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Manufactures of the Non-ferrous Metals Group

THE WHITE METAL PRODUCTS INDUSTRY, 1948

Statistics given in this report cover the operations of firms in Canada which were occupied chiefly in (a) the manufacture of white metal alloys, such as babbitt, solders, type and type metal; (b) the refining of scrap to recover white metals, such as lead, tin, zinc, etc.; and (c) the manufacture of products such as lead sheet, lead pipe, antimonial lead, collapsible tubes, castings, metal foil, etc., in which the white metals or their alloys are the principal materials. In some establishments all three of these operations were carried on, so it is not practicable to make a subdivision of the industry.

Forty-seven factories reported in this group in 1948 and the value of their output was \$49,641,787. This total was 32.6 per cent above the 1947 value of \$37,435,177.

Of the total output during the year under review, 56.2 per cent came from the 26 plants in Ontario, 37.2 per cent from the 16 plants in Quebec, and 6.6 per cent from the 2 plants in Manitoba and 3 in British Columbia.

Employment was afforded to a monthly average of 3,319 people, including 604 on salaries and 2,715 on wages. Salaries for the year amounted to \$1,779,945 and wages to \$5,201,990, a total of \$6,981,935. In the previous year, the 3,097 workers were paid \$6,024,239 in salaries and wages.

Materials used in manufacturing, exclusive of fuel and electricity, cost \$35,312,992 delivered at the works. Included in these materials were 46,163 tons of scrap metals at \$11,757,539; 29,234 tons of pig lead at \$10,185,136; 1,732 tons of pig tin at \$3,072,346; 9,911 tons of aluminum at \$5,316,871; 9,195 tons of zinc spelter at \$2,711,580, and other metals at \$2,381,464.

Production included 25,880 tons of refined metals (recovered from scrap) valued at \$9,616,807; 5,238 tons of solders at \$4,510,283; 4,301 tons of type and type metal at \$1,824,902; 2,640 tons of babbitt metal at \$1,733,627; die castings at \$4,705,884; 3,640 tons of lead pipe at \$1,614,106; 3,197 tons of lead sheet at \$1,326,441, and other lines, such as metal foil, moulded shot, collapsible tubes, plastic bottle caps, toys, etc.

Table 1 - PRINCIPAL STATISTICS OF THE WHITE METAL PRODUCTS INDUSTRY, 1944-1948

Year	Average		Cost of			Gross sell- ing value of products at works
	Number of plants	number of em- ployees	Salaries and wages	fuel and electricity at works	Cost of materials at works	
1944	41	2,911	4,310,348	316,930	12,930,750	21,303,718
1945	41	2,929	4,560,581	343,085	15,718,455	23,222,129
1946	47	3,414	5,600,124	430,560	15,851,089	28,128,907
1947	47	3,097	6,024,239	530,573	24,256,664	37,435,177
1948	47	3,319	6,981,935	688,113	35,312,992	49,641,787
Per cent change, 1948 from 1947 ..	..	+7.2	+15.9	+29.7	+45.6	+52.6

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.

Note: This report was prepared in the Mining, Metallurgical and Chemical Section.

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Table 2 - PRINCIPAL STATISTICS, BY PROVINCES, 1947 and 1948

Province	Number of plants	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
<u>1947</u>						
Quebec	17	792	1,659,166	184,939	9,023,551	14,160,658
Ontario	25	2,198	4,141,433	371,173	13,651,549	21,123,891
Manitoba	2)	107	223,640	24,461	1,581,564	2,150,628
British Columbia	3)					
CANADA	47	3,097	6,024,239	530,573	24,256,664	37,435,177
<u>1948</u>						
Quebec	16	841	1,899,015	176,259	13,600,585	18,431,434
Ontario	26	2,365	4,827,461	477,275	19,073,759	27,899,800
Manitoba	2)	113	255,459	34,579	2,638,648	3,310,553
British Columbia	3)					
CANADA	47	3,319	6,981,935	688,113	35,312,992	49,641,787

