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02



ALUMINUM ROLLING, CASTING AND EXTRUDING 1963

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ALUMINUM ROLLING, CASTING AND EXTRUDING 1963

Data presented in this report under the heading of Aluminum Rolling, Casting and Extruding reflect implementation of the revised Standard Industrial Classification (S.I.C.) and the New Establishment Concept which are being used by the Dominion Bureau of Statistics in its compilations of industry statistics—see items "Standard Industrial Classification" and "Establishment" in the Explanatory Notes section of this report.

For statistical purposes the industry titled Aluminum Rolling, Casting and Extruding in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing aluminum shapes, such as bars, rods, plates, sheets and castings. Pressure die casting of aluminum is included in the Metal Rolling, Casting and Extruding, n.e.s. industry and the extraction of aluminum from the ore is classified to the Smelting and Refining industry.

SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- p preliminary figures.
- revised figures.
- ${\bf x}$ confidential to meet secrecy requirements of the Statistics Act.

TABLE 1 A. Principal Statistics classified by Province, 1962 and 1963

				Man	ufacturing	activity					rotal acti	vity	
Year and	Estab-		oduction ated wor		Cost of	Cost of	Value of shipments			g owners artners		otal loyees	
province	ments	Number	Man- hours paid	Wages		materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Total value added
	No.		'000			\$'000				\$'000		\$'(000
1961		į		·						1			
Totals	43	3,738	7,921	16,324	2,090	76,751	110.456	34,106	4	15	5.095	23.403	34,052
1962				,					4. 4				
Newfoundland	_	_	_	_	_	_	_	_	_	_	_		
Prince Edward Island	_	_	_	_	_	_	_	_	_	_	7	-	1.1
Nova Scotia	_	_	_	_	_	_				_		_	_
New Brunswick	_	_	-		- L	-	-	_	_	_	_	_ !	-
Quebec	12	836	1,800	3,262	611	36,189	44,947	8,944	x	х	1,271	5,401	8,746
Ontario	22	2,708	5,608	12,240	1,490	52,847	70,527	14,545	х	х	3,588	17,271	14,629
Manitoba	1	h			200								
Saskatchewan	_	> 58	100	166	10	364	713	345	_	_	72	216	343
Alberta	2												
British Columbia	5	139	285	664	104	3,793	5,726	1,589	_	_	187	917	1,636
Yukon and Northwest Territories	_	_	_	_	_	-	_		_	_	_	_	_
Totals	42	3,741	7,794	16,331	2,215	93,193	121.912	25.424	11	62	5.118	23,805	25,354
		ill I		- 11									
1963													
Newfoundland	_	_	_	_	-	_	_	_	_	-	_	_	100
Prince Edward Island	_	_	_	_	_	-	_	_	_	_		-	
Nova Scotia	_	_	_	_	_	_	_	_	_	_	_		_
New Brunswick	_	_	_	_	_	_	_	_	_	_	_		
Quebec	12	788	1,789	3,422	610	37,201	47,211	9,412	3	9	1,207	6,029	9,349
Ontario	24	2,857	5,850	12,990	1,769	55,354	75,179	20,851	6	29	3,739	18,123	20,805
Manitoba	_	_	W		-	-	-	_	_	-	_	_	_
Saskatchewan	-	-		_	_	_	-	-	_	_	_	_	_
Alberta	3	15	30	53	3	101	184	81	_	_	21	74	80
British Columbia	5	148	288	717	110	5,050	6,701	1,557	-	_	197	997	1,571
Yukon and Northwest Territories	_	-	-	_	_	_	_		_	-	elements.	-	.cl
Totals	44	3,808	7,957	17,182	2,491	97,706	129,275	31,901	9	38	5,164	25,223	31.806

TABLE 1 B. Principal Statistics classified by Size Groups based on Shipments of Goods of Own Manufacture, 1962 and 1963

