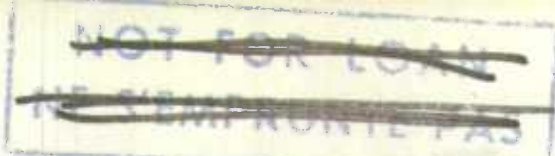
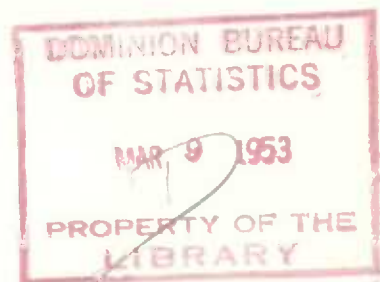


41-215

C.2



DOMINION BUREAU OF STATISTICS—DEPARTMENT OF TRADE AND COMMERCE
CANADA



THE WHITE METAL ALLOYS INDUSTRY

1951

Published by

Authority of the Rt. Hon. C. D. Howe
Minister of Trade and Commerce

Prepared in the Mining, Metallurgical and Chemical Section
Industry and Merchandising Division
Dominion Bureau of Statistics
Ottawa

NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 4 volumes, as follows: **Volume I**—The Primary Industries, including mining, forestry and fisheries; **Volume II**—Manufacturing; **Volume III**—Construction; **Volume IV**—Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

- I—General Review of the Manufacturing Industries, \$1.50.
- II—The Manufacturing Industries, by Provinces
 - Section 1. Principal Statistics of Major Industrial Groups and Leading Industries, 50¢.
 - Section 2. Principal Statistics of Individual Industries, 75¢.
 - Section 3. Principal Statistics by Regional Distribution, 75¢.
- III—Foods and Beverages
- IV—Tobacco and Tobacco Products
- V—Rubber Products
- VI—Leather Products
- VII—Textiles
- VIII—Wood and Paper Products
- IX—Printing Trades
- X—Iron and Steel Products
- XI—Transportation Equipment
- XII—Non-ferrous Metal Products
- XIII—Electrical Apparatus and Supplies
- XIV—Non-metallic Mineral Products
- XV—Products of Petroleum and Coal
- XVI—Chemicals and Allied Products
- XVII—Miscellaneous Manufactures

The present report belongs in Part XII, Non-ferrous Metal Products. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A—General Review, 25¢.
- B—The Aluminum Products Industry, 25¢.
- C—The Brass and Copper Products Industry, 25¢.
- D—The White Metal Alloys Industry, 25¢.
- E—The Jewellery and Silverware Industry, 25¢.
- F—The Non-ferrous Smelting and Refining Industry, 25¢.
- G—The Miscellaneous Non-ferrous Metal Products Industry, 25¢.

THE WHITE METAL ALLOYS INDUSTRY

1951

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 are carried on so it is not practicable to make a subdivision of the industry.

Fifty-one factories reported in this group in 1951, and the value of their output was \$66,023,915. This total represented an increase of 26.7 per cent over the 1950 value of \$52,100,390.

Of the total output during the year under review, 75 per cent came from the 31 plants in Ontario, 19 per cent from the 14 plants in Quebec, and 6 per cent from the 2 plants in Manitoba and 4 in British Columbia.

Employment was afforded to a total of 3,376 people, including 632 on salaries and 2,744 on wages. Salaries for the year amounted to \$2,601,252 and wages to \$6,911,090, a total of \$9,512,342. In the previous year the 3,557 workers were paid \$8,620,347.

Materials used in manufacturing, exclusive of fuel and electricity, cost \$46,540,009 delivered at the works. Included in these materials were 57,581 tons of scrap metals at \$18,457,622; 21,657 tons of pig lead at \$8,057,839; 2,008 tons of pig tin at \$5,991,909; 3,307 tons of aluminum at \$2,005,534; 16,336 tons of zinc spelter at \$6,607,428; and other metals at \$3,203,167.

