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THE NON-FERROUS METAL PRODUCTS 1959

General Review



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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 **Non-ferrous Metal 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

Q — Quarterly

Catalogue number	Title	Price
41-202	Non-ferrous Metal Products — General Review (A) .....	.50
41-204	The Aluminum Products Industry (A) .....	.50
41-206	The Brass and Copper Products Industry (A) .....	.50
41-215	The White Metal Alloys Industry (A) .....	.50
41-211	The Jewellery and Silverware Industry (A) .....	.50
41-214	The Smelting and Refining Industry (A)50
41-218	The Miscellaneous Non-ferrous Metal Products Industry (A)25
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41-007	Non-ferrous Scrap Metal and Secondary Non-ferrous Ingot (Q)	per year 1.00
31-201	General Review of the Manufacturing Industries (A)	2.00
31-001	Inventories, Shipments and Orders in Manufacturing Industries (M)	per year 4.00
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or to the Queen's Printer, Ottawa, Canada.*

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 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.¹

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.

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*.

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.

NON-FERROUS METAL PRODUCTS

1959

General Review

The total gross value of output for the industries in the Non-ferrous Metal Products was \$1,740 millions in 1959 compared with \$1,531 millions in 1958.

All of the industries in this group showed increases in output values compared with 1958 as follows, in millions of dollars; (1958 in brackets): Aluminum products, \$106.4 (\$97.9); Brass and copper products, \$200.3 (\$176.4); jewellery and silverware, \$54.7 (\$53.9); White metal products, \$53.6 (\$50.2); Miscellaneous non-ferrous metal products, \$17.5 (\$17.1) and Non-ferrous metal smelting and refining, \$1,308.0 (\$1,135.8).

For the group as a whole, there were 580 plants in operation in 1959 with 52,045 employees. Payment in salaries and wages during the year amounted to \$237 millions, materials for manufacturing cost \$1,076 millions and fuel and electricity cost \$69 millions.

Imports into Canada of non-ferrous metals and their products (except electrical apparatus) were valued at \$202 millions in 1959 compared with \$192 millions in 1958. Exports of Canadian made goods were appraised at \$1,082 millions as against \$1,010 millions in 1958.

Note: Figures for value added by manufacture, shown in Tables 1 and 2, prior to 1952 were obtained by subtracting the cost of materials used, including fuel and electricity, from the value of production. In 1952 the gross value of production was replaced by value of factory shipments, f.o.b. plant for all industries except Non-ferrous smelting and refining. As no information on inventory change is available for 1952 and 1953, value added figures for these years were obtained by subtracting from the value of shipments the cost of materials, fuel and electricity. In 1954 information on the value of year-end inventory holdings at plant and plant warehouses began to be collected as part of the annual Census of Industry and information thus made available was taken into account in calculating the value added figures for all industries except Non-ferrous smelting and refining. 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 for all industries except Non-ferrous smelting and refining. For all years figures shown for "Gross selling value of factory shipments" for the Non-ferrous smelting and refining industry actually represent "Gross value of production" and value added figures have been arrived at by subtracting cost of materials, including fuel and electricity from value of production.

TABLE 1. Principal Statistics for the Non-ferrous Metal Products Group, by Industries, 1955-59

