626,508		57,994,098
Quebec	14	3,626	16,336,234	3,017,035	33,232,092		61,615,525
Ontario	19	26,980	146,567,720	20,630,591	297,594,716		660,132,130
Other provinces	12	1,698	8,193,648	1,344,680	12,992,759		29,055,908
Canada	48	36,182	189,459,014	26,764,912	374,446,075		808,797,661
1960							
Nova Scotia	3	4,364	21,240,322	2,844,899	30,732,630	32,925,542	66,461,271
Quebec	14	3,826	17,826,323	4,008,054	35,396,008	28,416,658	67,684,132
Ontario	18	26,571	146,272,191	20,704,858	277,993,898	301,485,206	595,124,933
Manitoba, Saskatchewan, Alberta	6	1,152	5,680,891	1,065,073	8,697,610	8,503,208	16,018,573
British Columbia	7	559	2,873,011	551,555	6,818,269	4,053,662	11,167,483
Canada	48	36,472	193,892,738	29,174,439	359,638,415	375,384,276	756,456,392

¹ See note to text.

² The changeover to the new classification has delayed the recompilation of "value added" figures for these years and same will not be available until next issue of the report.

Note: Profits or losses cannot be calculated from the above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Inventories,¹ Iron and Steel Mills, 1960

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
dollars				
Opening:				
Nova Scotia	9,032,227	1,602,249	921,911	11,556,387
Quebec	6,795,203	2,339,724	2,595,912	11,730,839
Ontario	68,280,426	30,943,798	25,697,104	124,921,328
Manitoba, Saskatchewan, Alberta	4,290,759	762,285	441,491	5,494,535
British Columbia	1,207,989	49,912	195,127	1,453,028
Canada	89,606,604	35,697,968	29,851,545	155,156,117
Closing:				
Nova Scotia	11,428,718	1,433,078	1,132,882	13,994,678
Quebec	6,604,539	2,425,097	2,647,127	11,676,763
Ontario	64,714,028	28,464,907	33,235,024	126,413,959
Manitoba, Saskatchewan, Alberta	8,944,325	2,408,764	1,042,330	12,395,419
British Columbia	1,325,550	55,314	445,727	1,826,591
Canada	93,017,160	34,787,160	38,503,090	166,307,410

¹ Book value of all manufacturing inventories owned and held at plant and plant warehouses.

TABLE 3. Materials Used: Iron and Steel Mills, 1960

Material	Quantity	Cost at plant
\$		
Coke, gas and by-products section		
Bituminous coal carbonized in ovens or retorts:		
From Canadian mines	ton	585,077
Imported	"	3,997,179
Absorbing and wash oil	Imp. gal.	301,115
Caustic soda	lb.	2,631,089
Sodium nitrate	"	225,390
Sulphur	ton	1,063
Sulphuric acid, 100%—Purchased	"	15,162
Own make	"	2,882
Sinter plant and blast furnace section		
Sinter plant:		
Crude iron ore:		
From Canadian mines	ton	704,667
Imported	"	725,525
Pyrite cinder	"	54,388
Millcinder, scale, fluedust, etc. (not sintered, pelletized, etc.):		
Purchased	"	3,749
Own make	"	278,665
Scrap iron and steel (own make)	"	12,563
Limestone (including fines)	"	81,585
Dolomite (including fines)	"	162,718
Coke (including breeze)—Purchased	"	27,032
Own make	"	92,373

TABLE 3. Materials Used: Iron and Steel Mills, 1960 — Continued

Material		Quantity	Cost at plant
		\$	
Sinter plant and blast furnace section—Concluded			
Blast furnace:			
Crude iron ore:			
From Canadian mines	ton	1,487,833	13,962,469
Imported	"	2,102,651	21,339,183
Iron ore (sintered, pelletized, etc.):			
From Canadian mines	"	1,014,910	11,375,732
Imported	"	774,785	12,163,591
From own processing (does not include mine sinter plant)....	"	1,644,603	...
Mill cinder, roll scale, slag and flue dust (not sintered, pelletized, etc.):			
Purchased.....	"	40,495	326,209
Own make	"	232,189	...
Scrap iron and steel—Purchased	"	91,544	1,319,196
Own make.....	"	19,866	...
Limestone—From Canadian quarries	"	502,831	1,417,626
Imported	"	292,685	472,950
Dolomite	"	253,136	438,165
Coke—Purchased	"	77,450	1,670,936
Own make.....	"	3,008,518	...
Firebrick, fireclay and other refractories .....		...	515,771
Steel ingots and steel castings			
Pig iron—Purchased.....	ton	8,325	275,386
Own make	"	3,502,567	...
Scrap iron and steel—Purchased	"	1,313,360	44,097,425
Own make.....	"	1,574,206	...
Sinter—Purchased.....	"	5,443	79,103
Own make	"	37	...
Coke (charged to furnace; not for fuel)—Purchased	"	1,467	38,067
Own make.....	"	1,051	...
Spiegeleisen.....	"	65	6,760
Ferromanganese—High carbon (over 3 per cent carbon)	"	34,378	6,951,037
Medium carbon	"	3,821	1,301,531
Low carbon (maximum 0.75 per cent carbon)....	"	552	360,072
Silico manganese.....	"	7,768	1,777,596
Ferrosilicon—Low silicon grade (under 45 per cent silicon).....	"	400	38,689
Medium silicon grade.....	"	10,130	1,488,944
High silicon grade (over 55 per cent silicon)	"	1,028	309,578
Sil-X	"	67	18,759
Ferrochrome (including chrom-X)—High carbon	"	2,200	729,757
Low carbon (maximum 2 per cent carbon).....	"	6,414	2,864,228
Ferromolybdenum.....	"	224	532,303
Ferrophosphorus	"	232	25,550
Ferroselenium	"	2	27,269
Ferrotitanium	"	418	207,489
Ferrotungsten.....	"	57	128,621
Ferrovanadium	"	168	606,734
Ferozirconium	"	56	24,047
Calcium silicon	"	266	114,241
Calcium manganese silicon	"	109	60,654

TABLE 3. Materials Used: Iron and Steel Mills, 1960 — Continued

Material		Quantity	Cost at plant
			\$
Steel ingots and steel castings section—Concluded			
Other ferro-alloys	ton	1,687	611,294
Iron ore, crude	"	155,507	2,385,064
Iron ore, calcined, roasted or treated	"	237,529	3,505,427
Manganese ore	"	105	25,150
Chrome ore	"	702	55,066
Tungsten ore	"	257	278,878
Aluminum ingots, shot, etc.	"	1,700	853,472
Copper ingots, cakes, shot, etc.	"	407	222,966
Nickel ingots, cathodes, shot, etc.	"	2,731	3,592,904
Other metals	"	360	277,615
Coal (charged to steel furnaces, not for fuel)	"	804	50,784
Charcoal	"	25	2,308
Bentonite	"	4,249	152,156
Dolomite — Raw, crushed	"	80,953	458,082
Calcined	"	83,121	2,162,556
Fluorspar	"	21,029	651,020
Ganister	"	3,415	28,933
Graphite	"	1,179	105,781
Lime	"	184,122	2,887,444
Limestone	"	163,362	517,882
Linseed oil	Imp. gal.	32,261	38,384
Magnesite	ton	10,029	683,482
Electrodes .....		...	2,756,794
Silica sand—For moulds	ton	79,883	673,329
For sand blasting	"	100	1,484
Other foundry sands	"	3,516	76,118
Sulphur	"	158	26,222
Firebrick, fireclay and other refractories .....		...	12,284,276
Molybdenum trioxide (molybdic oxide) briquettes	"	513	809,600
Ingot moulds (including hot tops) and stools .....		...	8,650,943
Rolled steel products section			
Steel ingots — Purchased	ton	159,952	11,813,241
Own make	"	5,480,460	...
Steel billets and blooms	"	184,816	17,850,836
Steel bars	"	35,627	5,363,769
Wire rods	"	10,437	1,302,824
Rails, old (include reject rails)	"	65,588	3,245,196
Axles, old	"	4,959	250,349
Scrap iron and steel, other	"	520	18,864
Tin	"	2,255	4,411,485
Zinc spelter	"	20,076	5,402,490
Acids—Chromic	lb.	240,000	66,081
Hydrochloric (muriatic), 100%	"	1,508,000	69,476
Sulphuric, 100%	ton	30,105	721,826
Ammonium chloride (salammoniac)	lb.	110,000	9,883
Cleaners (Pennsalt, etc.) .....		...	168,892
Inhibitors (Rodine, etc.) .....		...	10,843
Phenone	lb.	40,000	44,258

