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CANADA

DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL BRANCH

THE

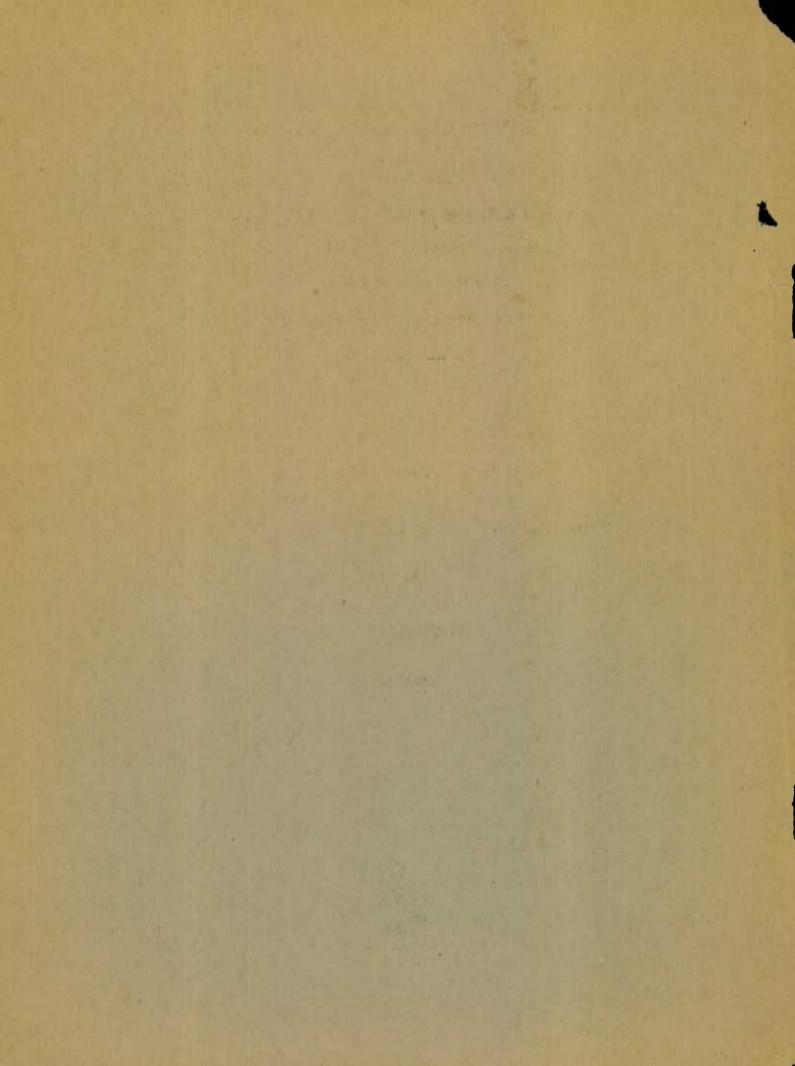
WHITE METAL ALLOYS INDUSTRY

IN

CANADA

1939





DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS MINING, METALLURGICAL AND CHEMICAL BRANCH OTTAWA - CANADA

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Annual Industry Report

Manufactures of the Non-Ferrous Metals Group

THE WHITE METAL ALLOYS INDUSTRY, 1939

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 and zinc, etc.; and (c) the manufacture of such articles as lead sheet, lead pipe, antimonial lead, collapsible tubes, slide fasteners, 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 practical to make any subdivision of the industry.

Thirty-five factories reported in this group in 1939 and the value of their output was \$8,937,165. This total was 16.7 per cent over the 1938 value of \$7,660,254 and was only slightly under the all-time high of \$9,011,283 in 1937.

Of the total output during the year under review, 73 per cent came from the 22 plants in Ontario, 21 per cent from the 9 plants in Quebec and 6 per cent from 2 plants in Manitoba and 2 in British Columbia.

Capital employed in these works at the end of 1939 amounted to \$7,936,725, of which 44 per cent represented the value of land, buildings, plant and equipment, 20 per cent represented the value of inventories and stocks in process and 36 per cent the total of cash, accounts receivable, etc. The investment in works in Ontario was \$6,209,881, in Quebec, \$1,328,318 and in other provinces, \$398,526.

Employment was afforded to a monthly average of 1,347 people, including 286 on salaries and 1,061 on wages. Salaries for the year amounted to \$553,370 and wages to \$1,032,812, a total of \$1,586,182. In the previous year, the 1,252 workers were paid \$1,434,089 in salaries and wages.