				Man	ufacturing	activity				7	Total acti	vity	
Size group	Estab-		oduction ated wor		Cost of	Cost of	Value of shipments of goods	Value		owners artners		otal oyees	Total
	ments	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
	No.	1	'000			\$'000				\$'000		\$'0	000
1962													
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 " 49,999 100,000 " 199,999 200,000 " 499,999 200,000 " 499,999 1,000,000 " 4,999,999 1,000,000 " 4,999,999 5,000,000 and over Head offices, sales offices and auxiliary units	3 5 3 3 3 8 7 3 3 3 7 · · · · 42	1 3 9 16 103 234 155 290 2,930	2 4 22 34 200 410 339 535 6,248	2 6 37 55 399 623 551 1,207 13,451	2 3 2 5 36 37 51 192 1,889	7 20 56 121 517 748 794 5,347 85,583	19 64 135 230 1,334 2,280 1,930 7,534 108,386	14 41 79 111 787 1,510 1,074 1,887 19,921	1 5 2 - 1 2 11	4 13 10 6 30 — —	2 4 11 21 119 278 194 396 4,093	5 9 46 69 488 851 783 1,784 19,771	144 41 78 110 856 1,510 1,077 1,859 19,807
1963													
Inder \$10,000	} 7	4	8	10	4	37	98	57	6	22	5	13	51
25,000 " 49,999 50,000 " 99,999 100,000 " 199,999 200,000 " 499,999 500,000 " 499,999 5,000,000 " 4,999,999 5,000,000 and over Head offices, sales offices and auxiliary units	3 6 8 5 5 3 7	16 26 99 108 216 324 3,015	31 52 204 216 502 552 6,391	47 99 348 343 781 1,193 14,360	3 7 27 20 78 183 2,170	26 233 600 649 1,497 5,094 89,571	113 409 1,334 1,445 3,141 8,102 114,634	90 167 718 674 1,583 2,873 25,738	2 1	10 6	19 37 121 149 261 403 4,169	55 149 474 474 1,054 1,655 21,350	90 172 707 673 1,571 2,842 25,694
Totals	44	3,808	7,957	17,182	2,491	97,706	129,275	31,901	9	38	5,164	25,223	31,806

TABLE 1 C. Principal Statistics classified by Size Groups based on Manufacturing Value Added, 1962 and 1963

				Man	ufacturing	activity				7	Total acti	vity	
Size group	Estab- lish-		oduction ated worl		Cost of	Cost of	Value of shipments of goods	Value	Working and pa			otal loyees	Total
	ments	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
1962	No.		'000		1	\$'000				\$'000		\$'0	000
1902													
Inder \$10,000	} 9	7	12	21	5	52	132	79	8	27	9	26	79
10,000 to \$ 24,999. 25,000 " 49,999. 50,000 " 99,999. 100,000 " 199,999. 200,000 " 499,999. 500,000 " 999,999.	5 4 8 6 4	22 42 151 299 405	50 95 273 581 781	79 189 488 896 1,857	6 16 33 73 192	152 274 590 1,195 23,595	316 600 1,695 3,249 26,551	165 312 1,084 1,976 2,828	1 2	6 30 —	29 46 182 363 548	102 207 636 1,279 2,692	165 312 1,152 1,980 2,601
1,000,000 " 4,999,999	} 6	2,815	6,002	12,801	1,889	67,335	89,369	18,980	_	_	3,941	18,862	18,866
Totals	42	3,741	7,794	16,331	2,215	93,193	121,912	25,424	11	62	5,118	23,805	25.354
1963													
Inder \$10,000	7 4 7 5 6 5	17 5 38 50 110 249	34 10 75 106 225 563	62 18 134 197 335 884	9 3 9 17 27 73	327 43 249 345 783 1,295	492 101 517 770 1,623 3,037	51 55 262 409 837 1,675	3 5 1	10 22 6 —	44 5 49 63 134 297	115 18 175 272 458 1,180	56 55 260 395 837 1,667
1,000,000 4,999,999 5,000,000 and over Head offices, sales offices and	} 10	3,339	6,944	15,553	2,353	94,685	122,736	28,611	_	_	4,572	23,006	30 50
auxiliary units		* * *				111							7.00
Totals	44	3,808	7,957	17,182	2,491	97,706	129,275	31,901	9	38	5.164	25,223	31,806

TABLE 1 D. Principal Statistics classified by Size Groups based on Total Value Added, 1962 and 1963