Industry and year	Establishments	Employees	Salaries and wages for year	Cost of fuel and electricity at works	Cost of materials at works	Value added by manufacture ¹	Gross selling value of factory shipments ¹
	number				dollars		
Aluminum products:							
1955	93	6,832	24,025,405	1,702,109	45,961,129	31,733,656	79,839,602
1956	96	6,884	25,664,161	1,807,712	56,330,198	35,131,189	90,470,877
1957	94	6,917	27,475,361	1,852,226	56,190,667	33,953,111	91,818,989
1958	95	6,605	28,544,154	1,941,443	60,434,728	36,832,967	97,883,277
1959	91	6,787	29,995,589	2,097,985	63,956,586	42,473,372	106,411,905
Brass and copper products:							
1955	157	8,864	32,274,041	2,189,532	150,395,034	64,086,451	216,500,000
1956	154	9,220	34,729,361	2,405,113	173,601,665	69,497,906	244,096,116
1957	160	8,825	34,803,463	2,442,415	111,347,089	67,852,993	182,396,315
1958	155	9,034	36,441,269	2,600,711	107,392,740	68,161,993	176,400,890
1959	156	9,196	39,542,605	2,850,893	124,849,456	75,762,348	200,287,367
Jewellery and silverware:							
1955	221	5,178	13,680,463	391,782	25,711,100	22,245,768	48,016,269
1956	220	4,877	13,990,509	394,988	29,499,839	24,171,407	53,460,985
1957	220	4,731	14,572,549	404,516	28,885,750	23,502,638	52,789,040
1958	221	4,739	14,935,765	408,378	30,147,682	24,085,298	53,898,979
1959	213	4,338	14,622,778	374,512	30,654,887	23,986,910	54,703,327
White metal products:							
1955	60	3,102	10,496,152	852,309	38,099,192	34,384,056	62,505,196
1956	58	3,199	11,424,043	975,391	41,590,230	20,180,300	62,515,219
1957	61	3,154	11,258,160	1,008,437	37,734,175	17,856,056	56,969,191
1958	64	2,825	10,576,075	998,200	30,305,392	18,505,709	50,177,719
1959	64	2,919	10,843,456	1,088,723	32,862,935	19,973,054	53,554,334
Miscellaneous non-ferrous metal products:							
1955	26	729	2,444,440	115,447	3,862,843	4,489,036	8,403,307
1956	30	1,103	4,421,722	261,328	7,335,302	7,854,003	15,047,787
1957	34	1,341	5,383,649	319,022	9,983,138	9,268,243	19,263,253
1958	33	1,139	5,035,959	289,312	8,853,868	8,029,249	17,065,670
1959	32	1,059	4,496,329	284,907	7,939,441	8,786,387	17,499,279
Non-ferrous metal smelting and refining:							
1955	23	28,606	118,189,378	56,948,510	710,762,890	444,005,081	1,211,716,481 ²
1956	23	30,788	130,139,944	64,942,503	820,604,322	511,018,353	1,396,565,178 ²
1957	23	29,613	134,775,206	59,474,791	770,004,696	450,666,165	1,280,145,652 ²
1958	25	26,959	131,081,250	63,522,398	693,796,744	378,451,364	1,135,770,506 ²
1959	24	27,746	137,227,215	62,320,376	815,787,699	429,888,766	1,307,996,841 ²
Totals:							
1955	580	53,311	201,109,879	62,199,689	974,792,188	590,944,048	1,626,980,855
1956	581	56,071	220,369,740	70,787,035	1,128,961,556	667,853,158	1,862,156,162
1957	592	54,581	228,268,388	65,501,407	1,014,145,515	603,099,206	1,683,382,440
1958	593	51,301	226,614,472	69,760,442	930,931,154	534,066,580	1,531,197,041
1959	580	52,045	236,727,972	69,017,396	1,076,051,004	600,870,837	1,740,453,053

¹ See note to text.² Gross value of production for this industry.

TABLE 2. Principal Statistics for the Non-ferrous Metal Products Group,
by Provinces 1955-59

Province and year	Estab- lish- ments	Em- ployees	Salaries and wages for year	Cost of fuel and electricity at works	Cost of materials at works	Value added by manufacture ¹	Gross selling value of factory shipments ¹
	number		dollars				
Nova Scotia, New Brunswick and Quebec:							
1955	188	19,405	73,061,392	34,041,933	435,650,285	193,426,183	663,518,906
1956	194	20,127	76,506,988	35,604,882	504,232,304	231,842,393	769,961,835
1957	194	18,169	74,238,319	30,258,912	367,454,139	186,985,804	584,568,936
1958	187	18,837	84,466,525	36,088,894	419,803,921	186,650,479	643,035,491
1959	182	17,629	81,722,690	32,025,092	454,636,295	182,239,741	667,632,452
Ontario:							
1955	310	26,709	98,456,533	21,162,508	420,976,114	319,600,466	760,620,623
1956	304	27,212	106,584,300	23,606,017	485,438,888	339,557,989	844,909,087
1957	309	27,760	114,106,127	24,651,893	508,557,666	339,577,559	873,320,832
1958	320	24,653	104,131,563	18,900,988	393,553,179	274,732,884	683,423,641
1959	316	26,897	117,660,567	24,729,817	503,085,739	330,998,373	857,563,893
Manitoba:							
1955	18	466	1,672,119	519,148	9,512,080	10,569,470	20,514,984
1956	18	465	1,769,879	572,850	9,199,933	12,023,303	21,710,535
1957	17	484	1,886,547	539,075	8,088,301	6,313,357	15,052,447
1958	14	500	2,387,167	632,298	5,858,260	4,213,342	10,724,361
1959	15	523	2,112,630	642,282	7,666,787	5,683,761	13,903,115
Saskatchewan and Alberta:							
1955	14	1,155	4,854,620	2,230,569	23,006,987	30,175,120	55,334,059
1956	15	1,247	5,560,767	2,476,224	22,309,773	33,069,570	57,756,580
1957	16	1,261	5,816,053	2,501,290	23,269,715	21,164,115	47,108,711
1958	16	1,255	5,905,054	2,847,424	26,350,120	21,829,343	50,981,914
1959	15	1,203	5,829,261	2,944,281	28,383,864	22,326,546	53,705,568
British Columbia and Yukon:							
1955	50	5,576	23,065,215	4,245,531	85,646,722	37,172,809	126,992,283
1956	50	7,020	29,947,806	8,527,062	107,780,658	51,359,903	167,818,125
1957	56	6,907	32,221,342	7,550,237	106,775,694	49,058,371	163,331,514
1958	56	6,056	29,724,163	11,290,838	85,365,674	46,640,532	143,031,634
1959	52	5,793	29,402,824	8,675,924	82,278,319	59,622,416	147,648,025
Canada:							
1955	580	53,311	201,109,879	62,199,689	974,792,188	590,944,048	1,626,980,855
1956	581	56,071	220,369,740	70,787,035	1,128,961,556	667,853,158	1,862,156,162
1957	592	54,581	228,268,388	65,501,407	1,014,145,515	603,099,206	1,683,382,440
1958	593	51,301	226,614,472	69,760,442	930,931,154	534,066,580	1,531,197,041
1959	580	52,045	236,727,972	69,017,396	1,076,051,004	600,870,837	1,740,453,053