Materials used in manufacturing, exclusive of fuel and electricity, cost \$4,927,693 delivered at the works. Included in these materials were 16,436 tons of scrap metals at \$1,666,555; 6,790 tons of pig lead at \$446,021; 1,951 tons of pig iron at \$1,443,047; 858 tons of eluminium at \$311,295; 1,232 tons of zinc spelter at \$122,982 and 981 tons of other metals at \$396,460.

Production included 9,967 tons of refined metals (recovered from scrap) valued at \$1,539,319; 2,510 tons of solders at \$1,330,681; 2,273 tons of type and type metal at \$437,740; 1,312 tons of babbitt metal at \$530,630; 1,277 tons of zinc and zinc alloy castings at \$447,466; 1,416 tons of lead pipe at \$253,230; 1,179 tons of lead sheets at \$187,790 and other lines such as metal foil, slide fasteners, moulded shot, collapsible tubes, nickel-chrome tubing, etc.

Table 1 - PRINCI	PAL STA	FISTICS, 19	926 - 19:	39			
And the state of state of the s	THE STATE OF THE S				Cost of		Gross sell-
	Number	Capital	number	Salaries	fuel and	Cost of	ing value
Year	of	employed	of em-	and	electricity	materials	of products
			ployees	wages	at works	at works	at works
destination of representations and the destination of the section	and the same and the	\$	and the second second second second	\$	\$	\$	\$
		н				-	
1926	25	4,241,731	609	806,849	64,631	3,766,648	5,184,096
1927	25	4,295,256	602	702,298	90,420	3,854,979	5,3.49,092
1928	25	4,673,882	644	759,603	60,055	4,105,167	5,493,360
1929	28	5,988,685	755	929,295	98,958	4,757,366	6,466,168
1930	23	4,612,408	614	734,650	78,147	3,813,569	5,178,583
1931	23	4,507,307	532	679,631	72,185	2,330,652	4,137,600
1952	24	4,434,722	532	621,480	62,970	1,935,507	3,498,049
1988	29	4,842,077	680	765,075	69,275	2,501,790	4,236,751
1.934	31	4,847,914	790	840,698	78,141	3,138,319	5,227,047
1935	32	5,521,720	797	911,644	83,503	3,993,110	6,182,402
1936	35	5,882,190	894	1,017,732	99,860	4,356,439	6,905,041
1937	38	7,155,603	1,222	1,360,216	108,519	5,749,842	9,011,283
1938	35	7,197,855	1,252	1,434,089	109,787	4,506,881	7,660,254
1939	35	7,936,725	1,347	1,586,182	121,185	4,927,693	8,937,165
% Change 1939			HT U				
from 1.938	0.8 5	£ 10.3	\$ 7.6	£10.6	£ 10.4	1 9.3	£ 16.7

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 - PRIN	CIPAL S'	TATISTICS,	BY PROV.	INCES, 1938	and 1939		
			Average		Cost of		Gross sell-
	Number	Capital	number	Salaries	fuel and	Cost of	ing value
Year	of	employed	of em-	and	al.actricity	materials	of products
	plants		ployees	wages	at works	at works	at works
	Strae Colleges on, minchesser tenur.	\$	200000000000000000000000000000000000000	\$	8	\$	\$
1988							
Qинрас	11	1,325,669	157	202,631	18,307	1,321,261	1,780,964
Ontario	20	5,496,595	1,058	1,179,072	83,853	2,902,783	5,401,743
Manitoba	2)						
Bed to sh)	375,591	37	52,386	7,627	282,837	477,547
Golumbia	2)			regardetaproductor roll servicing split			
CANADA	35	7,197,855	1,252	1,434,089	109,787	4,506,881	7,660,254
			AND SHOW AND SHOW SHOW SHOW				
1939							
Quebec	9	1,328,318	152	209,417	17,056	1,195,911	1,883,544
Ontario	22	6,209,881	1,157	1,312,032	95,227	3,394,534	6,557,462
Mand toba	2)						
British)	398,526	38	64,733	8,902	337,248	496,159
Columbia	2)		2 - 24.0	and a production of the state o			
CANADA	35	7,936,725	1,347	1,586,182	1.21, 1.85	4,927,693	8,937,165
and are a large and a second and a second	Day Charles on Books, Str. (Broads		THE PARTY OF THE PARTY OF	-			and the state of t