				Mani	ıfacturing	g activity				7	otal acti	vity	
Size group	Estab- lish- ments		oduction ated wor		Cost of	Cost of	Value of shipments of goods	Value		g owners artners		otal oyees	Total
	IIICII CO	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
	No.		'000			\$'000				\$'000		\$'(000
1962													
Under \$10,000] 9	7	12	21	5	52	132	79	8	27	9	26	79
25,000 " 49,999 50,000 " 99,999 100,000 " 199,999 200,000 " 499,999 500,000 " 999,999	5 4 8 6 4	22 42 151 299 405	50 95 273 581 781	79 189 488 896 1,857	6 16 33 73 192	152 274 590 1,195 23,595	316 600 1,695 3,249 26,551	165 312 1,084 1,976 2,828	1 2 —	6 30 —	29 46 182 363 548	102 207 636 1,279 2,692	165 312 1,152 1,980 2,801
1,000,000 " 4,999,999	} 6	2,815	6,002	12,801	1,889	67,335	89,369	18,980	-	_	3,941	18,862	18,866
Totals	42	3,741	7,794	16,331	2,215	93,193	121.912	25,424	11	62	5,118	23,805	25,354
1963													
Under \$10,000	6 5 8 4 6 6 5 3 7	15 7 42 46 110 249 293 3,046	30 14 83 96 225 563 619 6,325	56 24 149 182 335 884 1,489	8 3 12 14 27 73 106 2,247	274 95 309 285 783 1,295 25,452 69,213	430 164 635 651 1,623 3,037 28,111 94,625	42 65 317 354 837 1,675 2,583 26,029	1	10 22 6	41 8 56 56 134 297 364 4,208	102 31 209 237 458 1,180 2,015 20,991	40 71 302 353 837 1,667 2,558 25,979
Totals	44	3,808	7,957	17,182	2,491	97,706	129,275	31,901	9	38	5,164	25,223	31,808

TABLE 1 E. Principal Statistics classified by Size Groups based on Total Employed, 1962 and 1963

				Man	ufacturing	activity				7	Cotal acti	vity	
Size group	Estab- lish- ments		oduction ated wor		Cost of	Cost of	Value of shipments of goods	Value		g owners artners		otal loyees	Total
	1110-1100	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
	No.		'000		1	\$'000				\$'000		\$'(000
1962													
Under 5 employed	10 8 10 5 4	10 51 222 299 456 2,703	22 109 449 564 875 5,775	34 210 731 952 2,143 12,262	6 20 52 78 266 1,793	58 387 825 2,432 25,772 63,720	170 845 2,608 4,305 29,863 84,121	109 450 1,743 1,847 3,590 17,685	6 3 2	17 16 30 —	14 61 272 373 610 3,788	47 246 994 1,328 3,085 18,105	109 513 1,748 1,843 3,554
Totals	42	3,741	7,794	16,331	2,215	93,183	121,912	25,424	11	62	5,118	23.805	25,354
1963													
Under 5 employed	9 11 10 5 3	9 65 178 263 367 2,926	18 129 393 583 741	26 236 647 939 1,871	5 19 55 76 192	100 515 1,322 2,687 28,745	203 1,000 2,799 4,799 32,088	100 469 1,339 2,054 3,190	6 3	22 16 —	12 85 238 321 460	40 317 877 1,304 2,533	106 453 1,334 2,038 3,191
loo employed and over		2,920	6,093	13,461	2,145	64,338	88,385	24,749	-	7.1.1	4,048	20,152	24,683
Totals	44	3,808	7,957	17.182	2,491	97,706	129,275	31,901	9	38	5,164	25,223	31,806

TABLE 1 F. Principal Statistics classified by Type of Organization, 1962 and 1963

				Mani	ufacturing	activity				7	Total acti	vity	
Type of organization	Estab- lish- ments		oduction ated work		Cost of	Cost of	Value of shipments of goods	Value		g owners artners		otal loyees	Total
	ments	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	value added
1962	No.		'000			\$'000				\$'000		\$'(000
Individual ownerships	5	13	25	47	11	95	212	108	5	19	13	47	108
Partnerships	3	18	31	60	3	105	272	167	6	44	19	62	167
Incorporated companies	34	3,710	7,738	16,225	2,201	92,993	121,427	25,149	_	_	5,086	23,696	25,079
Cooperatives	_		_	_	_	_		_	_	_	1	_	-
Head offices, sales offices and auxiliary units	* * *												
Totals	42	3.741	7,794	16,331	2,215	93,193	121,912	25.424	11	62	5,118	23,805	25,354
1963													
Individual ownerships Partnerships	8	18	36	65	7	131	291	152	9	38	19	68	152
Incorporated companies	36	3,790	7,921	17,117	2,484	97,576	128,985	31,748	_	_	5,145	25,155	31,654
Cooperatives	_	_	-	_	_	_	_	_	_			_	_
Head offices, sales offices and auxiliary units										4 4 4		• • •	
Totals	44	3,808	7,957	17,182	2,491	97.706	129,275	31,901	9	38	5,164	25.223	31,806