TABLE 3. Materials Used: Iron and Steel Mills, 1960 — Concluded

Material		Quantity	Cost at plant
			\$
Rolled steel products section—Concluded			
Rolling oils .....		...	558,190
Zinc ammonium chloride.....	ton	301	72,216
Refractories .....		...	738,165
Rolls and dies .....		...	5,162,714
Silica sand	ton	269	4,463
Ferro-alloys section			
Coal—Anthracite	net ton	15,724	222,053
Bituminous	"	35,059	530,076
Coke—Petroleum	"	69,181	1,148,463
Other	"	41,755	619,318
Dolomite	"	3,880	16,842
Electrodes .....		...	1,133,840
Firebrick, fireclay and other refractories .....		...	68,370
Lime	net ton	3,413	61,447
Limestone	"	2,000	8,942
Linseed oil	Imp. gal.	7,552	13,484
Magnesite	net ton	522	41,976
Millscale	"	952	9,609
Pitch	"	7,292	337,248
Quartzite	"	109,416	331,722
Silica sand	"	2,317	20,462
Steel scrap (borings, turnings, etc.)	"	36,124	734,023
Woodchips	"	31,162	253,804
Miscellaneous			
All other materials (including chrome ore and manganese ore)			50,030,102
Containers and other packaging materials and supplies			5,653,948
Total			359,638,415

Note: Figures in above table do not include materials charged to furnaces by firms reclassified under the new Standard Industrial Classification.

TABLE 4. Production¹ of Pig Iron and Sales¹ by Producers, 1959 and 1960 (from All Industries)

Grade	Total tonnage made	Sales	
		Quantity	Income from sales
1959			
Basic	3,552,926	112,237	6,052,632
Foundry ²	228,843	161,949	8,102,294
Malleable	401,006	388,155	22,125,684
Totals	4,182,775	662,341	36,280,610
1960			
Basic	3,598,595	79,892	4,113,058
Foundry ²	290,050	264,541	13,018,467
Malleable	410,204	332,531	19,029,128
Totals	4,298,849	676,964	36,160,653

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

² Includes silvery pig.

TABLE 5. Production¹ of Pig Iron, by Grades, 1952-60

Year	Basic	Foundry	Malleable	Total
net tons				
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 ²	3,552,926	228,843	401,006	4,182,775
1960	3,598,595	290,050	410,204	4,298,849

¹ Includes silvery pig.² Commencing with 1959 includes the "remelt iron" product produced in the smelting of titanium ores.TABLE 6. Production¹ of Pig Iron, by Months, 1959 and 1960

Month	1959			1960		
	For own use	For sale	Total	For own use	For sale	Total
net tons						
January	274,401	24,883	299,284	338,143	36,380	374,523
February	257,676	24,966	282,642	319,265	38,078	357,343
March	319,180	31,420	350,600	383,894	35,267	419,161
April	289,880	76,958	366,838	351,098	44,020	395,118
May	318,674	52,770	371,444	341,967	51,119	393,086
June	282,318	69,266	351,584	253,948	81,584	335,532
July	272,337	80,498	352,835	281,234	55,784	337,018
August	311,910	47,269	359,179	284,032	44,732	328,764
September	283,218	79,203	362,421	258,036	83,750	341,786
October	289,022	71,790	360,812	266,919	101,124	368,043
November	299,390	53,712	353,102	275,380	58,031	333,411
December	318,363	52,690	371,053	247,321	47,319	294,640
Totals	3,516,369	665,425	4,181,794	3,801,237	677,188	4,278,425

¹ See footnotes to Table 4.

Note: Above breakdown developed from a special monthly report on primary iron and steel and does not reconcile precisely with total shown on Tables 4 or 5 because of the preliminary status of monthly figures.

TABLE 7. Sales¹ of Pig Iron by Producers, 1952-60

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
	net tons	\$		net tons	\$
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	662,341	36,280,610
1955	609,978	30,539,000	1960	676,964	36,160,653
1956	649,213	34,501,520			

¹ See footnotes to Table 4.

TABLE 8. Imports into Canada and Exports¹ of Pig Iron, 1952-60

Year	Imports		Exports	
	Net tons	Value	Net tons	Value
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
1960	8,581	516,606	480,590	23,780,316

¹ 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 9. Stocks of Pig Iron Held at Year-End by Producers¹ in Canada, 1952-60

Year	Net tons	Year	Net tons
1952	58,959	1957	233,569
1953	135,781	1958	239,598
1954	127,894	1959	165,846
1955	136,415	1960	220,588
1956	113,629		

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

TABLE 10. Consumption of Pig Iron in Canada by Industries and by Provinces, 1957-59
(As Reported by Consumers)

	1957	1958	1959
	net tons		
By industries			
Steel ingots and castings	2,875,324	2,610,517	3,511,207
Iron castings	183,733	136,865	171,795
Boilers and platework	16,322	15,490	12,636
Agricultural implements	8,489	8,240	10,031
Machinery	18,919	12,632	10,697
Motor vehicles	9,850	4,933	7,844
Motor vehicle parts	31,149	28,379	31,552
Railway rolling stock	2,077	2,878	2,550
Brass and copper products	3,319	3,450	2,615
Shipbuilding	306	321	320
Hardware and tools	1,345	1,291	1,517
Miscellaneous iron and steel	10,138	9,000	7,335
Heating and cooking apparatus	6,154	6,337	6,041
Electrical apparatus and supplies	3,382	1,838	1,859
Bridge and structural steel	1,164	1,052	848
Miscellaneous	11,600	19,282	32,559
Totals	3,183,271	2,862,505	3,811,406
By provinces			
Prince Edward Island and Newfoundland	—	135	190
Nova Scotia	501,491	400,095	450,592
New Brunswick	2,503	2,465	2,571
Quebec	66,961	55,518	41,276
Ontario	2,604,946	2,397,482	3,312,259
Manitoba	5,251	3,840	3,130
Saskatchewan	—	—	—
Alberta	959	2,179	284
British Columbia	1,160	791	1,104
Canada	3,183,271	2,862,505	3,811,406

TABLE 11. Consumption of Pig Iron in Canada by Industries and by Provinces, 1960
 (As Reported by Consumers)

	1960 net tons
By industries	
Agricultural implements	10,322
Boiler and plate works	1,404
Electrical products	6,092
Fabricated structural metal	550
Hardware, tool and cutlery	126
Heating equipment	11,385
Iron and steel mills	3,510,892
Iron foundries	139,586
Machinery	7,959
Miscellaneous metal fabricating	10,813
Motor vehicles	4,397
Motor vehicle parts and accessories	30,144
Railroad rolling stock	1,801
Shipbuilding and repair	390
Miscellaneous	36,299
Total	3,772,160
By provinces	
Prince Edward Island and Newfoundland	90
Nova Scotia	531,341
New Brunswick	2,121
Quebec	31,597
Ontario	3,202,283
Manitoba	3,037
Saskatchewan	—
Alberta	519
British Columbia	1,172
Canada	3,772,160

Note: Data in Table 11 by industry reflect classification in accordance with new Standard Industrial Classification adopted in 1960.