Table 3 - PRODUCTS MADE IN THE WHITE METAL PRODUCTS INDUSTRY, 1947 and 1948

Product	1947		1948	
	Quantity	Selling value	Quantity	Selling value
	pounds	\$	pounds	\$
Refined Metals (reclaimed or remelted) -				
Aluminum	8,479,114	1,275,223	8,275,441	1,548,978
Lead (antimonial)	32,948,838	4,342,216	50,717,284	5,733,168
Lead (common)	10,245,851	1,305,917	9,599,936	1,843,593
Tin	99,555	67,013	157,161	143,860
Zinc	3,151,979	265,394	2,887,995	322,547
Other metals .....	...	15,922	...	24,661
Alloys -				
Babbitt	6,317,568	1,866,487	5,279,925	1,733,627
Brass	6,878,752	1,131,013	5,685,257	1,048,930
Bronze	7,265,602	1,425,893	8,359,135	1,677,944
Copper alloys, not elsewhere specified	480,538	121,776	718,930	134,488
Lead alloys, not elsewhere specified..	13,868,879	1,501,041	18,168,219	3,565,598
Solders	10,142,359	3,101,829	10,475,406	4,510,283
Tin alloys, not elsewhere specified ..	15,559	9,167	12,669	8,964
Type and type metal	7,761,868	1,376,819	8,601,466	1,824,902
Die casting alloy	6,454,526	858,636	10,559,801	1,743,199
Zinc alloys, not elsewhere specified..	1,467,595	228,182	2,900,079	632,858
Other non-ferrous alloys	1,316,678	208,772	1,375,398	292,812
Castings -				
Die castings -				
Aluminum-base alloy	954,428	394,852	979,882	565,401
Zinc-base alloy	8,102,695	2,910,705	7,455,876	3,516,696
Other metal base .....	...	56,154	...	623,787
Other castings -				
Brass and bronze	402,956	155,295	283,743	126,770
Lead	406,150	72,491	315,874	93,516
Other .....	...	421,536	...	454,380
Lead Products -				
Pipe	6,852,799	1,095,699	7,269,315	1,614,106
Sheets	7,088,761	1,036,540	6,393,367	1,326,441
Traps and fittings	1,498,075	430,869	1,311,510	474,613
Miscellaneous, including bullet wire. shot, etc. ....	...	364,473	...	1,456,798
Scrap and dross	1,049,933	63,587	862,450	105,872
All other products (*) .....	...	11,331,676	...	12,492,995
TOTAL .....	...	37,435,177	...	49,641,787

(*) Includes commodities which were made by only one or two firms in this industry, such as metal foil, collapsible tubes, lead oxides, etc.