Production included 34,619 tons of refined metals (recovered from scrap) valued at \$15,266,645; 5,933 tons of solders at \$7,403,406; 4,296 tons of type and type metal at \$2,377,489; 1,875 tons of babbitt metal at \$2,096,546; die castings at \$9,982,185; 2,327 tons of lead pipe at \$1,260,456; 2,547 tons of lead sheet at \$1,258,184; and other lines, such as metal foil, moulded shot, collapsible tubes, etc.

TABLE 1. Principal Statistics of the White Metal Alloys Industry, 1947-1951

Year	Number of plants	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	Net ¹ value of production
			\$	\$	\$	\$	\$
1947.....	47	3,097	6,024,239	530,573	24,256,664	37,435,177	12,647,940
1948.....	47	3,319	6,981,935	688,113	35,312,992	49,641,787	13,640,682
1949.....	47	3,428	7,843,173	704,742	30,643,550	45,478,527	14,130,235
1950.....	48	3,557	8,620,347	792,080	35,161,532	52,100,390	16,146,778
1951.....	51	3,376	9,512,342	809,230	46,540,009	66,023,915	18,674,676
Per cent change, 1951 from 1950	—	+ 5.1	+ 10.3	+ 2.2	+ 32.4	+ 26.7	+ 15.7

1. Gross value less cost of materials, fuel and electricity.

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 2. Principal Statistics, by Provinces, 1950 and 1951

Province	Number of plants	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
			\$	\$	\$	\$
1950						
Quebec.....	13	853	2,156,383	198,822	10,583,499	16,132,482
Ontario.....	30	2,599	6,210,604	558,491	22,423,623	33,184,287
Manitoba	2	105	253,360	34,767	2,154,410	2,783,621
British Columbia	3					
Canada.....	48	3,557	8,620,347	792,080	35,161,532	52,100,390
1951						
Quebec	14	418	1,145,266	77,946	9,833,940	12,676,873
Ontario	31	2,830	8,057,050	695,026	33,789,892	49,619,734
Manitoba	2	128	310,026	36,258	2,916,177	3,727,308
British Columbia	4					
Canada.....	51	3,376	9,512,342	809,230	46,540,009	66,023,915

TABLE 3. Products Made in the White Metal Alloys Industry, 1950 and 1951

Product	1950		1951	
	Quantity	Selling value	Quantity	Selling value
	lb.	\$	lb.	\$
Refined metals (reclaimed or remelted):				
Aluminum	8,586,345	1,944,070	14,272,931	3,990,365
Lead (antimonial)	35,239,957	5,546,320	36,446,781	7,307,013
Lead (common)	9,256,440	1,442,646	14,678,812	2,742,082
Tin	175,663	176,210	357,859	449,531
Zinc	3,636,786	516,552	3,481,638	777,654
Other metals	—	—	—	—
Alloys:				
Babbitt	3,962,250	1,511,442	3,750,738	2,096,546
Brass	4,061,860	852,649	6,922,018	2,166,618
Bronze	8,168,013	1,748,646	11,280,249	3,716,705
Copper alloys, not elsewhere specified	261,942	77,673	1,142,785	388,291
Lead alloys, not elsewhere specified	7,811,679	1,481,525	1,514,922	420,973
Solders	12,895,329	6,008,871	11,866,107	7,403,406
Tin alloys, not elsewhere specified	19,671	15,192	27,655	25,627
Type and type metal	9,129,748	2,157,457	8,592,650	2,377,489
Die casting alloys	11,302,349	2,048,611	16,462,162	3,766,654
Zinc alloys, not elsewhere specified	3,448,327	601,785	2,777,084	692,873
Other non-ferrous alloys	946,229	329,577	750,569	198,598
Castings:				
Die castings:				
Of aluminum-base alloy	1,337,650	1,146,636	1,331,998	1,397,734
Of zinc-base alloy	12,458,616	5,558,105	15,901,211	8,462,876
Of other metal base	—	118,092	173,979	121,575
Other castings:				
Brass and bronze	782,317	613,132	656,823	572,632
Lead	210,208	52,994	440,745	142,817
Other	—	619,096	—	889,078
Lead products:				
Pipe	4,875,037	1,076,552	4,654,227	1,260,456
Sheets	4,044,632	802,678	5,093,889	1,258,184
Traps and fittings	1,531,460	557,804	1,254,931	537,821
Miscellaneous, including bullet wire, shot, etc.	—	966,636	—	1,205,424
Scrap and dross	—	50,877	—	74,445
All other products ¹	—	14,082,562	—	11,580,448
Total	—	52,100,390	—	66,023,915