Table 3 - CAPITAL EMPLOYED, 1938 and 1939							
Provinces	Present value of lands, buildings, machinery,	Inventory value of materials and finished products on hand, stock in process, fuel and	Operating capital (cash, bills and accounts	TOTAL CAPITAL EMPLOYED			
	tools, etc.	other supplies	receivable)	\$			
1938	Ψ	Ψ	*	-			
Quebec	591,909	294,176	439,584	1,325,669			
Ontario	2,524,703	1,079,867	1,892,025	5,496,595			
Manitoba) British Columbia)	179,748	99,818	96,025	375,591			
CANADA	3,296,360	1,473,861	2,427,634	7,197,855			
1939							
Quebec	574,012	285,451	468,855	1,328,318			
Ontario	2,725,053	1,171,886	2,312,942	6,209,881			
Manitoba) British Columbia)	174,482	119,141	104,903	398,526			
CANADA	3,473,547	1,576,478	2,886,700	7,936,725			
		-		The state of the s			

Table 4 - EMPLOYEES	The same of the sa	ARIES AN ERAGE NU	Company to the region of			S, 1938 an	d 1939	TOTAL
Provinces	On S	alaries	On W	ages	Total	Salaries	Wages	SALARIES
	Male	Female	Mele	Female		\$	\$	and WAGES
1 9 3 8 Quebec	42	8	106	1	157	106,043	96,588	202,631
Ontario)	116	72	615	255	1,058	336,587	842,485	1,179,072
British Columbia.)	9	6	22		37	26,026	26,360	52,386
CANADA	167	86	743	256	1,252	468,656	965,433	1,434,089
1 9 3 9 Quebec	37	9	105	1	152	104,009	105,408	209,417
Ontario	141	84	649	283	1,157	414,790	897,242	1,312,032
Manitoba) British Columbia.)	10	5	23	• • •	38	34,571	30,162	64,733
CANADA	188	98	777	284	1,347	553,370	1,032,812	1,586,182

Table 5 - SIZE OF ESTABLISHMENTS, ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES AND CAPITAL EMPLOYED, 1939

	Number of plants	Capital employed	Number of employees	Selling value of products at works
(a) PRODUCTION	Dianos	\$	Chip10, cob	\$
Under \$10.000	4	23,476	8	16,561
\$10.000 to \$25,000	5	156,073	27	74,730
\$25,001 to \$50,000	3	175,014	29	102,289
\$50,001 to \$100,000	5	328,754	54	390,610
100,000 to \$250,000	9	1,189,476	103	1,479,847
Over \$250,000	9	6,063,932	1,126	6,873,128
TOTAL	35	7,936,725	1,347	8,937,165

Table 5 - SIZE OF ESTABLISHMENTS, ACCORDING TO PRODUCTION, NUMBER OF EMPLOYEES AND

CAPITAL EMPLOYED, 1939 - (Concluded)								
	Number of plants	Capital employed	Number of employees	Selling value of products at works				
(b) EMPLOYEES		\$		\$				
1 or 2	4	54,283	7	27,098				
3 to 10	13	1,004,784	83	862,095				
11 to 20	9	842,241	116	1,392,433				
Over 20	9	6,035,417	1,141	6,655,539				
TOTAL	35	7,936,725	1,347	8,937,165				
(c) CAPITAL								
Under \$25,000	8	100,939	32	141,068				
\$25,001 to \$100,000	13	788,918	137	1,087,853				
\$100,001 to \$500,000	10	2,133,767	389	2,766,820				
Over \$500,000	4	4,913,101	789	4,941,424				
TOTAL	35	7,936,725	1,347	8,937,165				

Table 6 - WAGE-EARNERS,	BY MONTHS.	The state of the s		the last		
		CONTRACTOR OF THE PARTY OF THE	8		1 9 8	manufacture and the same and th
Months	Male	Female	TOTAL	Male	Female	TOTAL
January	753	218	971	770	247	1,017
February	747	238	985	745	242	987
March	744	232	976	714	248	962
April	752	231	983	717	243	960
May	739	231	970	716	248	964
June	729	252	981	750	264	1,014
July	734	247	981	765	262	1,027
August	741	276	1,017	797	287	1,084
September	753	295	1,048	831	318	1,149
October	755	308	1,063	838	339	1,177
November	758	285	1,043	873	352	1,225
December	738	241	979	853	358	1,211
AVERAGE	743	256	999	777	284	1.061

				of
normal empl	Loyment; o	vertime not included)		
Number of	Per cent	Regular hours	Number of	Per cent
wage-earners	of total	worked per week	wage-earners	of total
				0.0
11	0.9	51 - 54 hours	34	2.9
13	1.1	55 hours	158	13.5
202	17.2	56 - 64 hours	290	24.7
135	11.5	65 hours and over	33	2.8
40	3.4	Total	1,174	100.0
258	22.0	Total wages paid		
		in selected week	\$25,2	224
	normal emp. Number of wage-earners 11 13 202 135 40	normal employment; o Number of Per cent wage-earners of total 11 0.9 13 1.1 202 17.2 135 11.5 40 3.4	normal employment; overtime not included) Number of Per cent Regular hours wage-earners of total worked per week 11 0.9 51 - 54 hours 13 1.1 55 hours 202 17.2 56 - 64 hours 135 11.5 65 hours and over 40 3.4 Total 258 22.0 Total wages paid	wage-earners of total worked per week wage-earners 11 0.9 51 - 54 hours 34 13 1.1 55 hours 158 202 17.2 56 - 64 hours 290 135 11.5 65 hours and over 33 40 3.4 Total 1,174 258 22.0 Total wages paid