Table 4 - MATERIALS USED IN THE WHITE METAL PRODUCTS INDUSTRY, 1947 and 1948

Material		1947		1948	
		Quantity	Cost at works (*)	Quantity	Cost at works (*)
<u>Metals (other than scrap) -</u>					
Aluminum--Ingots--Primary or virgin	lb.	9,538,860	1,333,593	16,218,948	2,439,814
Secondary (from scrap)	lb.	157,673	17,782	171,719	27,030
Other forms	lb.	3,599,989	1,089,090	3,431,660	850,027
Antimony	lb.	1,896,712	605,550	1,401,260	488,136
Arsenic	lb.	37,454	3,224	30,927	3,431
Bismuth	lb.	40,205	78,442	30,512	61,253
Brass, all forms	lb.	50,282	6,472	82,165	23,008
Bronze, all forms	lb.	19,222	2,814	1,179	583
Cadmium	lb.	149,840	299,678	70,389	138,418
<u>Copper ingots and slabs -</u>					
Primary or virgin	lb.	1,296,189	228,013	211,740	45,159
Secondary (from scrap)	lb.	6,886	838	18,122	3,683
Die casting alloy	lb.	2,600,971	303,894	3,886,685	640,294
<u>Lead, pig -</u>					
Pure--Primary or virgin	lb.	49,785,442	5,702,823	51,385,807	8,794,950
Secondary (from scrap)	lb.	1,228,251	126,990	1,988,653	337,452
Antimonial--Primary	lb.	3,156,932	217,358	3,441,860	789,604
Secondary (from scrap) ...	lb.	964,575	103,145	1,652,559	263,130
Magnesium	lb.	174,510	44,067	382,684	96,391
Manganese metal	lb.	8,865	2,455	13,705	4,360
Nickel	lb.	442,378	141,480	732,843	256,702
Silicon metal	lb.	135,127	19,236	158,687	28,780
Silver, fine	Troy oz.	36,626	27,261	6,651	4,884
Tellurium	lb.	974	1,533	947	1,825
<u>Tin, pig -</u>					
Primary or virgin	lb.	2,951,081	2,123,884	3,444,385	3,055,470
Secondary (from scrap)	lb.	38,499	23,958	20,433	16,876
<u>Zinc slabs, bars and ingots -</u>					
Primary or virgin	lb.	13,387,118	1,415,126	18,283,675	2,701,332
Secondary (from scrap)	lb.	191,326	16,921	106,968	10,248
Other metals, except scrap but including alloys	lb.	2,511,179	485,239	...	584,557
<u>Scrap metals of all kinds -</u>					
Aluminum	lb.	9,078,558	850,783	8,602,318	1,006,547
Babbitt	lb.	3,007,731	408,287	3,237,777	586,924
Brass	lb.	2,878,313	268,950	7,359,004	803,461
Bronze	lb.	5,647,848	679,056	3,028,857	408,811
Copper	lb.	6,310,155	884,658	5,142,735	827,010
Lead--Battery plates and lugs	lb.	36,230,890	2,545,023	29,125,701	3,313,152
Dross	lb.	1,562,391	103,035	3,568,911	421,164
Other	lb.	17,687,778	1,398,635	20,434,027	2,504,946
Magnesium	lb.	1,048	314	7,706	571
Solder	lb.	1,089,621	243,803	1,326,301	426,018
Tin	lb.	75,528	25,830	150,161	93,139
Type metal	lb.	3,444,612	367,928	4,978,215	740,772
Zinc	lb.	1,002,699	54,890	1,340,515	108,893
Zinc dross	lb.	4,289,703	233,326	4,022,890	294,911
Other scrap, including scrap unspecified by kind .....	...	...	121,158	...	201,220
Shipping containers .....	...	...	54,595	...	107,875
All other materials .....	...	...	1,595,527	...	1,800,181
TOTAL .....	...	...	24,256,664	...	35,312,992

(*) Includes freight, duty, taxes, etc.

Table 5 - PRODUCTION OF BABBITT, SOLDERS, TYPE AND TYPE METAL, 1939-1948 (from All Industries)

Year	Babbitt Metal		Solders of All Kinds		Type and Type Metal	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	pounds	\$	pounds	\$	pounds	\$
1939	2,629,540	533,131	5,075,750	1,341,644	4,546,996	437,740
1940	3,214,694	847,791	6,460,679	1,716,359	4,342,916	415,531
1941	4,353,252	1,066,447	8,781,169	2,491,569	5,377,059	501,694
1942	4,182,882	1,104,772	7,624,770	1,842,640	4,150,069	447,079
1943	3,826,064	984,920	8,223,498	1,948,163	5,996,676	547,878
1944	4,100,724	847,005	8,447,480	2,004,955	5,118,068	515,737
1945	4,409,033	950,407	7,156,668	1,814,494	6,563,071	686,094
1946	5,077,738	1,386,295	7,475,951	2,102,508	6,565,831	727,537
1947	6,511,921	1,961,280	10,153,577	3,104,615	7,761,868	1,376,819
1948	5,496,104	1,840,169	10,480,048	4,511,761	8,601,466	1,824,902