1. 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 Alloys Industry, 1950 and 1951

Material	1950		1951	
	Quantity	Cost at works ¹	Quantity	Cost at works ¹
		\$		\$
Metals (other than scrap):				
Aluminum:				
Ingots:				
Primary or virgin	lb. 23,543,789	3,908,311	2,182,743	615,003
Secondary (from scrap)	177,888	37,218	441,644	116,171
Other forms	2,888,965	883,154	3,989,027	1,274,360
Antimony	lb. 1,814,619	448,948	1,263,307	618,442
Arsenic	95,687	10,426	99,821	9,582
Bismuth	28,134	58,901	35,841	81,677
Brass, all forms	119,949	72,910	740,409	161,236
Bronze, all forms	7,340	2,099	4,288	2,379
Cadmium	66,468	115,223	68,393	135,527
Copper ingots and slabs:				
Primary or virgin	lb. 59,551	14,364	152,426	42,508
Secondary (from scrap)	158,200	26,362	247,244	51,737
Die casting alloys	lb. 4,265,960	651,052	2,746,064	605,726
Lead, pig:				
Pure:				
Primary or virgin	lb. 40,951,578	5,793,192	37,992,011	6,937,088
Secondary (from scrap)	1,952,446	278,239	1,616,723	276,793
Antimonial:				
Primary	lb. 1,730,802	243,349	2,949,361	709,707
Secondary (from scrap)	323,870	42,563	755,754	134,251
Magnesium	lb. 672,185	198,342	1,877,640	688,421
Manganese metal	5,863	2,397	20,746	5,289
Nickel	948,206	450,956	884,600	504,480
Silicon metal	32,116	6,257	51,587	10,255
Silver, fine	Troy oz. 7,936	6,709	11,592	11,626
Tellurium	lb. 962	1,549	672	1,344
Tin, pig:				
Primary or virgin	lb. 3,949,728	4,196,002	4,005,975	5,983,206
Secondary (from scrap)	16,464	14,495	10,416	8,703
Zinc slabs, bars and ingots:				
Primary or virgin	lb. 23,813,765	3,723,780	32,527,292	6,582,454
Secondary (from scrap)	472,888	37,075	144,553	24,974
Other metals, except scrap, but including alloys	—	151,553	—	272,938
Scrap metals of all kinds:				
Aluminum	lb. 10,568,936	1,699,478	15,735,796	2,920,722
Babbitt	2,461,386	713,130	2,224,169	536,691
Brass	3,066,723	400,647	4,851,093	954,804
Bronze	5,234,475	850,137	6,245,707	1,563,438
Copper	4,429,989	838,561	7,475,695	1,822,823
Lead:				
Battery plates and lugs	lb. 33,840,159	2,685,609	40,333,667	4,471,123
Dross	3,323,466	248,195	3,192,006	340,603
Other	12,175,275	1,497,559	13,837,598	2,207,051
Magnesium	lb. 33,933	3,823	6,691	520
Solder	1,541,179	541,334	1,279,164	455,814
Tin	161,680	124,216	77,096	83,776
Type metal	5,760,463	914,487	6,331,386	1,339,920
Zinc	987,795	79,346	2,114,225	287,175
Zinc dross	lb. 5,001,302	427,705	4,132,892	508,271
Other scrap, including scrap unspecified by kind	—	555,518	—	964,891
Shipping containers	—	109,962	—	189,662
All other materials	—	2,096,399	—	2,026,848
Total	—	35,161,532	—	46,540,009