TABLE 2. Industry Output, Input and Value Added, 1962 and 1963

	Manufact activit		Non-manufa activit		Tota activi	
	1962	1963	1962	1963	1962	1963
BG - 91 HI			\$'000			
Output						
1. Shipments and other revenue	121,912	129,275	900	527	122,812	129,802
Inventories—Goods of own manufacture:						
Add closing—Goods in process	4,370	5,595			4,370	5,595
Finished goods	5,940	7,633			5,940	7,633
Less opening—Goods in process	4,314	4,322			4,314	4,322
Finished goods	7,077	6,084			7,077	6,084
2. Net inventory change	(1,081)	2,822			(1,081)	2,822
3. Gross output (1 + 2)	120,831	132,097	900	527	121,731	132,624
Input						
4. Purchases of goods not of own manufacture		0 4 b	331	463	331	463
Inventories-Goods not of own manufacture:						
Add opening			256	58	256	58
Less closing			82	193	82	193
5. Cost of goods sold (not of own manufacture)			505	328	505	328
6. Materials, supplies, components and semi-processed goods	93,193	97,706	466	293	93,659	97,999
7. Fuel and electricity	2,215	2,491			2,215	2,491
8. Gross input (5 + 6 + 7)	95,408	100,197	971	621	96,379	100,818
Census value added (3-8)	25,424	31,901	(71)	(94)	25,354	31,806

TABLE 3. Employment and Payroll, 1962 and 1963

					Emple	oyees						Salar	ies and w	ages	
Year and		Product related				ninis-		iles nd		otal	Producti related w		Admin- istra-	Sales	Total
province	Manufa	acturing	0	ther	and	office	distri	bution	emp.	loyees	related w	orkers	tive and	and distri- bution	salarie and wages
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	office	oddon	wages
					num	ber			_				\$'000		
1962				1											
Newfoundland	_		_	_	_	_		_		_	_	_		_	
Prince Edward Island	_	_	_	_	_		_	_	_	_	_	_	_	_	
Nova Scotia	_	_	_	_	_	-	_	_	_	_	-	_	_	_	_
New Brunswick		_	_	_	_	_	_	_	_	_	_	_		_	_
Quebec	797	39	_	_	274	82	53	26	1,124	147	3,262	_	1,804	334	5,401
Ontario	2,580	128	_	_	627	198	42	13	3,249	339	12,240	_	4,776	256	17,271
Manitoba	1														
Saskatchewan	58	_	_	_	12	1	1	_	71	1	165	_	45	6	216
Alberta	J														
British Columbia	138	1	**********		36	12	_	_	174	13	664	_	253	_	917
Yukon and Northwest		1													
Territories			_	_	_			_				_			-
Totals	3,573	168			949	293	96	39	4,618	500	16,331	_	6,878	596	23,805
1963															
Newfoundland						1 _		_			_				
Prince Edward Island		_	_		_				_	-	_				
Nova Scotia	_	1 _ 1	_		_	_	_	_	_	_					
New Brunswick	_	_	_	_	_	_	_	_	_	_	_	_			
Quebec	757	31	_		264	63	60	32	1,081	126	3,422	_	2,063	544	6,029
Ontario	2,694	163			632	200	33	17	3,359	380	12,990	_	4,910	224	18,123
Manitoba	_		_	_	_	_	_		_	_		_		_	_
Saskatchewan	_	_			_	_	_	_	_				_		_
Alberta	15	_	_		4	2	_	_	19	2	53		21	_	74
British Columbia	147	1	_	1 -	37	12	_	_	184	13	717	_	280	_	997
Yukon and Northwest					_		H								
	3.612							49	4.642	521	17 102		7 272	700	25,223
Territories Totals	3,613	195	-	_	937	277	93	49	4.643	521	17,182	_	7.273	768	2