TABLE 12. Blast Furnaces in Canada, 1958-60

Name of company	Location of plant	Number of stacks	Total annual capacity	Number of days in blast		
				1958	1959	1960
Dominion Foundries & Steel Ltd.	Hamilton, Ont.	1	320,000	—	—	241
		1	320,000	365	365	365
		1	320,000	365	365	130
		Totals	960,000	—	—	—
Dominion Steel & Coal Corporation, Limited ..	Sydney, Nova Scotia	1	237,000	363	365	365
		1	265,000	364	365	365
		1	182,000	—	63	251
		Totals	684,000	—	—	—
Canadian Furnace Company, Limited.....	Port Colborne, Ont.	1	190,000	160	243	193
		Totals	190,000	—	—	—
The Steel Company of Canada, Limited....	Hamilton, Ont.	1	123,000	223	304	362
		1	313,000	270	364	221
		1	472,000	259	285	286
		1	542,000	259	288	347
		Totals	1,450,000	—	—	—
Algoma Steel Corporation, Limited.....	Sault Ste. Marie, Ont. ..	1	109,000	—	—	—
		1	218,000	190	315	279
		1	177,000	150	259	167
		1	540,000	365	352	302
		1	540,000	263	365	366
		Totals	1,584,000	—	—	—
Totals for Canada		16	4,868,000	—	—	—

Note: Data in above table do not include details on other producers of pig iron in Canada as follows:

1. Electric furnace operations used in smelting titanium ores rated at approximately 300,000 tons pig iron per annum.
2. One electric furnace used in direct reduction of iron ore rated at 35,000 tons pig iron per annum.

**TABLE 13. Production of Steel Ingots and Steel Castings, and Sales by the Producers,
1959 and 1960 (from All Industries)**

	1959			1960		
	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 ¹	5,267,282	194,755	13,825,810	5,089,660	131,506	8,868,866
Electric	532,074	6,489	1,257,480	618,943	83,765	7,386,920
Totals, steel ingots	5,799,356	201,244	15,083,290	5,708,603	215,271	16,255,786
Steel castings:						
Basic open-hearth	14,834	13,128	6,038,874	2,611	1,182	527,926
Converter	7	7	4,500	—	—	—
Electric	87,290	83,870	37,878,460	97,894	96,536	42,409,233
Totals, steel castings	102,131	97,005	43,921,834	100,505	97,718	42,937,159
Totals, steel ingots and castings	5,901,487	298,249	59,005,124	5,809,108	312,989	59,192,945
Alloy steel included in above:						
Ingots	270,991	3,322	956,038	237,393	5,340	2,588,487
Castings	22,936	22,381	17,055,009	24,241	23,579	19,111,930
Totals	293,927	25,703	18,011,047	261,634	28,919	21,700,417

¹ Includes production from oxygen vessels.

**TABLE 14. Production of Steel Ingots and Steel Castings by Grades, 1952 - 60
(from All Industries)**

Year	Steel ingots		Steel castings			Total steel ingots and castings
	Open-Hearth ¹	Electric	Open-hearth	Converter	Electric	
net tons						
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	386,061	22,364	95	58,780	3,195,030
1955	3,917,151	529,190	25,953	165	62,213	4,534,672
1956	4,628,777	551,644	32,107	307	88,367	5,301,202
1957	4,500,737	430,673	27,076	20	109,643	5,068,149
1958	3,875,470	386,652	15,880	20	81,444	4,359,466
1959	5,267,282	532,074	14,834	7	87,290	5,901,487
1960	5,089,660	618,943	2,611	—	97,894	5,809,108

¹ Commencing with 1954, includes production from oxygen vessels.

**TABLE 15. Production of Steel Ingots and Steel Castings, by Months, 1956 - 60
(from All Industries)**

Month	1956	1957	1958	1959	1960
net tons					
January	433,700	467,505	402,915	461,113	570,057
February	400,638	424,168	375,267	436,932	551,557
March	440,725	475,146	412,432	476,154	595,715
April	434,066	450,065	377,965	487,885	516,318
May	462,131	436,593	413,431	489,387	498,408
June	445,588	428,013	403,310	467,607	443,423
July	441,563	427,848	366,139	482,256	440,803
August	452,274	434,889	270,511	487,271	431,469
September	434,373	403,060	247,900	503,146	450,575
October	466,175	380,835	261,133	536,909	485,865
November	444,434	358,639	387,696	542,858	451,659
December	450,138	351,103	426,592	550,210	353,721
Totals	5,305,805	5,037,864	4,345,291	5,921,728	5,789,570

Note: Above breakdown developed from a special monthly report on primary iron and steel and does not reconcile precisely with total shown in Tables 13, 14 or 16 because of the preliminary status of monthly figures.

**TABLE 16. Annual Production of Steel Ingots and Steel Castings, by Provinces, 1952 - 60
(from All Industries)**

Year	Nova Scotia	Quebec	Ontario	Manitoba and Saskatchewan	Alberta	British Columbia	Canada
net tons							
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
1960	796,878	169,672	4,609,221	93,921	68,378	71,038	5,809,108

**TABLE 17. Sales of Steel Ingots and Steel Castings by Producers, 1952-60
(from All Industries)**

Year	Tonnage Sold	Income from sales	Year	Tonnage sold	Income from sales
	net tons	\$		net tons	\$
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
1955	201,114	43,682,247	1960	312,989	59,192,945
1956	164,288	55,326,132			

TABLE 18. Production of Alloy Steel Ingots and Castings, 1952-60

Year	Ingots	Castings	Total
			net tons
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
1960	237,393	24,241	261,634

TABLE 19. Metal, Ore and Flux Charged to Steel Furnaces, 1952-60

Year	Pig iron	Ferro-manganese alloys ¹	Other ferro-alloys	Scrap iron and steel	Iron ore	Lime-stone	Dolomite	Fluorspar
	net tons							
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
1960 ²	3,510,892	46,584	23,083	2,887,566	393,036	163,362	164,074	21,029

¹ Including spiegeleisen, silicospiegeleisen, ferromanganese (all grades) and silicomanganese.

² 1960 does not include materials charged to furnaces by firms reclassified under the new Standard Industrial Classification.

TABLE 20. Steel Furnaces in Canada, December 31, 1960

	Type	Number of units	Size	Total annual capacity
tons				
Nova Scotia:				
Dominion Steel and Coal Corporation, Ltd., Sydney	O.H.	1	225	177,000
	O.H.	5	195	750,000
	Elec.	1	11	33,000
Totals.....		7	—	960,000
Maritime Steel Foundries Ltd., New Glasgow.....	Elec.	1	4	3,000
Quebec:				
Canadian Unitcast-Steel Ltd., Sherbrooke	Elec.	1	4	8,000
Canadian Steel Foundries Ltd., Montreal	O.H.	3	25	45,900
	Elec.	1	4	7,000
	Elec.	1	2½	4,600
	Elec.	1	30	52,800
Totals.....		6	—	110,300
Canadian Steel Wheel Ltd., Montreal.....	Elec.	2	50	145,800
Dominion Brake Shoe Co. Ltd., Joliette	Elec.	1	2½	9,000
	Elec.	1	3½	23,700
Totals.....		2	—	32,700
Dominion Engineering Works Ltd., Lachine	Elec.	1	5	5,000
	Elec.	1	15	10,000
Totals.....		2	—	15,000
Dominion Steel and Coal Corporation Ltd., Montreal	Elec.	3	30	90,000
Griffin Steel Foundries Ltd., St. Hyacinthe.....	Elec.	2	6	29,000
La Compagnie F.X. Drolet Ltd., Quebec	Conv.	1	1	300
Lynn MacLeod Metallurgy Ltd., Thetford Mines	Elec.	1	3	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
Totals.....		3	—	6,300
Crucible Steel of Canada Ltd., Sorel.....	Elec.	1	30	20,350
	Elec.	1	13	8,800
	Elec.	1	4	2,650
Totals.....		3	—	31,800
Sorel Steel Foundries Ltd., Sorel.....	Elec.	2	6	14,500
Ontario:				
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
Totals.....		8	—	1,600,000
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
Totals.....		7	—	170,400
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	2	60	{ } 980,000
		1	90	
Totals.....		8	—	1,165,000