1. Includes freight, duty, taxes, etc.

TABLE 5. Production of Babbitt, Solders, Type and Type Metal, 1942-1951 (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	\$
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
1949	3,630,232	1,278,156	9,473,573	4,412,506	7,812,131	1,768,434
1950	4,202,607	1,634,590	12,897,001	6,009,587	9,129,748	2,157,457
1951	4,061,472	2,287,717	11,873,951	7,409,623	8,592,650	2,377,489

TABLE 6. Imports of Lead, Tin and Zinc, and Their Products, 1950 and 1951

Item	1950		1951		
	Quantity	Value	Quantity	Value	
		\$		\$	
Lead and its products:					
Lead in pigs and blocks	lb.	2,473,080	294,935	1,454,286	356,777
Lead, old and scrap	"	502,329	48,042	10,525	2,061
Lead in bars and sheets	"	38,118	7,040	3,744	1,411
Lead pipe	—	—	—	—	—
Lead capsules for bottles	—	—	31,770	—	189,512
Shot and bullets, lead	lb.	6,671	1,873	4,328	1,935
Manufactures of lead, n.o.p.	—	—	211,175	—	192,858
Tin and its products:					
Tin in blocks, pigs or bars	cwt.	107,909	10,337,330	126,786	18,286,822
Tinfoil	lb.	34,543	16,872	7,541	12,157
Collapsible tubes	—	—	44,848	—	33,455
Zinc and its products:					
Zinc in blocks, pigs, bars and rods, and zinc plates, n.o.p.	cwt.	920	20,922	28,046	587,483
Zinc strip and sheets, and zinc plates for marine boilers	"	34,611	737,113	30,261	987,049
Zinc dust	"	4,147	72,871	4,444	121,993
Zinc slugs for discs, for the manufacture of seamless cups or shells for electric dry batteries	—	—	432,115	—	392,390
Zinc manufactures of, n.o.p.	—	—	2,093,945	—	1,890,267
Alloys, n.o.p.:					
Babbitt metal in blocks, bars, plates and sheets	cwt.	1,333	39,658	234	21,536
Britannia metal, manufactures of, not plated	—	—	21,613	—	27,080
Chromium metal and tungsten metal, in lumps, powder, ingots, blocks or bars, and scrap of alloy metal containing chromium and tungsten, for alloying purposes	lb.	26,702	59,411	82,537	140,388
Metal alloy slugs, cast, with diamonds or diamond clips embedded therein, as for the mould, and metal alloy strip	—	—	54,406	—	101,304
Phosphor tin and phosphor bronze, in blocks, bars, plates, sheets and wire	lb.	1,461,911	845,259	1,932,419	1,263,839
Alloys of copper	—	—	265,608	—	254,388
Alloys of magnesium	—	—	61,033	—	112,907
Type and type metal:					
Type metal, in blocks, bars, plates and sheets	lb.	400	126	—	—
Type for printing, including chases, quoins and slugs of all kinds	—	—	215,874	—	178,095

TABLE 7. Exports of Lead and Zinc and Their Products, 1950 and 1951

Item	1950		1951	
	Quantity	Value	Quantity	Value
		\$		\$
Lead in pigs, refined lead cwt.	2,303,358	32,241,459	2,114,722	38,123,412
Lead scrap cwt.	35,891	302,971	28,422	400,706
Lead pipe and tubing cwt.	1,913	33,188	1,400	33,638
Lead manufactures —	—	60,805	—	68,761
Zinc spelter cwt.	2,937,597	40,593,669	2,922,648	55,423,769
Zinc scrap, dross and ashes cwt.	101,702	716,610	90,199	1,091,970
Zinc, manufactures of —	—	183,160	—	781,175

TABLE 8. Employees and Their Earnings in the White Metal Alloys Industry, by Provinces, 1950 and 1951