TABLE 3 A. Production and Related Workers,—Manufacturing Activity, by Months, 1962 and 1963

	Estal	olishments repor	ting monthly det	all
Month	1963	2	196	3
	Male	Female	Male	Female
		num	ber	
January	2,995	126	3,233	192
February	3,013	129	3,289	189
March	3,246	139	3,244	198
April	3,285	149	3,307	177
May	3,347	163	3,421	164
June	3,504	164	3,543	173
July	3,658	137	3,595	173
August	3,485	130	3,639	166
September	3,477	132	3,622	176
October	3,415	131	3,505	173
November	3,368	129	3,427	168
December	3,155	159	3,373	172
Average for establishments reporting monthly detail (collected only for large establishments)	3,331	140	3,434	177
Average for small establishments (only annual averages collected)	242	28	179	18
Average for all establishments	3,573	168	3,613	195

TABLE 4. Industry Inventories, 1963

		Manuf	acturing		Non- manufacturing	
Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	Total inventories
			book va	lue \$'000		
Opening:	2			1-		
Newfoundland	_	_			-	
Prince Edward Island		properties.	_			
Nova Scotia	_		_		_	_
New Brunswick			_			
Quebec	1,477	2,273	1.699	5,448		5.448
Ontario	9,406	2,015	4,068	15,489	33	15,521
Manitoba						,
Saskatchewan		_	_			
Alberta	_	_	12	12	****	15
British Columbia	632	34	305	972	26	997
Yukon and Northwest Territories		_	_	energies .		
Totals	11,516	4,322	6,084	21,921	58	21,979
Closing:						
Newfoundland	_	_	_	_	_	
Prince Edward Island		_	_	_	_	100
Nova Scotia		_	_	_		
New Brunswick		_	_	_	_	- 11
Quebec	1,860	2,088	1,895	5,844	_	5,844
Ontario	7,860	3,456	5,422	16,737	172	16,909
Manitoba	_	_			-	_
Saskatchewan	-	_	_		_	
Alberta	24	~	12	36		36
British Columbia	640	51	303	994	21	1,015
Yukon and Northwest Territories	_	_	_	_	_	
Totals	10,383	5,595	7.633	23,611	193	23,804

TABLE 5. Purchased Fuel and Electricity Used in Manufacturing Activity, 1962 and 1963

Description		1962		1963	
Description	-	Quantity	Cost	Quantity	Cost
Large establishments which reported commodity detail: Bituminous coal:			\$'000	_,,,,,	\$'000
(a) From Canadian mines	ton		_	10	
(b) Imported	46	2,910	34	_	
Sub-bituminous coal (from Alberta mines only)	66	_ [_	_	_
Anthracite coal	26	-	_	_	_
Lignite coal	44	_			_
Coke	44	_	_		
Gasoline (including gasoline used in cars and trucks)	Imp. gal,	77,712	19	101,147	30
Fuel oil including kerosene or coal oil	44	7,429,097	716	7,090,435	821
Wood Gas:	cord	_	-	_	-
(a) Liquefied petroleum gases	Imp. gal.	394,692	59	299,446	42
(b) Other manufactured gas	M cu. ft.			_	_
(c) Natural gas	94	244,969	218	302,416	304
Other fuel	1	_	-	_	_
Electricity purchased	kwh.	158,416,622	1,116	177.402,276	1,258
Steam purchased		provider (
Estimate for small establishments: . Fuel and electricity		No.	58	***	36
All establishments Total fuel and electricity used			2,215		2.491