Table 8 - FUEL AND ELECTRIC	LITY USED	, 1938 a	nd 1939		GUIDE ER LU	
			1 9	3 8	1 9	Name and Address of the Owner, where the Publisher of the Owner, where the Owner, which is the Owner, which the Owner, which is
Kinds	Unit of	ı		Cost at		Cost at
	measur	е	Quantity	works	Quantit	
				\$		\$
Bituminous coal - Canadian	short to	on	800	4,833	66	1 4,851
Imported	short to	on	1,323	10,211	1,28	5 10,359
Anthracite coal	short to	on	101	1,245	11	9 1,490
Coke	short to	on	654	6,791	72	9 6,679
Gasoline	Imp.ga	1.	12,913	2,066	16,92	2 2,561
Kerosene	Imp.ga	1.	472	89	49	2 78
Fuel oil	Imp.ga	1.	244,152	19,682	325,69	25,696
Wood	Cord		36	253	5	3 350
Gas - Manufactured	M cu.ft.	0	24,859	9,028	30,49	9 9,882
Natural	M cu.ft.	•	11,556		10,97	2 6,105
Other fuel						
Electricity purchased	K. W. H		3,884,206	48,951	4,895,15	6 53,099
TOTAL	XXX			109,787		
	-					
Table 9 - POWER EQUIPMENT,	1938 and	1939				
Tame 0 - Tournt Doubling	1000 0110	1	9 3 8		1 9	3 9
		Number o	~	rated		Total rated
		units		power		horse power
Electric motors operated by chased power - In use In reserve		550 13		3 05 185	680 22	5,273 180
	0 0 0 0 0 0	563		490	702	5,453
		2		78	3	93
Boilers - In use In reserve or idl		î		65	1	65
In leseive of Iu.				00		
Table 10 - MATERIALS USED,	1938 and	1939				
		1 9	3 8	-	1 9	3 9
Materials			0 1	1		0 4 4
			Cost	E.T.		Cost at
		Quantity	Wor		Quantity	works_
		Quantity 1b.			Quantity 1b.	
			wor			works
METALS (other than scrap) -		lb.	WOF	ks	1b.	works \$
METALS (other than scrap) - Aluminium	-	1b. 1,272,70	word \$,751	1b. 1,516,717	works
METALS (other than scrap) - Aluminium		1b. 1,272,70: 514,02	wor \$ 2 288 7 68	,751 ,962	1b. 1,516,717 671,118	works \$ 311,295 70,855
METALS (other than scrap) - Aluminium		1b. 1,272,702 514,022 46,303	2 288 7 68 5 38	,751 ,962 ,333	1b. 1,516,717	works \$ 311,295
METALS (other than scrap) - Aluminium	-	1b. 1,272,70: 514,02 46,30: 51,01	2 288 7 68 5 38 7 6	,751 ,962 ,333 ,203	1b. 1,516,717 671,118 76,072 115,851	works \$ 311,295 70,855 49,722
METALS (other than scrap) - Aluminium	1	1b. 1,272,70. 514,02. 46,30. 51,01. 1,875,11.	2 288 7 68 5 38 7 6 6 505	,751 ,962 ,333 ,203 ,614	1b. 1,516,717 671,118 76,072	works \$ 311,295 70,855 49,722 13,340
METALS (other than scrap) - Aluminium	1	1b. 1,272,70. 514,02. 46,30. 51,01. 1,875,11. 228,93.	2 288 7 68 5 38 7 6 6 505 8 66	,751 ,962 ,333 ,203 ,614 ,292	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525	* 311,295 70,855 49,722 13,340 446,021
METALS (other than scrap) - Aluminium		1b. 1,272,70. 514,02. 46,30. 51,01. 1,875,11. 228,93. 52,00.	2 288 7 68 5 38 7 6 6 505 8 66 0 39	,751 ,962 ,333 ,203 ,614 ,292 ,270	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525 79,102	works \$ 311,295 70,855 49,722 13,340 446,021 67,657 56,800
METALS (other than scrap) - Aluminium Antimony, regulus Cadmium Copper ingots and slabs Lead, pig Nickel Nickel-chrome sheets Tin, pig		1b. 1,272,70: 514,02: 46,30: 51,01: 1,875,11: 228,93: 52,00: 2,756,32:	2 288 7 68 5 38 7 6 6 505 8 66 0 39 6 1,168	751 ,962 ,333 ,203 ,614 ,292 ,270 ,745	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525 79,102 2,902,169	works \$ 311,295 70,855 49,722 13,340 446,021 67,657 56,800 1,443,047
METALS (other than scrap) - Aluminium Antimony, regulus Cadmium Copper ingots and slabs Lead, pig Nickel Nickel-chrome sheets Tin, pig Tin plate	1	1b. 1,272,70: 514,02: 46,30: 51,01: 1,875,11: 228,93: 52,00: 2,756,32: 21,51:	word 2 288 7 68 5 38 7 6 6 505 8 66 0 39 6 1,168 0 3	751 ,962 ,333 ,203 ,614 ,292 ,270 ,745 ,105	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525 79,102 2,902,169 64,520	** 311,295 70,855 49,722 13,340 446,021 67,657 56,800 1,443,047 10,442
METALS (other than scrap) - Aluminium Antimony, regulus Cadmium Copper ingots and slabs Lead, pig Nickel Nickel-chrome sheets Tin, pig Tin plate Zinc spelter		1b. 1,272,70. 514,02. 46,30. 51,01. 1,875,11. 228,93. 52,00. 2,756,32. 21,51. 2,256,40.	word 2 288 7 68 5 38 7 6 6 505 8 66 0 39 6 1,168 0 3 114	751 962 ,333 ,203 ,614 ,292 ,270 ,745 ,105 ,763	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525 79,102 2,902,169 64,520 2,464,493	** 311,295 70,855 49,722 13,340 446,021 67,657 56,800 1,443,047 10,442 122,992
METALS (other than scrap) - Aluminium Antimony, regulus Cadmium Copper ingots and slabs Lead, pig Nickel Nickel-chrome sheets Tin, pig Tin plate		1b. 1,272,70: 514,02: 46,30: 51,01: 1,875,11: 228,93: 52,00: 2,756,32: 21,51:	#0r \$ 2 288 7 68 5 38 7 6 6 505 8 66 0 39 6 1,168 0 3 114 136	751 ,962 ,333 ,203 ,614 ,292 ,270 ,745 ,105	1b. 1,516,717 671,118 76,072 115,851 13,579,186 228,525 79,102 2,902,169 64,520	** 311,295 70,855 49,722 13,340 446,021 67,657 56,800 1,443,047 10,442