¹ See note to text.

TABLE 3. Inventories,¹ 1959

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
(a) By industries				
Opening:				
Aluminum products	5,180,209	8,475,203	3,737,453	17,392,865
Brass and copper products	13,393,932	8,135,197	8,085,233	29,614,362
White metal products	4,517,019	991,051	3,033,063	8,541,133
Jewellery and silverware	6,807,746	3,125,081	5,260,355	15,193,182
Non-ferrous smelting and refining	116,508,000	32,061,000	41,955,000	190,524,000
Miscellaneous	2,068,952	1,153,273	957,766	4,179,991
Totals	148,475,858	53,940,805	63,028,870	265,445,533
Closing:				
Aluminum products	5,392,168	10,274,927	4,053,767	19,720,862
Brass and copper products	15,060,172	9,348,576	10,047,184	34,455,932
White metal products	4,220,948	942,872	3,451,620	8,615,440
Jewellery and silverware	6,248,155	2,794,269	5,904,149	14,946,573
Non-ferrous smelting and refining	111,974,000	37,631,000	41,787,000	191,392,000
Miscellaneous	1,751,752	711,027	911,468	3,374,247
Totals	144,647,195	61,702,671	66,155,188	272,505,054
(b) By provinces				
Opening:				
New Brunswick and Quebec	59,299,637	12,554,080	20,898,195	92,751,912
Ontario	62,703,527	35,646,011	21,805,683	120,155,221
Manitoba	1,221,049	182,862	279,828	1,683,739
Saskatchewan and Alberta	5,325,757	804,000	970,109	7,099,866
British Columbia and Yukon	19,925,888	4,753,852	19,075,055	43,754,795
Canada	148,475,858	53,940,805	63,028,870	265,445,533
Closing:				
New Brunswick and Quebec	55,627,612	14,679,953	18,759,998	89,067,563
Ontario	59,896,782	40,249,862	29,940,868	130,087,512
Manitoba	1,551,758	233,093	358,312	2,143,163
Saskatchewan and Alberta	5,515,650	1,146,400	2,839,832	9,501,882
British Columbia and Yukon	22,055,393	5,393,363	14,256,178	41,704,934
Canada	144,647,195	61,702,671	66,155,188	272,505,054

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

Note: The opening inventory for the current year may not necessarily agree with the closing inventory for the previous year because of changes in the composition of the industry such as; the addition of new establishments, the disappearance of old ones, or the transfer of establishments to other industries for statistical purposes. The figure for value added by manufacture for the previous year does not need to be altered because of such changes in the composition of the industry.