Province	Number of employees					Earnings		
	Office and supervisory		Production workers		Total	Office and supervisory	Production workers	Total
	Male	Female	Male	Female				
1950						\$	\$	\$
Quebec	176	57	570	50	853	819,715	1,336,668	2,156,383
Ontario	334	142	1,633	490	2,599	1,649,588	4,561,016	6,210,604
Manitoba	11	17	71	6	105	74,835	178,525	253,360
British Columbia								
Canada	521	216	2,274	546	3,557	2,544,138	6,076,209	8,620,347
1951								
Quebec	92	22	290	14	418	437,731	707,535	1,145,266
Ontario	351	136	1,816	527	2,830	2,069,061	5,987,989	8,057,050
Manitoba	17	14	88	9	128	94,460	215,566	310,026
British Columbia								
Canada	460	172	2,194	550	3,376	2,601,252	6,911,090	9,512,342

Directory of Firms in the White Metal Alloys Industry, 1951

Name of firm	Location of plant
Quebec:	
Bel Art Metal Casting Reg'd	1424 Pie IX Blvd., Montreal
Canada Metal Company Limited, The	6265 Notre Dame St. E., Montreal
Eagle Smelting & Refining Works Limited	1095 Wellington St., Montreal
Industrie Leadco, Limitée	5889 Des Erables St., Montreal
Kay Metal Refining Works Reg'd.	301 Nazareth St., Montreal
Magnolia Metal Co. of Canada, Limited	2028 Manufacturers St., Montreal
Montreal Die Casting Ltd.	378 Chambly Rd., Longueuil
Montreal Materials Processing Co. Ltd.	5270 Arnoldi St., Montreal
Mount Royal Metal Co. Ltd.	1201 Mill St., Montreal
Ouellette, O. J., Co.	270 Vitre Est, Montreal
Richmond Machine Tool & Die Casting Co. Ltd.	622 Lagauchetière St. W., 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
Ontario:	
Barber Die Casting Co. Limited	Cor. Hillyard & Munroe Sts., Hamilton
Binkley, T., Die Casting Co.	145 Beverly 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
Canadian Magnesium Products Ltd.	Speedsville
Cohen, I., & Co. Ltd.	594 Montreal St., Kingston
Dominion Die Casting Ltd.	1355 Wallace St., Wallaceburg
Dominion Magnesium Limited	Haley
Frankel Brothers Corporation	East Don Roadway, Toronto
General Smelting Company of Canada, Ltd.	Wilcox St., Hamilton
Grenville Castings Limited	Merrickville
Hewitt Metals Corporation, Limited	1554 McDougall Ave. E., Windsor
Kester Solder Company of Canada Limited	51 Bruce St., Brantford
Lakeshore Die Casting Ltd.	Queen Elizabeth Highway, Oakville
Last Minute Mfg. Co. Ltd.	Wellington St. N., Thorold
Light Alloys Limited	Hall St., Renfrew
Lintet Metal Industries Limited	21 Argyle 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
Newburg Die Castings	29A Birch Ave., Toronto
Pressure Castings of Canada Limited	67 Main St. S., Weston
Prince & Smith Type Foundry	113 St. Patrick St., Toronto
Schultz Die Casting Co. of Canada Limited	Wallaceburg
Spooner Copperine Company Limited	John St., Port Hope
Standard Metal Products	505 Eastern Ave., Toronto
Sun Tube Corp. of Canada Ltd.	145 Spruce St., Ottawa
Toronto Refiners & Smelters Ltd.	28 Bathurst St., Toronto
White Metal Die Castings	112 Ossington Ave., Toronto
Manitoba:	
Canada Metal Company Limited, The	301 Chambers St., Winnipeg
Union Metal Company Limited, The	654 McGee St., Winnipeg
British Columbia:	
Atlas Smelting & Refining Co. Ltd.	321 East First Ave., Vancouver
Canada Metal Company Limited, The	1428 Granville St., Vancouver
General Metals Industries Ltd.	8726 Barnard St., Vancouver
Great Western Smelting Co. Ltd.	310 Prior St., Vancouver

STATISTICS CANADA LIBRARY
BIBLIOTHEQUE STATISTIQUE CANADA



1010699420