Table 10 - MATERIALS USED, 1938 and 1939 - (Concluded)

	1 9	3 8	1 9	3 9
Materials		Cost at		Cost at
epitical confirmation of the second state	Quanti ty	works	Quanti ty	works
SCRAP METALS -	lb.	\$	1b.	\$
Aluminium	1,630,334	211,922	2,539,707	322,987
Brass and bronze, all kinds	2,226,789	143,889	2,570,468	171,663
Copper, all kinds	2,162,192	145,280	2,411,785	184,371
Lead, battery plates	9,459,490	239,602	8,252,238	214,709
Lead, all other kinds	2,771,454	108,514	3,715,164	149,945
Zine, all kinds	627,551	15,304	771,921	18,982
Babbitt	1,371,027	169,481	1,479,824	176,519
Solder	63,993	7,388	135,510	17,703
Hn vaconomonomonomon	57,867	21,106	60,754	24,671
Type metal	1,454,266	64,322	1,107,082	58,455
Drosses	4,953,143	133,708	5,895,990	132,151
Other scrap, including scrap		1279146		
unspecified by kind	4,369,911	225,243	2,383,066	129,321
Shipping containers	0.0 4	26,903	0 0 0	31,934
All other materials	000	549,820		569,060
TOTAL		4,506,881	0 0 0	4,927,693

Table 11 - PRODUCTS MADE, 1938 and 1939

NOTE: Data given in this table cover only the production by firms which have been classified to this particular industry (see Directory), and do not necessarily represent the total output for Canada. The figure (1) indicates that the figures are incomplete and that production was also reported in other industries.