**TABLE 4. Employees and their Earnings in the Non-ferrous metal Products Group,
1958 and 1959**

	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
	number					dollars		
1958								
(a) By industries:								
Aluminum products	1,607	835	3,913	250	6,605	13,310,074	15,234,080	28,544,154
Brass and copper products ..	1,530	600	6,396	508	9,034	10,371,110	26,070,159	36,441,269
White metal products	471	159	1,730	465	2,825	3,332,713	7,243,362	10,576,075
Jewellery and silverware ...	692	471	2,222	1,354	4,739	4,702,745	10,233,020	14,935,765
Non-ferrous smelting and re- fining	4,773	744	21,391	51	26,959	33,398,402	97,682,848	131,081,250
Miscellaneous	275	98	669	97	1,139	2,044,757	2,991,202	5,035,959
Totals	9,348	2,907	36,321	2,725	51,301	67,159,801	159,454,671	226,614,472
(b) By provinces:								
Nova Scotia, New Brunswick and Quebec	3,760	1,103	13,285	689	18,837	26,577,624	57,888,901	84,466,525
Ontario	4,177	1,447	17,061	1,968	24,653	30,177,270	73,954,293	104,131,563
Manitoba	64	18	409	9	500	801,361	1,585,806	2,387,167
Saskatchewan and Alberta ..	273	40	940	2	1,255	1,688,089	4,216,965	5,905,054
British Columbia and Yukon	1,074	299	4,626	57	6,056	7,915,457	21,808,706	29,724,163
Canada	9,348	2,907	36,321	2,725	51,301	67,159,801	159,454,671	226,614,472
1959								
(a) By industries:								
Aluminum products	1,612	881	4,057	237	6,787	13,268,398	16,727,191	29,995,589
Brass and copper products ..	1,576	585	6,553	482	9,196	11,042,855	28,499,750	39,542,605
White metal products	510	154	1,721	534	2,919	3,450,774	7,392,682	10,843,456
Jewellery and silverware ...	671	422	2,051	1,194	4,338	4,799,464	9,823,314	14,622,778
Non-ferrous smelting and re- fining	4,648	644	22,402	52	27,746	32,042,472	105,184,743	137,227,215
Miscellaneous	303	99	559	98	1,059	2,007,356	2,488,973	4,496,329
Totals	9,320	2,785	37,343	2,597	52,045	66,611,319	170,116,653	236,727,972
(b) By provinces:								
Nova Scotia, New Brunswick and Quebec	3,616	1,051	12,337	625	17,629	25,952,029	55,770,661	81,722,690
Ontario	4,259	1,438	19,292	1,908	26,897	30,430,746	87,229,821	117,660,567
Manitoba	75	15	424	9	523	423,066	1,689,564	2,112,630
Saskatchewan and Alberta ..	256	36	909	2	1,203	1,698,631	4,130,630	5,829,261
British Columbia and Yukon	1,114	245	4,381	53	5,793	8,106,847	21,295,977	29,402,824
Canada	9,320	2,785	37,343	2,597	52,045	66,611,319	170,116,653	236,727,972

TABLE 5. Wage-Earners Employed in the Non-Ferrous Metals Products Group, by Months, 1959

Month	Establishments reporting monthly detail ¹		Establishments reporting quarterly detail ²	
	Male	Female	Male	Female
January	33,982	2,178	—	—
February	33,862	2,228	—	—
March	34,450	2,220	453	187
April	35,168	2,173	—	—
May	35,678	2,203	—	—
June	36,236	2,264	453	179
July	36,367	2,302	—	—
August	36,636	2,387	—	—
September	36,263	2,432	467	182
October	36,080	2,195	—	—
November	35,864	2,144	—	—
December	35,783	2,088	456	169
Average for establishments reporting monthly detail			35,528	2,243
Average for establishments reporting quarterly detail			457	179
Average estimated for small establishments ³			1,358	175
Average for all establishments			37,343	2,597

¹ The number of production workers, by months, was collected only for larger establishments.

² The number of production workers, by quarters, was collected only for medium sized establishments.

³ Small establishments were not asked to report details of employment.

Note: For data by industries for 1959 refer to separate industry reports.

TABLE 6. Alphabetical List of Materials Used in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959

Material	1958		1959	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Aluminum (except scrap):				
Ingots	ton 106,039	47,624,739	112,846	48,610,324
Castings	" 102	146,251	..	19,776
Circles and forms for hollow-ware	" 1,260	1,078,242	777	721,064
Sheet and strip	" 3,240	2,650,810	2,621	2,113,360
Rods and bars	" 308	231,197	31	31,487
Pipe and tubing	" 173	248,753	122	223,699
Wire	" 34	33,907	34	34,391
Other forms .....	..	5,812,883	..	6,860,575
Alloy, die casting	ton 3,414	898,749	3,145	866,454
Antimony	" 471	202,165	490	201,104
Arsenic—Metallic arsenic	lb. 12,582	5,737	13,297	5,938
Oxide, As ₂ O ₃	" 68,120	4,419	35,299	2,813
Babbitt and solders	ton 150	66,947	777	425,290
Beads for artificial or simulated pearls:				
Glass .....	..	229,431	..	152,510
Other .....	..	134,037	..	132,636
Bismuth	lb. 22,732	52,491	30,389	66,691

TABLE 6. Alphabetical List of Materials Used in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959 — Continued