TABLE 20. Steel Furnaces in Canada, December 31, 1960 — Concluded

	Type	Number of units	Size	Total annual capacity
Ontario — Concluded:				
Fahralloy Canada Ltd., Orillia	Elec.	4	1/4- 2	7,100
Totals		4	—	7,100
Ford Motor Co. of Canada Ltd., Windsor	Elec.	15	5	127,000
	Elec.	1	1	4,400
Totals		16	—	131,400
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 1/4	2,400
	Elec.	1	4	8,000
Totals		2	—	10,400
Neelon Steel Limited, Lebel	Elec.	1	5	9,600
Steel Co. of Canada, Ltd., Hamilton	O.H.	4	115	428,000
	O.H.	5	190	832,000
	O.H.	4	315	1,240,000
Totals		13	—	2,500,000
Welland Electric Steel Foundry Ltd., Welland	Elec.	1	2	
	Elec.	1	1	
	Elec.	1	1/4	
Totals		3	—	8,300
Manitoba:				
Manitoba Rolling Milling Co. Ltd., Selkirk	O.H.	2	20	50,000
	Elec.	1	9	23,000
	Elec.	1	15	35,000
Totals		4	—	108,000
Dominion Brake Shoe Co. Ltd., Manitoba Steel Foundry Division, Selkirk	Elec.	1	3	3,000
	Elec.	1	5	4,000
Totals		2	—	7,000
Griffin Steel Foundries Ltd., Transcona	Elec.	2	7	36,000
Saskatchewan:				
Interprovincial Steel and Pipe Corporation, Limited	Elec.	2	30	125,000
Alberta:				
Foothills Steel Foundry & Iron Works Ltd., Calgary	Elec.	1	1	1,900
Premier Steel Mills Ltd., Edmonton	Elec.	2	15	87,600
British Columbia:				
A-1 Steel & Iron Foundry Ltd., Vancouver	Elec.	1	1 1/2	1,800
	Elec.	1	1/2	1,800
Totals		2	—	3,600
Consolidated Mining & Smelting Co. of Canada, Ltd., Trail	Elec.	1	1	2,500
	Elec.	1	3	6,000
Totals		2	—	8,500
Reliance Foundry Co. Ltd., Vancouver	Elec.	1	1	2,000
	Elec.	1	1 1/2	3,000
	Elec.	1	1 1/2	3,000
Totals		2	—	8,000
Vancouver Steel Co. Ltd., Vancouver	Elec.	1	30	86,000
Victoria Machinery Depot Co. Ltd., Victoria	Elec.	2	2	5,000
Canadian Sumner Iron Works Ltd., Vancouver	Elec.	2	1	3,700

TABLE 21. Summary of Steel Furnace Capacity, December 31, 1960

	Number of furnaces	Total annual capacity
net tons		
Basic open-hearth	30	4,522,900
Oxygen Vessels	5	1,580,000
Electric	92	1,468,200
Converter	1	300
Totals	128	7,571,400
 Steel ingots:		
Basic open-hearth	—	4,477,000
Oxygen Vessels	—	1,580,000
Electric	—	1,021,000
Totals	—	7,078,000
Steel castings	—	493,400
Total ingots and castings	—	7,571,400

TABLE 22. Summary of Steel Furnace Capacity, by Provinces, December 31, 1956-60

	Total annual capacity				
	1956	1957	1958	1959	1960
net tons					
Nova Scotia	789,500	934,500	933,000	963,000	963,000
Quebec	272,750	340,900	298,000	269,700	491,500
Ontario	4,502,600	4,771,700	5,182,700	5,461,300	5,636,600
Manitoba	121,000	121,000	121,000	154,200	151,000
Saskatchewan	—	—	—	—	125,000
Alberta	48,100	77,300	77,300	79,300	89,500
British Columbia	79,300	72,700	74,500	73,200	114,800
Canada	5,813,250	6,318,100	6,686,500	7,000,700	7,571,400

TABLE 23. Products Made in Steel Rolling and Drawing Mills, 1959 and 1960

Product	Total tonnage made	Factory sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
		net tons	\$
1959			
A. Hot-rolled products			
Semi-finished rolled forms: All semi-finished forms intended for further rolling, including blooms, billets, slabs and sheet bars:			
(a) For sale in Canada	1	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			
Total semi-finished rolled forms	232,052	325,993	32,821,954
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 ²	46,182,505
Structural steel shapes: Heavy, including sheet piling, beams, angles, channels, tees, zees, 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
Total structural steel shapes^{3,4}	268,573	265,194	34,528,656
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	—	—
Total hot-rolled bars⁵	949,865	795,274	116,993,886
Plates (excluding plate for pipes and tubes)	416,099	408,835	53,394,313
Skelp ⁶ (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. Cold-rolled and coated products⁷			
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, ⁸ tin plate, silicon sheet and strip, but excluding cold-rolled skelp	1,807,884	1,150,011	203,489,043
C. Other products			
Rail fastenings—Rail joints, including splice bars and fish plates Tie plates	14,853 70,376	14,818 70,351	2,212,917 8,970,082
Other products made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc.	..	..	10,450,857
Total value of production .....	..	..	655,398,012

See footnotes at end of table.

TABLE 23. Products Made in Steel Rolling and Drawing Mills, 1959 and 1960 — Concluded

Product	Total tonnage made	Factory sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
1960	net tons		\$
A. Hot-rolled products			
Semi-finished rolled forms:			
All semi-finished forms intended for further rolling, including blooms, billets, slabs and sheet bars:			
(a) For sale in Canada	1	190,728	17,554,378
(b) For export	262,995	288,501	21,891,439
Blooms, billets and axle blanks for forging purposes only, whether for own use or for sale to others including export	149,353	140,885	16,837,034
Rounds or billets for seamless tubes including export	412,348	620,114	56,282,851
Total semi-finished rolled forms	412,348	620,114	56,282,851
Rails	224,306	223,033	25,385,347
Wire rods, No. 5 gauge to 47/64 inch in diameter (excluding straight lengths over 5/16 inch in diameter)	343,052	347,629	42,949,477
Structural steel shapes:			
Heavy, including sheet piling, beams, angles, channels, tees, zees, etc., having one leg or web of 3" and over, and a thickness of 1/8" and over	173,292	168,629	21,396,409
Light, including light shapes angles, channels, etc., having a section smaller than that provided under previous item	68,100	65,901	8,679,217
Total structural steel shapes^{1,4}	241,392	234,530	30,075,626
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	404,752	373,895	62,420,403
Bars for concrete reinforcing, including twisted and other deformed bars	354,672	349,858	43,483,111
Long angle splice bars, tie plate bars and all other long rail joint bars	48,351	—	—
Total hot-rolled bars⁵	807,775	723,753	105,903,514
Plates (excluding plate for pipes and tubes)	387,947	387,993	52,275,933
Skelp ⁶ (hot and cold rolled plate, sheets, strip and bars for pipes and tubes)	347,152	332,897	38,091,098
Other hot-rolled sheets and strip including material for further cold reduction and all other hot-rolled forms	1,773,562	428,103	54,356,848
B. Cold-rolled and coated products⁵			
Bars, cold-rolled and cold-drawn	40,437	39,366	13,350,163
Cold-rolled strip	47,932	46,676	15,162,828
Other cold-rolled and coated products, including cold-reduced sheets, black plate for tinning and other black plate, galvanized sheets and strip, ⁶ tin plate, silicon sheet and strip, but excluding cold-rolled skelp	1,691,992	1,043,262	174,205,603
C. Other products			
Rail fastenings — Rail joints, including splice bars and fish plates ..	11,256	11,133	1,684,824
Tie plates	36,028	36,108	4,787,831
Other products made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc.	..	..	16,041,065
Total value of production .....	..	..	630,553,008

¹ Not collected separately.² Includes shipments transferred to own fabricating mills of producing firms. These tonnages not included prior to 1954.³ Not comparable with previous years, as prior to 1951 light structures were classified under hot-rolled bars.⁴ 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 24 and 25.⁵ Note that skelp as listed provides for both hot-rolled and cold-rolled material.⁶ Includes the tonnages made in rolling mills only.