	1 9	3 8	1 9	3 9
Products	S	elling value	S	Selling value
	Quantity	at works	Quantity	at works
B. P. Changest P. C. C. Changest Land Control of the Control o	1b _o	\$	1b.	\$
Babbitt metal	2,229,444	455,742	2,623,562	530,630
Bars and ingots - Aluminium (1)	1,086,030		1,899,550	287,699
(from scrap) Brass, bronze and				
copper (1)	5,026,667	384,567	3,526,298	284,688
Lead - Antimonial.	7,644,802	377,937	9,671,387	480,471
Other	2,799,025	133,905	2,306,659	111,108
Tin	159,971	76,933	165,914	90,223
Zinc	2,382,531	104,516	2,364,909	85,130
Castings - Aluminium (1)	53,925	15,207	63,096	15,240
Brass and bronze (1)	318,678	83,116	824,665	290,490
Lead (1)	760,613	38,511	259,808	23,953
Zinc, including zinc base				
die castings (1)	1,703,657	370,280	2,553,598	447,466
Other, including nickel				
and cadmium anodes	725,890	185,620	391,990	209,598
Lead pipe	2,318,001	218,167	2,832,161	253,230
head sheets	2,521,575	200,848	2,358,555	187,790
Lead traps and fittings	610,018	115,192	714,018	126,874
Other lead products		53,129	121,697	91,567
Scrap sold	619,829	23,207	712,665	29,105
Solders	5,032,225	1,201,999	5,020,048	1,330,681
Type and type metal	3,635,344	355,636	4,546,996	437,740
Other products (x)	000	3,077,757	000	3,623,482
TOTAL	000	7,660,254	• • • •	8,937,165
(x) Includes date for foil, collapsit		lide fastener	s. dropped	and moulded

(x) Includes data for foil, collapsible tubes, slide fasteners, dropped and mould shot, chrome-nickel tubing, etc., which were reported by only one or two companies in this industry, and for which production figures cannot be shown separately. Table 12 - PRODUCTION OF BABBITT, SOLDERS, TYPE AND TYPE METAL, 1924 - 1959

	BABBITT	TYPE AND T	YPE METAL			
Years	Se	lling value	Se	alling value	Se	elling value
	Quantity	at works	Quantity	at Works	Quantity	at works
	Pounds	\$	Pounds	. \$	Pounds	\$
1924	3,086,741	869,007	1,979,797	625,642	1,381,426	278,705
1925	4,566,973	1,063,940	2,139,116	700,040	2,242,259	246,794
1926	4,999,541	1,185,209	2,549,567	888,001	2,491,084	294,652
1927	5,186,021	1,063,391	2,853,399	941,020	2,693,905	309,176
1928	5,485,375	1,089,616	3,361,987	851,395	2,475,724	253,619
1929	5,247,142	730,358	3,336,576	824,101	4,094,203	407,048
1930	4,361,533	609, 388	2,933,237	581,586	4,105,235	401,042
1931	2,011,315	432,506	2,235,221	398,378	3,065,283	274,485
1932	1,413,699	255,058	2,084,447	353,361	2,777,781	218,956
1933	1,485,915	320,472	2,244,210	498,362	2,999,017	230,576
1934	1,948,510	436,182	3,090,359	816,712	4,102,992	318,644
1935	2,418,522	558,991	3,944,727	1,011,679	4,346,228	385,991
1936	2,662,706	475,544	4,420,555	1,075,694	3,906,174	377,675
1937	2,905,351	641,880	5,789,677	1,618,209	4,166,091	407,819
1938	2,229,444	455,742	5,032,225	1,201,999	3,635,344	355,656
1939	2,623,562	530,630	5,020,048	1,330,681	4,546,996	437,740

Table 15 - IMPORTS INTO CANADA AND EXPORTS OF LEAD, TIN, ZINC AND THEIR PRODUCTS, 1938 and 1939

(n.o.p. means "not otherwise provided for")								
		1 9	3 8	1 9	3 9			
Items	and an alternative and a second as	Quanti ty	Value	Quantity	Value			
			\$		\$			
Imports -								
Lead, pig and block	lb.	56,416	3,235	12,666	1,437			
Lead, old and scrap	lb.			4,180	385			
Lead, bars and sheets	1b.	54,507	2,948	88,092	5,442			
Lead pipe	1b.	28,333	1,671	69,525	3,798			
Lead capsules for bottles		• • •	65,029	0 0 0	78,652			
Lead shot and bullets		9,023	634	11,726	974			
Manufactures of lead, n.o.p		000	67,228	0	80,338			
TOTAL LEAD AND ITS PRODUCTS			140,745	000	171,026			
Tin in blocks, pigs and bars	cwt.	52,752	2,205,449	58,257	2,833,089			
Tinfoil		19,092	6,593	38,520	12,153			
Collapsible tubes			45,484		64,523			
TOTAL TIN AND ITS PRODUCTS		000	2,257,526		2,909,745			
Zinc spelter	cwt.	27	201	12	96			
Zinc in blocks, pigs, bars and								
rods and zinc plates, n.o.p	cwt.	59	643	385	3,347			
Zinc strip and sheets, and zinc								
plates for marine boilers	cwt.	67,716	467,114	70,043	547,514			
Zinc dust	cwt.	13,739	70,294	13,019	80,571			
Zinc slugs or discs imported by								
manufacturers of electric								
storage batteries		0 0 0	20,582	0 0 0	60,252			
Zinc manufactures, n.o.p		000	206,948		283,127			
TOTAL ZINC AND ITS PRODUCTS		000	765,782	• • •	974,887			
Alloys, n.o.p								
Babbitt metal in blocks, bars,								
plates and sheets	cwt.	7,825	40,869	1,424	12,758			