Material		1958		1959	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Brass and bronze (except scrap):					
Ingots	ton	11,350	5,802,717	9,018	4,819,121
Bars and rods	"	2,051	1,368,326	2,194	1,548,071
Castings .....	"	..	..	..	..
Plates, sheets and strips	"	872	781,102	623	606,867
Pipe and tubing	"	585	619,950	512	627,576
Wire	"	411	478,005	357	394,883
Other forms .....	..	..	2,668,660	..	2,379,756
Britannia metal, including blanks for plating .....	..	..	25,724	..	17,319
Cadmium	lb.	75,441	117,562	81,286	118,522
Coke, foundry	ton	1,267	42,668	1,424	50,247
Copper (except scrap):					
Ingots, slabs, wire bars, etc.	"	114,665	59,620,105	114,991	69,091,468
Pipe and tubing	"	289	308,260	212	263,786
Plates, sheets and strips	"	451	439,408	309	302,635
Wire	"	208	183,952	201	175,287
Other forms .....	..	..	465,457	..	436,583
Diamonds, for rings, etc. ....	..	..	2,895,200	..	2,251,638
Glass linings and blanks, for silverware .....	..	..	86,879	..	213,734
Gold:					
Pine:					
New .....	..	..	4,792,935	..	5,164,186
Old .....	..	..	251,290	..	160,144
Old, for remelting or refining .....	..	..	398,219	..	350,420
Alloys .....	..	..	1,633,143	..	1,662,361
Gold-filled wire .....	..	..	143,909	..	124,531
Graphite	ton	34	17,870	33	17,477
Iridium .....	..	..	17,125	..	17,178
Iron, pig	ton	3,450	221,277	2,615	182,099
Jewellers' findings .....	..	..	1,105,125	..	1,260,201
Lead (except scrap):					
Pig:					
Pure	ton	14,177	3,231,849	16,363	3,359,073
Antimonial	"	1,237	348,493	1,774	377,476
Other forms .....	..	..	66,881	..	17,962
Lumber	M bd. ft.	779	99,315	985	123,671
Magnesium metal	ton	796	555,107	415	283,178
Manganese metal	"	60	38,788	117	54,634
Metals, other non-ferrous .....	..	..	1,312,882	..	596,818
Monel metal	ton	27	41,543	63	137,582
Nickel	"	1,756	2,730,872	1,140	1,637,581
Nickel-copper shot	"	5	7,627	3	4,008
Nickel-silver, including blanks for plating .....	..	..	1,237,203	..	851,788
Palladium .....	..	..	1,143,382	..	1,287,587
Pearl essence .....	..	..	9,721	..	6,247
Platinum .....	..	..	3,258,208	..	2,549,125

TABLE 6. Alphabetical List of Materials Used in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959 — Concluded

Material	1958		1959	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Refractories .....	..	76, 283	..	94, 458
Resins, synthetic, and plastics .....	..	31, 782	..	2, 896
Rhodium .....	..	108, 285	..	321, 947
Rouge and other polishes .....	..	101, 035	..	76, 251
Sand:				
Foundry	ton 14, 638	124, 684	11, 517	135, 863
Silica	" 2, 849	67, 594	2, 438	48, 597
Scrap:				
Aluminum	" 11, 712	3, 927, 512	12, 092	4, 279, 258
Babbitt	" 1, 497	494, 997	1, 381	486, 087
Brass and bronze	" 26, 355	10, 090, 351	28, 581	12, 290, 278
Copper	" 16, 906	7, 834, 782	16, 947	8, 921, 919
Iron and steel	" 2, 522	108, 590	4, 423	199, 205
Lead	" 34, 660	4, 660, 325	33, 460	4, 219, 124
Magnesium	" ..	10, 163	..	7, 721
Solder	ton 409	184, 747	502	160, 899
Tin	" 119	120, 101	46	42, 431
Type metal	" 3, 752	1, 313, 122	3, 928	1, 315, 963
Zinc	" 1, 822	184, 005	2, 487	278, 896
Zinc dross	" 3, 171	294, 189	3, 666	348, 484
Other metals	" 913	184, 411	977	193, 573
Silicon metal	lb. 402, 051	80, 852	439, 933	84, 712
Silver:				
Fine .....	..	2, 817, 509	..	3, 273, 643
Sterling .....	..	2, 282, 143	..	2, 404, 789
Other alloys .....	..	72, 349	..	92, 027
Stainless steel .....	..	1, 916, 981	..	2, 003, 054
Steel, other:				
Cutlery .....	..	72, 657	..	36, 979
Plates, sheets and strip	1, 450	248, 059	646	114, 255
Other .....	..	1, 433, 539	..	3, 058, 095
Stones, other semi-precious and precious .....	..	1, 178, 539	..	1, 378, 822
Tellurium	lb. 1, 016	1, 824	839	1, 711
Tin (except scrap):				
Ingots and slabs	ton 1, 910	3, 536, 335	1, 944	3, 712, 072
Other forms	" 25	50, 665	33	33, 662
Trimnings, knobs, handles, etc., for kitchenware .....	..	348, 981	..	337, 538
Waste and scrap for remelting and refining .....	..	622, 709	..	622, 709
Watch parts .....	..	44, 369	..	54, 505
Zinc (except scrap):				
Ingots and slabs	ton 16, 272	3, 632, 027	17, 154	4, 021, 995
Sheets	" 331	151, 666	—	—
Other forms .....	..	362, 034	..	543, 054
Shipping containers and packing materials .....	..	3, 350, 835	..	3, 298, 038
Ores, concentrates, etc., for smelting and refining .....	..	693, 796, 744	..	815, 787, 699
All other materials .....	..	25, 261, 625	..	36, 205, 780
Amount paid out to others for work done on materials owned by plants in this group .....	..	1, 764, 257	..	1, 571, 081
Totals .....	..	930, 931, 154	..	1, 076, 051, 004

TABLE 7. Alphabetical List of Products Made in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959

Note: Figures for individual items do not necessarily represent total Canadian production as they may also have been made in plants classified to other groups.