TABLE 24. Net Production¹ in Canada of Hot-rolled Steel Products, 1956 - 60

Item	1956	1957	1958	1959	1960
net tons					
Blooms, billets and slabs	118,780	158,924	172,804	232,052	412,348
Rails	336,662	393,926	365,429	286,989	224,306
Bars for rail fastenings	120,381	102,114	72,955	95,346	48,351
Wire rods	403,834	291,300	268,848	382,106	343,052
Structural shapes	316,000	347,693	217,137	268,573	241,392
Bars	827,598	763,419	632,118	854,519	759,424
Plates (excluding plates for pipes and tubes)	326,208	349,626	230,309	416,099	387,947
Sheets, hoops, bands and strips (excluding skelp)	1,403,974	1,194,670	1,147,238	1,772,395	1,773,562
Other hot-rolled forms (including hot-rolled skelp)	346,207	363,032	349,755	359,635	308,605
Totals	4,199,644	3,964,704	3,456,593	4,667,714	4,498,987

¹ Inter-mill shipments have been excluded.

TABLE 25. Alloy Steel Products Made and Sold by Rolling Mills, 1959 and 1960

	1959		1960	
	Tonnage made	Tonnage sold	Tonnage made	Tonnage sold
net tons				
Bars	69,425	91,521	82,671	71,341
Other products, including plates, billets, forgings, sheet piling and wire rods, etc.	119,586	61,902 ¹	123,320	60,507 ¹
Total alloy steel	189,011	153,423	205,991	131,848

¹ Commencing with 1958, includes alloy grinding balls.

TABLE 26. Products Rolled from Axles, etc., 1959 and 1960

	1959		1960	
	Tonnage made	Tonnage sold	Tonnage made	Tonnage sold
net tons				
Bars	61,997	59,151	54,743	53,575
Other products	8,634	8,260	8,183	7,129
Totals	70,631	67,411	62,926	60,704

TABLE 27. Steel Ingots and Castings Shipped for Export by Producers, 1959 and 1960

	1959		1960	
	net tons			
Steel ingots		37,155		46,234
Steel castings		3,448		3,020

TABLE 28. Production and Factory Sales of Steel Rails, 1952 - 60

Year	Tonnage made	Factory sales	
		Tonnage sold	Income from sales
		net tons	\$
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
1960	224,306	223,033	25,385,347

TABLE 29. Production and Factory Sales of Finished Rail Fastenings, 1952 - 60

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		\$
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
1960	36,028	36,108	4,787,831	11,256	11,133	1,684,824

TABLE 30. Production and Factory Sales¹ of Wire Rods of Iron or Steel, 1952 - 60

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
		net tons	\$
1952	315,789	128,900	10,554,693
1953	286,471	113,095	10,687,946
1954	275,121	274,870	26,848,014
1955	357,775	362,258	33,296,084
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	46,182,505
1960	343,052	347,629	42,949,477

¹ Beginning with 1954, includes shipments transferred to own mills of producing firms.

TABLE 31. Production and Factory Sales of Blooms, Billets and Slabs, 1952-60

Year	Except for forging ¹			For forging ²		
	Total tonnage made	Factory sales		Total tonnage made	Factory sales	
		Tonnage sold	Income from sales		Tonnage sold	Income from sales
	net tons		\$	net tons		\$
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	6,821,716	72,503	59,539	5,927,220
1955	2,864,919	227,833	16,552,854	77,806	70,813	6,561,780
1956	3,490,564	133,991	9,290,169	113,328	102,978	11,282,967
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
1960		479,229	39,445,817	149,353	140,885	16,837,034

¹ Shipment to other Canadian rolling mills are included.² Includes blanks or pierced billets for seamless tubes.³ Not collected since 1957.

TABLE 32. Production and Factory Sales of Hot-rolled Bars of All Kinds, 1952-60

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
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
1960	807,775	723,753	105,903,514

TABLE 33. Production and Factory Sales of Structural Steel Shapes¹ of All Kinds, 1952-60

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
	net tons		\$
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
1960	241,392	234,530	30,075,626

¹ 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 34. Production and Factory Sales of Steel Plate,¹ 1952-60

Year	Total tonnage made	Factory sales	
		Tonnage sold	Income from sales
		net tons	
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
1960	387,947	387,993	52,275,933

¹ Excludes plate for pipes and tubes.

TABLE 35. Factory Shipments of Ferro-alloys, 1953-60 (from All Industries)

Year	Net tons	Year	Net tons
1953	153,660	1957	204,483
1954	116,141	1958	112,589
1955	189,805	1959	135,526
1956	240,480	1960	137,535

TABLE 36. Production and Factory Shipments of Coke Oven Products: Iron and Steel Mills, 1960

Product	Quantity made (including amounts for own use)	Factory shipments	
		Quantity shipped	Value of shipments
Coke (including breeze)	ton	3,392,015	5,025,437
Coke oven gas	M cu. ft.	49,271,627	1,145,071
Tar	Imp. gal.	...	4,818,379
Ammonium sulphate	ton	...	576,649
Benzol (all grades)	Imp. gal.	...	3,212,043
Toluol	"	...	577,817
Xylol	"	...	410,424
All other products		1,104,382	486,955
Total			16,252,775

Note: Comprehensive details on operations of coke plants, regardless of industrial classification, are published in a monthly report "Coal and Coke Statistics", Catalogue No. 45-002, and in an annual report "The Coal Mining Industry", Catalogue No. 26-206.

TABLE 37. Coke Ovens: Iron and Steel Mills, December 31, 1960

Name of company and location of plant	Coke-making equipment, including reserve equipment (Rated annual capacity, in tons of coal carbonized, given in brackets)
The Algoma Steel Corporation Limited, Sault Ste. Marie, Ontario	In use—57 Wilputte ovens (447,308 tons), and 143 Koppers ovens (1,302,320 tons). In reserve or idle—53 Wilputte ovens (415,917 tons).
Dominion Foundries and Steel Limited, Hamilton, Ontario	In use—105 Koppers ovens (850,000 tons).
Dominion Steel and Coal Corporation Limited, Sydney, Nova Scotia..	In use—114 Koppers Becker Under Jet Fired ovens (988,690 tons).
The Steel Company of Canada Limited, Hamilton, Ontario	In use—191 Wilputte ovens (1,660,000 tons).