Table 13 - IMPORTS INTO CANADA AND EXPORTS OF LEAD, TIN, ZINC AND THEIR PRODUCTS
1938 and 1939 - (Concluded)

(n.o.p. means "not otherwise provided for")						
Target of the state of the stat		1 9	3 8	1 9	3 9	
Items		Quantity	Value	Quenti ty	Value	
	TELL		\$		\$	
Imports (Concluded) -						
Alloys, n.o.p						
Britannia metal in blocks, pigs and		0.7	0.100	00	3 074	
bars	cwt.	63	2,192	60	1,974	
Britannia metal, manufactures of, not	anch		4 701		8,775	
platedtal and turnetten metal in	CWT.		4,761		0,110	
Chromium metal and tungsten metal in lumps, powder, ingots, blocks and						
bars, and scrap of alloy metal con-						
taining chromium and tungsten, when						
imported by manufacturers for use						
exclusively for alloying purposes					200	
in their own factories	lb.	43,527	30,328	55,428	50,769	
Metal alloy slugs, cast with diamonds						
or diamond chips embedded therein,						
of any size or shape, in condition as from the mould, and metal alloy						
strip containing not less than						
33 1/3 per cent by weight of nickel						
and 12 per cent by weight of chrom-						
ium, when for use in Canadian manu-						
factures, (from August 24, 1935)			57,279		77,743	
Phosphor tin and phosphor bronze, in						
blocks, bars, plates, sheets and	7 1.	50 F 000	150 177	740,691	235,420	
Yellow metal in bars, bolts and	TD.	595,098	100,101	140,031	200,420	
sheets, for use in the construction						
or repair of vessels	cwt.	105	1,581	73	1,617	
Copper alloys containing boron, for						
use exclusively as a flux or deoxi-			3 170		100	
dizer (from February 26, 1937)	0 0 0 3 m	000	159	000	406	
TOTAL OF ABOVE ALLOYS, N.O.P		• • •	295,306		389,462	
Type metal in blocks, bars, plates					9	
and sheets	lb.	540,959	20,746	647	72	
Type for printing, including chases,			EC 430		40 900	
quoins, and slugs of all kinds	• • •	000	56,416	***	48,280	
TOTAL TYPE AND TYPE METAL		***	77,162		48,352	
Make the same of t						
Exports -	cwt.	71,623	345,394	82,042	399,811	
Lead, metallic, contained in ore Lead in pigs, refined lead, etc	tons	154,932	8,637,797		9,450,265	
TOTAL LEAD AND ITS PRODUCTS			8,983,191		9,850,076	
Zinc contained in ore	cwt.	458,410	1,154,812	412,606		
Zinc spelter	tons	132,212	8,626,961		9,343,586	
Zinc dross and ashes	cwt.	23,641	34,235		51,741	
TOTAL ZINC AND ITS PRODUCTS		• • •	9,816,008		9,922,232	
the state of the s						