Product	1958		1959	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Alloys, die casting	lb. 11, 188, 908	1, 553, 126	12, 731, 006	1, 935, 058
Alloys, non-ferrous, not elsewhere specified	" 1, 152, 448	284, 895	799, 908	325, 424
Aluminum:				
Bars and rods		(a)		(a)
Bottle caps and seals		(a)		(a)
Castings (except die castings)	" 8, 917, 529	6, 280, 757	8, 608, 061	6, 650, 517
Conduit		(a)		(a)
Cooking utensils and other kitchen hollow-ware		6, 758, 605		5, 832, 025
Extruded shapes	lb. 30, 939, 362	17, 411, 611	41, 857, 477	21, 871, 624
Forgings		(a)		(a)
Hat dies and hat blocks		(a)		(a)
Ingots and wire bars:				
New	ton 634, 102	*	598, 629	*
Remelt	lb. 4, 534, 229	843, 051	3, 541, 660	875, 753
Secondary (reclaimed from scrap)	" 10, 887, 268	3, 291, 082	12, 311, 701	3, 645, 963
Patterns and match plates .....	..	858, 999	..	163, 144
Powder		(a)		(a)
Roofing		(a)		(a)
Scrap .....	..	230, 896	..	1, 872, 797
Sheets		(a)		(a)
Stampings and spinings, not elsewhere specified .....	..	459, 592	..	591, 867
Tubing		(a)		(a)
Other aluminum goods, including values for items marked (a) which were reported by only one or two concerns in this group .....	...	52, 853, 504	...	53, 537, 200
Anodes, for plating .....	..	*	..	*
Architectural work of brass, bronze, copper or iron .....	..	149, 447	..	140, 764
Babbitt metal	lb. 1, 708, 492	826, 315	1, 231, 590	702, 124
Brass and bronze:				
Bars and rods		(b)		(b)
Castings	lb. 25, 841, 042	11, 348, 235	26, 917, 070	12, 996, 155
Ingots	" 30, 279, 870	8, 080, 605	33, 476, 543	8, 976, 050
Powder		(b)		(b)
Scrap	lb. 1, 540, 108	272, 549	1, 458, 199	313, 465
Sheets, plates and strips		(b)		(b)
Other forms, including values for items marked (b) .....	...	26, 443, 288	...	23, 956, 212
Copper:				
Alloys, not elsewhere specified	lb. 2, 650, 407	696, 614	2, 044, 182	555, 569
Castings	" 250, 269	170, 019	461, 083	380, 971
Ingots, wire bars, etc., made in primary refineries	ton 329, 239	164, 699, 696	365, 366	213, 550, 714
Pipe and tubing		(c)		(c)
Plates and sheets		(c)		(c)
Scrap	lb. 329, 102	103, 579	2, 134, 154	588, 885
Wire rods		(c)		(c)
Other forms, including values for items marked (c) .....	...	69, 956, 017	...	88, 621, 967
Cadmium metal	lb. 1, 628, 239	1, 602, 825	1, 999, 222	2, 122, 108
Castings:				
Die:				
Aluminum base	lb. 2, 560, 348	1, 645, 499	3, 748, 532	2, 441, 637
Zinc base	" 14, 379, 489	6, 017, 214	14, 112, 518	6, 260, 381
Other .....	..	325, 581	..	174, 005
Grey iron .....	..	127, 146	..	1, 245
Other, not elsewhere specified .....	...	1, 069, 282	...	1, 401, 816
Church goods (chalices, etc.) .....	..	208, 712	..	302, 826
Dies .....	..	1, 018, 139	..	570, 356
Emblems, badges and medals .....	..	572, 116	..	508, 553

TABLE 7. Alphabetical List of Products Made in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959 — Continued