Table 6 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1947 and 1948

Item	1947		1948	
	Quantity	Value	Quantity	Value
	\$	\$	\$	\$
Lead and its Products -				
Lead in pigs and blocks:				
United Kingdom	lb.	2,240	528	97,936
United States	lb.	11,873	3,105	18,430
Total Imports	lb.	14,113	3,633	116,366
Lead, old and scrap:				
Bermuda	lb.	...	...	8,000
Newfoundland	lb.	...	...	27,004
United States	lb.	4,175	322	1,227
Total Imports	lb.	4,175	322	36,231
Lead in bars and sheets:				
United States	lb.	14,389	3,715	8,211
Total Imports	lb.	14,389	3,715	8,211
Lead capsules for bottles:				
United Kingdom	lb.	...	...	26,124
France .....	...	...	295	610
Netherlands .....	...	...	1,706	11,289
Portugal .....	...	...	848	109
United States .....	...	...	3,915	...
Total Imports .....	...	...	6,764	1,097
Shot and bullets, lead -				
United Kingdom	lb.	378	170	884
United States	lb.	2,708	1,090	2,280
Total Imports	lb.	3,086	1,260	3,164
Manufactures of lead, n.o.p.:				
United Kingdom .....	...	...	20,465	...
United States .....	...	...	125,538	...
Other countries .....	...	...	3,158	...
Total Imports .....	...	...	149,161	225,106
Tin and its Products -				
Tin in blocks, pigs or bars:				
Belgium	cwt.	26,319	2,215,992	14,560
United Kingdom	cwt.	...	...	229
Straits Settlements	cwt.	57,792	4,143,243	57,313
Hong Kong	cwt.	...	...	775
Netherlands	cwt.	...	...	5,218
United States	cwt.	4,612	318,201	2,493
Total Imports	cwt.	88,723	6,677,436	80,588
				7,898,335

Table 6 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1947 and 1948 (Continued)

Item	1947		1948	
	Quantity	Value	Quantity	Value
<u>Tin and its Products (Concluded) -</u>				
Tinfoil:				
United Kingdom	lb.	2,510	3,249	...
United States	lb.	7,264	4,633	2,681 1,919
Total Imports	lb.	9,774	7,882	2,681 1,919
Collapsible tubes:				
United Kingdom .....	...	...	...	1,210
United States .....	...	...	133,987	34,804
France .....	...	...	228	226
Total Imports .....	...	...	134,215	36,240
<u>Zinc and its Products -</u>				
Zinc in blocks, pigs, bars and rods, and zinc plates, n.o.p.:				
United Kingdom	cwt.	...	...	156 2,928
United States	cwt.	1,218	24,195	169 4,397
Total Imports	cwt.	1,218	24,195	325 7,525
Zinc strip and sheets, and zinc plates for marine boilers:				
United Kingdom	cwt.	221	4,682	661 11,297
Belgium	cwt.	1,688	27,194	4,520 75,032
United States	cwt.	35,050	561,493	53,469 983,824
Total Imports	cwt.	36,959	593,369	58,650 1,070,153
Zinc dust:				
United States	cwt.	3,480	48,725	4,779 78,585
Total Imports	cwt.	3,480	48,725	4,779 78,585
Zinc slugs for discs, for the manufac- ture of seamless cups or shells for electric dry batteries:				
United States .....	...	...	176,166	...
Total Imports .....	...	...	176,166	...
Zinc, manufactures of, n.o.p.:				
United Kingdom .....	...	...	4,822	...
Belgium .....	...	...	4,018	...
France .....	...	...	...	150
Italy .....	...	...	1,712	...
Switzerland .....	...	...	760	...
United States .....	...	...	1,339,335	...
Total Imports .....	...	...	1,350,647	...
Alloys, n.o.p. -				
Babbitt metal in blocks, bars, plates and sheets:				
United Kingdom	cwt.	...	...	157 13,158
United States	cwt.	744	32,882	307 12,331
Total Imports	cwt.	744	32,882	464 25,489
Britannia metal, manufactures of, not plated -				
France .....	...	...	308	...
Italy	49
United Kingdom	19,223	...
United States	14,404	...
Total Imports	33,935	...
				20,165