DIRECTORY OF FIRMS IN THE WHITE METAL ALLOYS INDUSTRY, 1939

DITE	Direction of filling in the white with Abboto industri, 1955						
Names of Firms QUEBEC -	Location of Plants	Main Products, 1939					
Atlas Metal and Alloys Co. of Canada, Ltd.	421 St. Henry St., Montreal	Babbitt; type and type metal.					
Canada Metal Co. Ltd.	6265 Notre Dame St. E., Montreal	Babbitt; solders; type and type metal; bars, ingots, castings, pipe, sheets, traps and fittings of lead; zinc base die castings.					
Eagle Smelting and Refining Works Ltd.	400 Richmond St., Montreal	Babbitt; solders; type and type metal; tin and zinc bars and ingots; lead castings.					
Liberty Smelting Works	269 Prince St., Montreal	Babbitt; solders, bars and ingots of brass, lead, copper, tin and zinc; die castings; type and type metal.					
Magnolia Metal Co. of Canada Ltd Mayer Sealing Devices Reg d.	2028 Manufacturers St., Montreal 2027 St. Timothee St., Montreal	Babbitt; solders; type and type metal. Lead seals.					
Mount Royal Metal Co. Ltd.	1201 Mill St., Montreal	Babbitt; solders; type and type metal; bars and ingots of lead and tin; lead and tin pipe; lead sheets, traps and fittings.					
Ouellette, O. J., & Co. Riverside Smelting and Refining Steel Co. of Canada Ltd.	270 Vitre E., Montreal 301 Nazareth St., Montreal 2320 Notre Dame St. W., Montreal	Type and type composition; lead headed nails. Babbitt; type metal; bars and ingots. Babbitt; dropped and moulded shot.					
ONTARIO -							
Addressograph-Multigraph of Canada Ltd.	349 Carlaw Ave., Toronto	Supplies for addressograph and multigraph machines.					
Canada Foils Ltd.	7 Fraser Ave., Toronto	Foils of lead, tin, aluminium, etc.					
Canada Metal Co. Ltd. and Hoyt Metal Co. of Canada Ltd.	721 Eastern Ave., Toronto	Babbitt; solders, type and type metal; bars and ingots of aluminium, brass, bronze, zinc, lead and tin; castings of aluminium, brass, bronze and lead; lead pipe, sheets, traps and fittings; alloys of lead, tin and antimony; copper cames; soldering paste; block tin pipe.					
Canadian Hanson and Van Winkle Co. Ltd.	15 Morrow Ave., Toronto	Anodes of cadmium, nickel and copper, cast- ings of bronze; castings of tin, zinc,					

brass and lead.

DIRECTORY OF FIRMS IN THE WHITE METAL ALLOYS INDUSTRY, 1939 - (Concluded)

Names of Firms

Hewitt Metals Corp. Ltd.

Location of Plants

Main Products, 1939

ONTARIO (Concluded) -Canadian Metal Forming Corp. Ltd. Dominion & Monarch Type Foundry Frankel Bros. Ltd. and National Metal Co. Ltd.

325 Devonshire Rd., Windsor 80 Nelson St., Toronto Don Road and Eastern Ave. Toronto

General Smelting Co. of Canada Ltd. Wilcox St., Hamilton 235 Hanna St. E., Windsor

Holland Metal Co.

Kester Solder Co. of Canada Ltd. Leader Die Casting Co. Lightning Fastener Co. Ltd. Metals and Alloys Ltd.

Modern Containers Ltd.

Moore Type Foundry Ltd. Newburg Die Castings Pressure Castings of Canada Ltd. Rahn Metals, Ltd. Schultz Die Casting Co. of Canada Wallaceburg Ltd. Spooner Copperine Co. Ltd.

MANITOBA -Canada Metal Co. Ltd.

Union Metal Co. Ltd.

BRITISH COLUMBIA -Canada Metal Co. Ltd.

Great Western Smelting Co. Ltd.

7 Boulton Ave. Toronto

51 Bruce St., Brantford 24 Mercar St., Toronto Niagara St., St. Catharines 1 Wiltshire Ave. Toronto

344 Queen St., Ottawa and 95 Sterling Road, Toronto 431 King St. W., Toronto 29A Birch Ave., Toronto 67 Main St., Weston, Ont. Regina St., North Bay

John St., Port Hope

301 Chambers St., Winnipeg

654 McGee St., Winnipeg

1428 Granville St., Vancouver

310 Prior St., Vancouver

Chrome-nickel tubing. Type and type metal.

Babbitt; solders; type and type metal; bars and ingots of lead, zinc, copper and tin: lead castings.

Bars and ingots of zinc and aluminium, Babbitt; solders; type and type metal; bars and

ingots of lead and tin. Solders; type and type metal; bars and ingots

of copper, lead, tin and zinc, Solders.

Zinc base die castings, Slide fasteners and component parts.

Babbitt; solders; bars and ingots of aluminium, brass, tin and zinc,

Collapsible tubes; moulded tube and bottle caps.

Type and type metal. Aluminium bronze die castings.

Zinc base die castings.

Babbitt; castings of bronze and aluminium; solders. Zinc base die castings.

Babbitt; solders.

Babbitt; solders; type and type metal; bars and ingots of lead, tin and zine; pipe and sheets of lead.

Babbitt; solders; type and type metal; bars and ingots of lead, tin and zinc; lead castings, lead sashweights.

Babbitt; solders; type and type metal; bars and ingots of lead and tin; pipe and sheets of lead; miscellaneous lead products and block tin pipe. Babbitt; type and type metal; bars of lead, brass and bronze.

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