Product	1958		1959	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Fasteners, metal.....		*		*
Fire extinguishers and extinguishing systems.....	...	3,204,004	...	3,110,432
Flatware and cutlery:				
Not plated (including stainless).....	..	1,169,212	..	1,085,006
Silver-plated .....	..	4,762,431	..	3,515,776
Sterling silver .....	..	1,727,851	..	2,121,565
Foils (lead, tin, aluminum, etc.) .....	..	10,932,963	..	11,420,363
Gold	¹	¹	¹	¹
Gold leaf		*		*
Gold-filled wire and other gold-filled stock .....	..	324,655	..	354,980
Hardware .....	..	177,749	..	348,133
Hollow-ware:				
Silver-plated on brass or copper.....	..	1,223,892	..	1,147,300
Silver-plated on Britannia metal.....	..	46,872	..	44,231
Silver-plated on lead alloy .....	..	48,607	..	53,298
Silver-plated on nickel-silver .....	..	96,672	..	86,286
Sterling silver .....	..	248,672	..	310,540
Hollow-ware and spinning, brass, bronze, copper, steel and monel .....	..	1,150,351	..	540,997
Hydrants.....		*		*
Jewellery:				
Of gold, silver and other metals (including stones) .....	..	22,350,449	..	21,317,440
Of plastics or other non-metallic materials .....	..	102,870	..	169,223
Lamps and lanterns, marine, portable and railway		*		*
Lead:				
Alloys, not elsewhere specified	lb. 801,252	98,462	697,251	96,016
Bars or ingots (antimonial):				
Primary (made from virgin metal).....	" 4,693,142	437,828	1,703,557	181,129
Secondary (reclaimed from scrap)	" 29,761,682	3,686,872	37,338,222	4,340,335
Bars or ingots (pure):				
New — Produced in primary refineries	ton 132,987	22,501,413	135,296	21,577,010
Remelted in secondary refineries	lb. 5,957,820	752,840	3,794,119	412,574
Secondary (reclaimed from scrap)	" 9,845,400	1,286,799	12,401,391	1,417,622
Castings	" 564,536	219,502	647,893	205,564
Pipe	" 2,368,422	530,802	2,465,125	680,196
Sheet	" 5,715,985	1,246,004	4,432,247	862,626
Traps and fittings	" 1,146,073	520,429	1,507,473	552,943
Wire	"	(d)		(d)
Miscellaneous lead products, including value for items marked (d) .....	...	430,148	...	631,908
Lead, red.....		*		*
Lightning rods and supplies.....	...	263,832	...	269,761
Magnesium:				
Castings .....	..	840,489	...	493,527
Other magnesium products		*		*
Maple sugar equipment		*		*
Meters and meter parts, gas and water		*		*
Precious metals (gold, silver, etc.) in the following forms: recovered (for sale) from old material, sweepings, waste, etc., also precious metals purchased as such and only melted and rolled and otherwise prepared without alloying, for resale to the arts and industries and other precious metal alloys not specified elsewhere:				
Gold .....	..	3,732,746	..	4,363,903
Silver .....	..	3,656,636	..	2,412,425
Other precious metals including platinum, crucibles and electrodes .....	...	3,935,646	...	5,526,245

¹ See "Precious metals".

TABLE 7. Alphabetical List of Products Made in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959 — Continued

Product	1958		1959	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Nickel in matte, oxides and salts, and refined nickel ton	139,559	194,142,019	186,550	257,008,801
Nickel-silver:				
Plates and sheets.....		*		*
Other forms		*		*
Pearls, artificial or simulated .....	..	954,468	..	999,334
Platinum, palladium, etc., in refinery residues and matte		14,321,443		16,932,178
Plumbers' brass fittings:				
Closet tank fittings .....	..	274,608	..	248,194
Faucets, sink, lavatory and bath, and their combinations .....	..	3,743,332	..	3,961,562
Stops, and stop and drains .....	..	1,035,288	..	955,741
Traps, drains, supplies and other tubular fittings .....	..	1,108,782	..	1,410,328
Tub-fillers, showers, and combinations of same .....	..	1,628,971	..	1,361,312
Any other brass plumbing fittings .....	...	6,294,140	..	6,547,909
Plumbing fixtures, cast iron .....	..	208,614	..	417,326
Pot scourers .....	..	749,561	..	667,927
Precious metal salts		*		*
Railway car bearings and fittings, brass and bronze		*		*
Scrap and dross sold		*		*
Selenium..... lb.	342,141	2,289,637	372,410	2,314,179
Shot, dropped or moulded		*		*
Silver	¹	¹		¹
Solders	lb. 11,467,241	5,050,414	11,700,152	5,151,006
Smelter and refinery products, not elsewhere specified .....	..	434,775,628	..	508,962,944
Steam boiler trimmings, including gauge cocks and water gauge mountings .....	..	58,000	..	26,000
Stellite and stellite products		*		*
Sweeps, jewellers', prepared .....	..	327,215	..	323,464
Tanks, kettles and coils for breweries .....	..	216,060	..	525,323
Tellurium	lb. 42,337	83,379	8,900	19,015
Terrazzo stripping, brass, zinc, magnesium.....		*		*
Tin:				
Alloys, not elsewhere specified		*		*
New — Produced in primary refineries	lb. —	—	—	—
Remelted in secondary refineries	227,547	226,375	323,160	344,403
Secondary (reclaimed from scrap)	" 44,747	50,973	2,532	3,061
Toiletware and dresserware:				
Sterling silver .....	..	185,023	..	213,376
Other metals .....	..	168,214	..	184,546
Trophies .....	..	996,443	..	1,004,321
Tubes, collapsible		*		*
Type and type metal	lb. 6,918,290	2,373,043	11,140,810	2,959,477
Valves:				
Brass or bronze (gate, globe, check, etc.) .....	..	4,403,778	..	4,810,070
Corporation brass (main and curb stops, etc.) .....	..	1,897,195	..	1,967,997
Radiator valves (all types) .....	..	295,369	..	222,113
Iron body (gate, globe, check, etc.) .....	..	3,950,323	..	4,014,097
Pressure regulators and relief valves .....	..	376,738	..	384,112
Steel .....	..	93,372	..	344,941
Other types .....	..	479,912	..	371,942