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Table 6 - IMPORTS INTO CANADA OF LEAD, TIN AND ZINC AND THEIR PRODUCTS, 1947 and 1948 (Concluded)

Item	1947		1948	
	Quantity	Value	Quantity	Value
Alloys, n.o.p. (Concluded) -				
Chromium metal and tungsten metal, in lumps, powder, ingots, blocks or bars, and scrap of alloy metal containing chromium and tungsten, for alloying purposes:				
United Kingdom	lb.	17,920	41,176	129,953
United States	lb.	14,659	29,673	51,152
Total Imports	lb.	32,579	70,849	181,105
				\$
Metal alloy slugs, cast, with diamonds or diamond clips embedded therein, as for the mould, and metal alloy strip:				
United States .....	...	22,719	...	56,160
Total Imports .....	...	22,719	...	56,160
Phosphor tin and phosphor bronze, in blocks, bars, plates, sheets and wire:				
United Kingdom	lb.	234,852	94,670	340,082
Germany	lb.	...	...	11,710
United States	lb.	1,323,901	737,144	1,213,708
Total Imports	lb.	1,558,753	831,814	1,565,500
				\$
Alloys of copper:				
United Kingdom .....	...	...	4,599	...
United States .....	...	...	268,300	...
Total Imports .....	...	...	272,899	...
				\$
Alloys of magnesium:				
United Kingdom .....	...	...	2,922	...
United States .....	...	...	14,416	...
Total Imports .....	...	...	17,338	...
				\$
Type and Type Metal -				
Type metal, in blocks, bars, plates and sheets:				
United States	lb.	6,756	1,935	2,140
Total Imports	lb.	6,756	1,935	2,140
				\$
Type for printing, including chases, quoins and slugs of all kinds:				
United Kingdom .....	...	..	8,444	...
France .....	...	...	218	...
Netherlands .....	...	...	...	545
United States .....	...	...	151,559	...
Total Imports .....	...	...	160,221	...
				\$

Table 7 - EXPORTS FROM CANADA OF LEAD AND ZINC AND THEIR PRODUCTS, 1947 and 1948

Item	1947		1948	
	Quantity	Value	Quantity	Value
Lead in pigs, refined lead				
cwt.	2,499,309	29,098,727	2,075,243	32,758,514
Lead manufactures .....	...	244,520	...	361,745
Zinc spelter	cwt.	2,744,561	26,661,360	2,897,730
Zinc scrap, dross and ashes	cwt.	94,391	442,168	144,371
Zinc, manufactures of .....	...	172,465	...	159,232

Table 8 - EMPLOYEES, SALARIES AND WAGES IN THE WHITE METAL PRODUCTS INDUSTRY, BY PROVINCES, 1947 and 1948

Province	Average Number of Employees						Salaries	Wages	TOTAL SALARIES and WAGES
	On salaries		On wages		Total	\$			
	Male	Female	Male	Female		\$	\$	\$	\$
<u>1947</u>									
Quebec	137	50	591	14	792	500,040	1,159,126	1,659,166	
Ontario	255	103	1,402	438	2,198	1,076,239	3,065,194	4,141,433	
Manitoba	12	17	73	5	107	70,898	152,742	223,640	
British Columbia)									
CANADA	404	170	2,066	457	3,097	1,647,177	4,377,062	6,024,239	
<u>1948</u>									
Quebec	138	61	612	30	841	569,835	1,329,180	1,899,015	
Ontario	268	108	1,526	463	2,365	1,131,744	3,695,717	4,827,461	
Manitoba	10	19	79	5	113	78,366	177,093	255,459	
British Columbia)									
CANADA	416	188	2,217	498	3,319	1,779,945	5,201,990	6,981,935	