TABLE 38. Producers of Ferro-alloys, 1960

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	Melocheville, Quebec	Ferrosilicon, silico manganese ferromanganese
Electro Metallurgical Company, Division of Union Carbide Canada Ltd.	(a) Beauharnois, Quebec	Ferrosilicon, spiegeleisen, ferromanganese, ferrochrome
	(b) Welland, Ontario	Ferrosilicon, ferrochrome, ferromanganese, silico manganese, spiegeleisen
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)

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Pig iron:				
Silvery	United States	2,802	—	—
Other	United States	359	—	—
	United Kingdom	90	—	—
	Australia	796	—	—
	Spain	4,480	—	—
	U.S.S.R.	56	—	—
Ingots and semi-finished:				
Ingots	United States	492	200	74.1
	United Kingdom	7	—	—
Billets, blooms, slabs and sheet bars	United States	508	486	611.2
	United Kingdom	7	—	47.3
Bars and sections:				
Hot rolled bars, n.o.p.	United States	12,641	2,677	197.5
	United Kingdom	2,084	627	180.2
	Austria	8	12	1.4
	Belgium	13,977	—	—
	France	2,009	—	—
	Germany	1,003	52	2.9
	Japan	1,727	—	—
	Sweden	309	18	2.4

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960—Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Bars and sections—Concluded:				
Hot rolled bars for agricultural implements	United States	4,220	288	—
	United Kingdom	11	—	—
Rounds over 4 7/8", squares over 4"	United States	1,121	67	9.4
	United Kingdom	392	37	12.2
	Belgium	30	—	—
Concrete reinforcing bars	United States	152	—	—
	United Kingdom	50	—	—
	Belgium	15,857	—	—
	France	4,144	—	—
	Germany	3,641	—	—
	Japan	6,682	—	—
	Norway	34	—	—
Sash or casement sections	United States	2,050	—	—
	United Kingdom	342	—	—
	Belgium	211	—	—
Cold rolled bars, n.o.p.	United States	1,414	521	162.3
	United Kingdom	4,349	33	74.0
	Austria	—	2	.8
	Belgium	708	—	—
	France	2	—	—
	Germany	23	45	—
	Japan	43	—	—
	Sweden	18	—	—
Cold rolled bars for agricultural implements	United States	339	5	—
Tool steel:				
All forms and sizes	United States	2,738	1,236	—
	United Kingdom	154	417	—
	Austria	15	112	—
	France	—	142	—
	Germany	—	41	—
	Sweden	31	200	—
Structural shapes:				
Wide flange beams	United States	205,650	—	—
	United Kingdom	70,841	—	—
	Belgium	18,952	—	—
	France	89	—	—
	Germany	5,882	—	—
Sheet piling	United States	7,541	—	—
	United Kingdom	8,906	—	—
	Belgium	11,171	—	—
	France	49	—	—
	Germany	3,674	—	—
	Japan	45	—	—
Structurals, n.o.p. 3" to 6"	United States	8,703	—	15.2
	United Kingdom	1,846	—	3.7
	Belgium	15,896	—	—
	France	4,409	—	—
	Germany	322	—	—
	Japan	201	—	—
	Norway	14	—	—
Structurals, n.o.p. over 6"	United States	27,878	—	—
	United Kingdom	5,400	—	—
	Belgium	9,395	—	—
	France	3,532	—	—
Bar size structurals, n.o.p.	United States	4,441	27	128.3
	United Kingdom	452	—	5.0
	Belgium	17,758	—	—
	France	2,742	—	—
	Germany	1,256	—	—
	Italy	121	—	—
	Japan	535	—	—
	Netherlands	5	—	—
	Norway	18	—	—
	Sweden	—	—	36.8
Bar size structurals for agricultural implements	United States	1,627	18	—
	Germany	40	—	—

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960 — Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Plates:				
60" and under in width	United States	6,568	433	391.4
	United Kingdom	3,658	11	225.8
	Austria	11	—	—
	Belgium	3,021	—	—
	France	139	—	—
	Germany	2,264	—	—
	Japan	7,958	—	—
	Netherlands	48	—	—
	Sweden	21	—	52.6
Over 60" up to and including 100" in width	United States	14,594	335	819.2
	United Kingdom	9,789	6	5.1
	Austria	67	—	—
	Belgium	2,264	—	—
	France	615	—	—
	Germany	7,726	—	—
	Japan	18,352	—	—
	Netherlands	21	—	—
	Sweden	—	—	19.5
Over 100" in width	United States	4,660	115	47.6
	United Kingdom	1,618	—	13.5
	Germany	963	—	—
Flanged or dished	United States	2,836	65	97.0
Floor plate	United States	10,367	—	7.3
	United Kingdom	2,451	—	—
	Belgium	69	—	—
	France	58	—	—
	Germany	156	—	—
	Japan	265	—	—
Sheets and strip (except stainless):				
Hot rolled—				
Under 12" in width	United States	5,762	67	—
	United Kingdom	495	2	—
	Belgium	2,502	—	—
	France	370	—	—
	Germany	75	—	—
	Japan	135	—	—
12" up to but not including 24" in width	United States	1,012	79	—
	United Kingdom	4	—	—
	Germany	11	—	—
24" to 51" in width	United States	6,433	335	—
	United Kingdom	565	—	—
	Belgium	282	—	—
	France	42	—	—
	Germany	56	—	—
	Japan	1,689	—	—
	Sweden	6	—	—
Over 51" in width	United States	14,073	5	—
	United Kingdom	105	—	—
	Belgium	41	—	—
	Germany	83	—	—
	Japan	107	—	—
Cold rolled—				
Under 24" in width	United States	4,680	99	—
	United Kingdom	483	—	—
	Belgium	145	—	—
	Germany	103	—	—
	Sweden	381	2	—
24" to 51" in width	United States	6,047	7	—
	United Kingdom	1,993	—	—
	Australia	128	—	—
	Japan	72	—	—
	Sweden	5	—	—
Over 51" in width	United States	12,156	—	—
	United Kingdom	47	—	—
Enamelling grade	United States	11,723	—	—
	United Kingdom	821	—	—
Aluminized	United States	1,357	—	—
	United Kingdom	5	—	—

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960 — Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Sheet and strip (except stainless)—Concluded:				
Coated (other than metal or asbestos bonded)	United States	10,061	—	—
	United Kingdom	734	—	—
	Germany	163	—	—
	Netherlands	2	—	—
Asbestos bonded (includes galvanized and corrugated)	United States	1,966	—	—
	United Kingdom	401	—	—
Metal coated, n.o.p.	United States	1,132	—	—
	United Kingdom	3	—	—
	Germany	136	—	—
Electro galvanized	United States	1,495	—	—
	United Kingdom	94	—	—
Galvanized, n.o.p.	United States	3,294	14	—
	United Kingdom	352	—	—
	Germany	19	—	—
	Japan	35	—	—
Electrical (silicon content 2.90 or more)	United States	—	14,474	—
	United Kingdom	—	195	—
	Sweden	—	1	—
Electrical, n.o.p.	United States	—	938	—
	United Kingdom	—	173	—
Saw steel	United States	180	1,450	—
	United Kingdom	—	60	—
	France	—	12	—
	Germany	—	3	—
	Sweden	—	343	—
Hot rolled wasters	United States	636	—	—
	United Kingdom	28	—	—
Cold rolled wasters	United States	2,748	—	—
	United Kingdom	2,448	—	—
Black plate	United States	240	—	—
Tin plate primes	United States	961	—	—
	United Kingdom	115	—	—
	Australia	41	—	—
Tin plate electrolytic	United States	360	—	—
	United Kingdom	4,602	—	—
Tin plate wasters and seconds	United States	126	—	—
Terne plate long	United States	7,565	—	—
	United Kingdom	120	—	—
	Australia	22	—	—
Terne plate short	United States	501	—	—
Strip for hoop	United States	654	—	—
	United Kingdom	167	—	—
	Belgium	7	—	—
	Japan	12	—	—
Stainless sheets and strip:				
Hot rolled—				
Under 24" in width 18 gauge and heavier	United States	—	—	22.2
	United Kingdom	—	—	2.8
Under 24" in width lighter than 18 gauge	United States	—	—	5.3
	United Kingdom	—	—	.3
24" up to and including 51" in width 18 gauge and heavier ..	United States	—	—	156.3
	United Kingdom	—	—	602.0
	Austria	—	—	7.3
	Japan	—	—	.1
	Sweden	—	—	186.3
24" up to and including 51" in width lighter than 18 gauge ..	United States	—	—	30.6
	United Kingdom	—	—	117.7
	Japan	—	—	1.5
	Sweden	—	—	1.5
Over 51" in width 18 gauge and heavier	United States	—	—	88.4
	United Kingdom	—	—	3.2
	Sweden	—	—	32.8
Over 51" in width lighter than 18 gauge	United States	—	—	2.0