¹ See "Precious metals".

TABLE 7. Alphabetical List of Products Made in the Industries in the Non-ferrous Metal Products Group, 1958 and 1959 — Concluded

Product	1958		1959	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Watch cases .....	..	1,000	—	—
Wrist watches .....	..	557,371	..	553,192
Weatherstripping .....	..	399,418	..	417,452
Zinc:				
Alloys not elsewhere specified	lb. 990,038	138,311	227,259	204,468
Castings	" 358	50	—	—
Dust	"	*		*
Bars, slabs, etc.:				
New — Produced in primary refineries	ton 252,093	40,318,923	255,306	48,179,391
Remelted in secondary refineries	lb. 472,707	54,460	1,403,364	205,020
Secondary (reclaimed from scrap)	" 5,368,185	548,241	6,226,313	726,452
All other products (including products reported by only one or two firms in this group marked * above) .....	...	325,239,091	...	309,593,039
Amount received in payment for repair and custom work ..	...	3,315,165	...	4,400,381
Totals .....	...	1,531,197,041	...	1,740,453,053

TABLE 8. Capital and Repair Expenditures in the Non-ferrous Metal Products Group, 1958 and 1959

Industry	Capital expenditures		Sub-total	Repair expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
thousands of dollars							
1958							
Aluminum products	953	3,238	4,191	403	3,023	3,426	7,617
Brass and copper products....	458	5,710	6,168	570	2,911	3,481	9,649
White metal products	164	867	1,031	108	1,052	1,160	2,191
Jewellery and silverware	1	1	400	103	459	562	962
Non-ferrous smelting and re- fining	42,019	41,413	83,432	8,435	41,641	50,076	133,508
Miscellaneous	1	1	614	1	1	294	908
Totals	95,836		95,836	58,999		58,999	154,835
1959							
Aluminum products	1,005	4,016	5,021	381	3,049	3,430	8,451
Brass and copper products....	1,340	3,365	4,705	783	3,339	4,122	8,827
White metal products	345	939	1,284	116	1,143	1,259	2,743
Jewellery and silverware	1	1	547	109	484	593	1,140
Non-ferrous smelting and re- fining	25,080	23,530	48,610	10,642	43,286	53,928	102,338
Miscellaneous	1	1	606	1	1	447	1,053
Totals	60,773		60,773	63,779		63,779	124,552

¹ Breakdown not available for publication as one of constituent parts of total under \$100,000.

Note: Data shown for 1958 and 1959 in above table are final figures and therefore, differ to some extent from the preliminary figures shown in the bulletins for the individual industries.

**TABLE 9. Fuel and Electricity Used in the Manufacture of Non-Ferrous Metals
Industries Group, 1959**

Kind	Quantity	Cost at plant
		\$
1. Establishments reporting commodity detail:¹		
Bituminous coal:		
(a) From Canadian mines	ton 419,615	5,660,736
(b) Imported	" 493,317	6,451,165
Anthracite coal	" 77,856	1,010,946
Lignite coal	" 282	6,816
Coke	" 269,290	6,081,646
Gasoline (including gasoline used in cars and trucks)	Imp. gal. 1,313,372	470,814
Fuel oil including kerosene or coal oil	" 75,674,643	7,161,650
Wood	cord 1,495	45,378
Gas (a) Liquefied petroleum gases	Imp. gal. 813,110	140,026
(b) Other manufactured gas	M cu. ft. 217,150	96,419
(c) Natural gas	" 7,254,743	2,298,177
Other fuel		58,920
Electricity purchased	kwh. 14,937,108,098	38,947,286
Steam purchased .....	..	67,833
2. Establishments reporting group detail:		
Cost of fuel .....	...	29,550,526
Cost of electricity .....	...	38,947,286
3. Estimate for establishments for which no data were collected:		
Cost of fuel and electricity .....	...	519,584
4. All establishments:		
Total cost of fuel and electricity .....	...	69,017,396

Note: For data by industries for 1959, refer to separate industry reports.