DIRECTORY OF FIRMS IN THE WHITE METAL PRODUCTS INDUSTRY, 1948

Name of Firm	Location of Plant
<u>Quebec -</u>	
Bel Art Metal Casting Reg'd.	1424 Pie IX Blvd., Montreal
Canada Metal Company Limited, The	6265 Notre Dame St. E., Montreal
Dominion Foils (Canada) Limited	466 Victoria Ave., Lachine
Dominion Foils (Canada) Limited	Cap de la Madeleine
Eagle Smelting & Refining Works Limited	1095 Wellington St., Montreal
Kay Metal Refining Works Reg'd.	301 Nazareth St., Montreal
Magnolia Metal Co. of Canada, Limited	2028 Manufacturers St., Montreal
Mayer Sealing Devices Reg'd.	11425 Cherrier St. E., Montreal
Montreal Die Casting Ltd.	378 Chambly Rd., Longueuil
Mount Royal Metal Co. Ltd.	1201 Mill St., Montreal
Ouellette, O. J., & Co.	270 Vitre St., Montreal
Richmond Machine Tool & Die Casting Co. Ltd.	299 Colborne St., Montreal
Riverside Smelting & Refining Works, Ltd.	639 Farm St., Montreal
Standard Metal Co. Ltd.	536 Dollard Ave., Ville La Salle
Steel Company of Canada, Limited, The	2320 Notre Dame St. W., Montreal
White Metal Casting & Plating Co.	2010 Cardinal, Montreal
<u>Ontario -</u>	
Barber Die Casting Co. Limited	Cor. Hillyard & Munroe Sts., Hamilton
Binkley, Theophile	145 Beverley St., Galt
Canada Foils Limited	7 Fraser Ave., Toronto
Canada Metal Co. Ltd., The	721 Eastern Ave., Toronto
Canadian Hanson & Van Winkle Co. Ltd.	15-25 Morrow Ave., Toronto
Dominion and Monarch Type Foundry	109 Ontario St., Toronto
Frankel Brothers, Limited	East Don Roadway, Toronto
General Smelting Company of Canada, Ltd.	Wilcox St., Hamilton
Hewitt Metals Corporation, Limited	1554 McDougall Ave. E., Windsor
Hildebrand, K.	420 Tuscarora St., Windsor
Kester Solder Company of Canada Limited	51 Bruce St., Brantford
Last Minute Mfg. Co. Ltd.	Wellington St. N., Thorold
Leader Die Casting Co.	24 Mercer St., Toronto
Light Alloys Limited	Hall St., Renfrew
Metals & Alloys Limited	Wicksteed Ave., Leaside, Toronto
Modern Containers Limited	95 Sterling Road, Toronto, and
	Bayview Road, Ottawa
Moore Type Foundry Limited	431 King St. W., Toronto

DIRECTORY OF FIRMS IN THE WHITE METAL PRODUCTS INDUSTRY, 1948
(Concluded)

Name of Firm	Location of Plant
<u>Ontario (Concluded) -</u>	
Newburg Die Castings	29A Birch Ave., Toronto
Pressure Castings of Canada Limited	67 Main St. S., Weston
Prince & Smith Type Foundry	442 King St. W., Toronto
Schultz Die Casting Co. of Canada Limited	Wallaceburg
Spooner Coppering Company Limited	John St., Port Hope
Sun Tube Corp. of Canada Ltd.	145 Spruce St., Ottawa
Toronto Refiners & Smelters Ltd.	28 Bathurst St., Toronto
Webster Bros. Limited	1161 King St., London
<u>Manitoba -</u>	
Canada Metal Company Limited, The	301 Chambers St., Winnipeg
Union Metal Company Limited, The	654 McGee St., Winnipeg
<u>British Columbia-</u>	
Atlas Smelting & Refining Co. Ltd.	321 East First Ave., Vancouver
Canada Metal Company Limited, The	1428 Granville St., Vancouver
Great Western Smelting Co. Ltd.	310 Prior St., Vancouver