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960 — Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Stainless sheets and strip — Concluded:				
Cold rolled —				
Under 24" in width 18 gauge and heavier	United States	—	—	328.8
	United Kingdom	—	—	16.6
Under 24" in width lighter than 18 gauge	United States	—	—	1,180.4
	France	—	—	2.0
	Sweden	—	—	2.6
Cold rolled, n.o.p.	United States	—	—	2,066.4
	United Kingdom	—	—	673.1
	France	—	—	237.9
	Japan	—	—	312.2
	Sweden	—	—	13.1
Plate, sheet and strip for pipes and tubes:				
Hot rolled —				
15 $\frac{3}{8}$ " and under in width	United States	13,011	—	—
	United Kingdom	5,959	—	—
	Netherlands	167	—	—
Over 15 $\frac{3}{8}$ " in width	United States	1,231	—	—
Hot rolled plate for pipe	United States	21,635	—	—
	United Kingdom	228	—	—
	France	153	—	—
	Germany	654	—	—
	Italy	166	—	—
	Japan	1,417	—	—
Cold rolled	United States	72	—	—
Pipes and tubes:				
Spiral welded	United States	1,437	—	—
	Germany	79	—	—
Cast	United States	1,553	—	—
	United Kingdom	18,523	—	—
For pressure parts of boilers —				
Seamless hot finished	United States	1,220	413	38.5
	United Kingdom	451	110	—
	Germany	133	—	—
	Sweden	1	—	—
Seamless cold drawn	United States	245	52	12.2
	United Kingdom	368	70	—
	France	30	—	—
	Germany	14	—	—
Welded	United States	192	—	2.7
	United Kingdom	2,652	—	—
	France	21	—	—
	Germany	169	—	—
	Switzerland	1,389	—	—
Seamless cold drawn, n.o.p.	United States	1,948	75	265.0
	United Kingdom	527	26	131.4
	Belgium	138	—	—
	France	—	—	36.0
	Germany	103	—	—
	Italy	5	—	—
	Sweden	161	1	16.8
Mechanical tubing	United States	9,355	3,318	54.7
	United Kingdom	805	80	1.3
	France	137	—	—
	Germany	258	213	—
	Japan	13	—	—
	Netherlands	68	—	—
	Sweden	136	1,173	—
Seamless hot finished, n.o.p. —				
Up to and including 6 $\frac{5}{8}$ " O.D.	United States	902	145	16.8
	United Kingdom	558	618	—
	Germany	131	—	—
	Italy	—	4	—
	Japan	104	—	—
	Sweden	7	—	—

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960 - Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Pipes and tubes - Concluded:				
Seamless hot finished, n.o.p. -				
Over 6½" O.D. up to and including 10½" O.D.	United States	176	26	1.0
	United Kingdom	157	9	-
	Germany	3	-	-
	Italy	1	40	-
	Japan	136	-	-
Over 10½" O.D. up to and including 16" O.D.	United States	2,046	30	-
	United Kingdom	3,273	81	-
	Italy	2	-	-
Over 16" O.D.	United States	1,926	2	-
	United Kingdom	3,422	-	-
	Italy	115	-	-
Drill pipe	United States	2,245	-	-
Welded n.o.p. -				
Up to and including 4½" O.D.	United States	2,722	-	158.9
	United Kingdom	4,713	-	10.0
	Belgium	336	-	-
	France	2,702	-	-
	Germany	4,844	-	-
	Japan	815	-	-
	Netherlands	453	-	-
	Norway	95	-	-
	Sweden	16	-	1.6
	Switzerland	1	-	-
Over 4½" O.D. up to and including 16" O.D.	United States	1,456	2	77.6
	Germany	131	-	-
	Japan	62	-	-
	Sweden	5	-	-
Over 16" O.D.	United States	4,447	1	2.8
	United Kingdom	13,350	-	-
	Germany	-	-	21.3
Oil country tubing up to and including 3½" O.D.	United States	2,664	-	.1
	United Kingdom	2,637	-	-
	France	214	-	-
	Italy	414	-	-
	Japan	3,193	-	-
Casing -				
J - 55 and H - 40	United States	1,307	-	-
	United Kingdom	4,374	-	-
	France	819	-	-
	Germany	521	-	-
	Italy	629	-	-
	Japan	14,146	-	-
All other casing	United States	3,792	-	-
	United Kingdom	2,435	-	-
	France	664	-	-
	Germany	336	-	-
	Japan	1,212	-	-
Conduit	United States	1,047	-	-
Wire products:				
Wire -				
For wire rope	United States	429	-	3.4
	United Kingdom	14,766	-	-
	Germany	3,664	-	-
	Japan	1,167	-	-
For springs, cushions, etc.	United States	125	-	-
	United Kingdom	21	-	-
	Japan	244	-	-
For corset clasps, dress stays, etc.	United States	68	-	-
	United Kingdom	33	-	-
	Germany	12	-	-
Coated (tin, copper, plastic, paper, paint, etc.)	United States	275	1	10.1
	United Kingdom	142	-	.3
	Austria	19	-	-
	Belgium	7	-	-
	Germany	81	-	-
	Japan	8	-	-

TABLE 39. Imports of Primary Forms of Iron and Steel, 1960 — Continued

Commodity	Country of origin	Carbon	Alloy	Stainless
tons (2,000 pounds)				
Wire products — Concluded:				
Wire — Concluded				
Galvanized fence wire	United States United Kingdom Belgium France Germany	20 1,613 118 244 1,613	— — — — —	— — — — —
Galvanized, n.o.p.	United States United Kingdom Austria Belgium France Germany Japan Netherlands	285 1,493 145 285 60 228 670 5	— — — — — — — —	— — — — — — — —
Wire, n.o.p.	United States United Kingdom Austria Belgium Denmark France Germany Japan Netherlands Sweden	1,601 1,970 562 828 2 770 186 870 85 181	69 6 — — — — — — — 2	85.3 25.6 — — — — — .5 — —
Wire rope	United States United Kingdom Austria Belgium Denmark France Germany Japan Netherlands Norway Sweden	249 2,943 66 148 28 533 900 1,133 1,036 45 20	— — — — — — — — — — —	216.5 .4 — .3 — — — — — — —
Welding rods (cut length)	United States United Kingdom Australia Germany Sweden	1,986 693 2 1 149	1,043 17 — — —	290.7 — — — 1.1
Welding wire in coil form (excludes wire for the manufacture of welding rods)	United States United Kingdom Belgium Japan	689 15 15 378	111 1 — —	33.5 — — —
Wire rods (all sizes)	United States United Kingdom Belgium Chile France Germany Japan Netherlands	381 1,774 1,577 268 4,837 4,959 1,829 566	— — — — — — — —	26.3 — — — — 5.8 — —
Rails and railway material:				
Rails —				
60 lb. and under per lineal yard	United States Belgium Germany Netherlands	124 39 826 24	— — — —	— — — —
Over 60 lb. up to and including 100 lb. per lineal yard	United States United Kingdom Germany	561 151 55	— — —	— — —
Over 100 lb. per lineal yard	United States	1,756	—	—

TABLE 39. Imports of Primary Forms of Iron and Steel 1960 — Concluded

Commodity	Country of origin	Carbon	Alloy	Stainless
		tons (2,000 pounds)		
Rails and railway material — Concluded:				
Track material —				
Fish plates, angle bars, etc.	United States	4,663	—	—
	United Kingdom	1,383	—	—
	Belgium	2	—	—
	Germany	367	—	—
	Netherlands	1	—	—
Switch points, guard rails	United States	188	—	—
	United Kingdom	9	—	—
Other railway material —				
Axles	United States	65	—	—
Steel tires	United States	229	—	—
	United Kingdom	15	—	—
Steel wheels	United States	363	—	—
	United Kingdom	6,293	—	—
Total Imports		1,005,299	34,226	10,885.9

TABLE 40. Exports of Primary Iron and Steel, 1960

Commodity	Total tonnage
	tons (2,000 pounds)
Pig iron¹	
Ingots, blooms and billets	480,590
Bars	340,145
Rods	33,510
Plates, sheets and strips	36,506
Rails	336,604
Structural shapes	41,973
	9,962
Pipe and tubing:	
Wrought iron	827
Cast iron	756
Galvanized	133
Other	35,506
Castings, iron and steel	7,987
Forgings	3,547
Total	1,328,046

¹ See footnote to Table 8.

TABLE 41. Principal Statistics classified according to Type of Ownership:
Iron and Steel Mills, 1957 and 1960

Type	Establishments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number			dollars	
1957					
Incorporated companies	54	38,746	184,909,368	397,881,793	804,539,133
Totals	54	38,746	184,909,368	397,881,793	804,539,133
1960					
Incorporated companies	48	36,472	193,892,738	359,638,415	756,456,392
Totals	48	36,472	193,892,738	359,638,415	756,456,392

PRIMARY METAL INDUSTRIES

**TABLE 42. Principal Statistics grouped according to Selling Value of Factory shipments:
Iron and Steel Mills, 1957 and 1960**

Establishments reporting value of factory shipments	Establish- ments	Employees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
		number		dollars	
1957					
Under \$10,000	1	32	120,433	135,268	384,363
\$ 100,000 to \$ 199,999	3	321	1,247,645	689,850	2,286,935
200,000 " 499,999	7	388	1,557,269	1,120,125	3,218,736
500,000 " 999,999	5	3,220	13,222,146	23,274,139	49,640,694
1,000,000 " 4,999,999	20	34,772	168,668,558	372,662,411	749,008,405
5,000,000 and over	18	13	95,317	-	-
Head offices	-				
Totals	54	38,746	184,909,368	397,881,793	804,539,133
1960					
\$ 50,000 to \$ 99,999	2	378	1,709,786	965,122	3,238,174
200,000 " 499,999	8	410	1,702,075	888,324	2,930,491
500,000 " 999,999	4	2,614	11,707,506	23,249,016	42,413,466
1,000,000 " 4,999,999	18	33,057	178,708,721	334,535,953	707,874,261
5,000,000 and over	16	13	64,650	-	-
Head offices	-				
Totals	48	36,472	193,892,738	359,638,415	756,456,392

TABLE 43. Employees and Earnings by Provinces: Iron and Steel Mills, 1959 and 1960

Province	Employees				Earnings			
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	
	Male	Female	Male	Female		Total		
	number				dollars			
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								
Canada	4,576	1,163	28,996	207	34,942	35,722,622	147,277,529	183,000,151
1960								
Nova Scotia	542	80	3,742	-	4,364	3,364,165	17,876,157	21,240,322
Quebec	645	106	3,074	1	3,826	4,148,101	13,678,222	17,826,323
Ontario	3,613	1,109	21,672	177	26,571	30,893,564	115,378,627	146,272,191
Manitoba	167	27	958	-	1,152	1,114,178	4,566,713	5,680,891
Saskatchewan								
Alberta	88	11	460	-	559	560,876	2,312,135	2,873,011
British Columbia								
Canada	5,055	1,333	29,906	178	36,472	40,080,884	153,811,854	193,892,738

TABLE 44. Production Workers, by Months: Iron and Steel Mills, 1960

Month	Male	Female	Total
	number		
January	31,609	188	31,797
February	31,704	181	31,885
March	31,864	178	32,042
April	31,507	179	31,686
May	30,086	164	30,250
June	29,794	172	29,966
July	30,104	182	30,286
August	29,921	183	30,104
September	29,112	180	29,292
October	29,046	185	29,231
November	27,462	181	27,643
December	26,598	172	26,770
Averages	29,906	178	30,084

TABLE 45. Fuel and Electricity Used: Iron and Steel Mills, 1960

Kind	1960		
	Quantity	Cost at plant	
	\$		
Bituminous coal - Canadian Imported	ton " " "	88,036 54,374 1,076 289 694,073 " 118,848,157 cord Imp. gal. M cu. ft.	1,012,208 544,693 25,110 6,352 184,909 10,552,112 764 18,366 2,695,875 106,075 14,027,974 29,174,438
Lignite coal			
Coke			
Gasoline			
Fuel oil, including kerosene			
Wood			
Gas - Liquefied petroleum gases Natural			
Other fuel			
Electricity purchased	kwh.	2,277,954,230	
Total		... 29,174,438	
Electricity generated for own use	kwh.	133,172,806	

Directory of Firms: Iron and Steel Mills, 1960

Name of firm	Location of plant,
Nova Scotia:	
Dominion Steel and Coal Corpn. Ltd.	Sydney
Enamel Heating Products Ltd.	Amherst
Maritime Steel Foundries Ltd.	379 Glasgow St., New Glasgow
Quebec:	
Canadian Steel foundries Ltd.	5227 Notre Dame St. E., Montreal
Canadian Steel wheel Ltd.	Hochelaga (Montreal)
Canadian Unit cast Steel Co., Ltd.	Sherbrooke
Chromium Mining and Smelting Corpn. Ltd.	Beauharnois
Crucible Steel of Canada Ltd.	Sorel
Dominion Brake shoe Co., Ltd.	Jollette
Dominion Engineering Works Ltd.	Lachine
Dominion Steel and Coal Corp. Ltd.	Montreal
Lynn Macleod Metallurgy Ltd.	Smith Blvd., Thetford Mines
Manganese Steel Castings Ltd.	104 Abenague St., Sherbrooke
Shawinigan Chemicals Ltd.	Shawinigan Falls
Sorel Steel Foundries Ltd.	160 Roi St., Sorel
Steel Co. of Canada Ltd.	2320 Notre Dame St. W., Montreal
Union Carbide Canada Ltd.	Beauharnois
Ontario:	
Atlas Steels Ltd.	Welland
Algoma Steel Corp. Ltd., Steel Works Division	Sault Ste Marie
Algoma Steel Corp. Ltd., Canadian Furnace Division	Port Colborne
Burlington Steel Co., Ltd.	Hamilton
Canada Electric Castings Ltd.	Orillia
Canadian Drawn Steel Co., Ltd.	Hamilton
Dominion Foundries and Steel Ltd.	Hamilton
Fahrralloy Canada Ltd.	Orillia
Ford Motor Co. of Canada Ltd.	Windsor
Indiana Steel Products Co. of Canada Ltd.	Kitchener
Kennedy and Sons Ltd., William	Owen Sound
Neelon Steel Ltd.	Sudbury
Stanley Steel Co., Ltd.	Hamilton
Steel Co. of Canada Ltd.	Hamilton
Union Carbide Canada Ltd.	Welland
Union Drawn Steel Co., Ltd.	Hamilton
Vanadium Alloys Steel Canada Ltd.	London
Welland Electric Steel Foundry Ltd.	Welland
Manitoba:	
Dominion Brake Shoe Co., Ltd., Manitoba Steel Foundry Div.	Selkirk
Manitoba Rolling Mill Co., Ltd.	Selkirk
Saskatchewan:	
Interprovincial Steel and Pipe Corpn., Ltd.	Armour Siding, Regina
Alberta:	
Dominion Bridge Co., Ltd.	Calgary
Foothills Steel Foundry and Iron Works Ltd.	Calgary
Premier Steel Mills Ltd.	Edmonton
British Columbia:	
A - 1 Steel and Iron Foundry Ltd.	Vancouver
Canadian Sumner Iron Works Ltd.	Vancouver
Consolidated Mining and Smelting Co. of Canada Ltd.	Tadanac
Reliance Foundry Co., Ltd.	Vancouver
Vancouver Rolling Mill Ltd.	Vancouver
Vancouver Steel Co., Ltd.	Vancouver
Victoria Machinery Depot Co., Ltd.	Victoria

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