TABLE 6. Materials and Supplies - Manufacturing Activity, 1962 and 1963

Description	1962		1963	
	Quantity	Cost	Quantity	Cost
	lbs.	\$'000	lbs.	\$'000
1. Materials used:				
Aluminum: Ingots (includes wire bar and re-roll sheet stock) Scrap Sheets and strip Other	308, 551, 697 7, 906, 725 3, 351, 335 180, 942	77,942 1,600 1,671 63	321, 105, 340 17, 837, 218 3, 400, 127 2, 480, 197	81,047 3,405 1,695 930
Brass and bronze	29,092	11	42, 100	17
Copper	347,53t	106	413, 968	131
Magnesium	1,442,305	529	1, 131, 262	370
Zinc	95,085	14	59, 234	8
Other non-ferrous metals		188		902
Stainless steel		189		8
Steel (except alloy steel): Plates, sheets and strip Other forms	9 0 0 0 1 0	2, 330 3, 799	* 4 *	6 154
All other materials and components used ¹		3, 199	4 4 4	3,474
2. Containers and other packaging materials and supplies used		1,146		1,220
3. Operating, maintenance and repair supplies used (excluding fuel)	4 6 4	3, 237		3,797
4. Amount paid out to others for work done on materials owned by establishments		363		540
Totals		93, 193		97,706

¹ No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated cost were \$1,039,000 in 1962 and \$901,023 in 1963.

TABLE 7. Shipments of Goods of Own Manufacture, 1962 and 1963

	1962		1963	
Description	Quantity	Value	Quantity	Value
	lbs.	\$*000	lbs.	\$'000
l. Products:				
Castings, aluminum (except die castings)	6, 272, 274	5,004	7, 502, 597	5, 140
Castings, other (brass, bronze magnesium, etc.) (except die castings)	839,550	1,027	818, 224	1,070
Extruded shapes, alumiumn	49, 706, 329	24, 243	54, 387, 493	25, 578
Foil, aluminum	28, 912, 615	15,010	31,470,048	16,423
All other products		76, 411		80, 808
2. Amount received in payment for work done on materials and products owned by others	* * *	358		275
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above	* * 4	(142)		(19
Net adjustment for establishments receiving progress payments	***			
Total adjusted value of shipments and work done		121, 912	444	129,276

TABLE 8. Shipments of Selected Goods of Own Manufacture - All Industries, 1959 to 1963 (Includes shipments from other Industries which manufacture, as a secondary activity, the commodities listed)

A. Aluminum Castings and Aluminum Die Castings

Year	Aluminum castings1		Aluminum die castings¹	
	Quantity	Value	Quantity	Value
	ibs.	\$'000	lbs.	\$'000
1969	9,209,000	7,047	3,749,000	2,442
540	9,349,000	7,086	3,918,000	2,699
M1,	8,762,000	7,063	3,737,000	2,651
062	9,111,000	7,974	8,098,000	5,302
063	10,674,000	7,996	10,128,000	6,086

See footnote at end of table.

TABLE 8. Shipments of Selected Goods of Own Manufacture - All Industries 1959 to 1963 - Concluded B. Specified Aluminum Products

Year	Extruded sh	Aluminum foil	
	Quantity	Value	Value
THE ACUSE OF THE PARTY OF THE P	lbs.	\$'000	
1959	41,857,477	21,871	11, 277
1960	35, 668, 877	18, 847	13, 226
1961	43,003,769	21,958	13, 392
1962	51, 578, 329	25, 156	15,010
1963	58, 795, 741	27, 108	16, 423

¹ Reported for sale as such, does not include castings produced for own use or castings reported under other commodity headings such as hardware, parts etc.

List of Establishments classified to This Industry, 1963

(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Name	Location
e A	
webec:	
	Arvida
Aluminum Co. of Canada Limited	
Cercast Inc.	
Custom-Aire Aluminum Limited	
Decelles, Georges	3545, 53rd Ave., Pointe-aux-Trembles
Fonderle Laliberté, Enr.	
Giard, Léonard	
Modern Aluminum Products Co.	1520 Notre-Dame St., Montreal 3
Precision Mastercrafts Ltd.	
Reynolds Aluminum Co. of Canada Ltd.	Cap-de-la-Madelelne
Reynolds Extrusion Sales Co, Ltd.	
Supreme Precision Castings Ltd.	
Ontario:	
Alumaloy Castings Limited	
Aluminum Co. of Canada Limited	15 Browns Line, Toronto 14
Aluminum Co. of Canada Limited	Princess St., Kingston
Aluminum Star Products	
Canada Foiis Limited	
Canadian Mouldings Ltd.	
City Foundry Co.	
Coles. J., Aluminum Foundry	114 Sinnott Rd., Scarborough 6 i Arrow Rd., Weston
Custom-Aire Aluminum Limited	
Custom Aluminum Foundry	
Drummond, T.A., Metal Products Ltd. Dunbar Aluminum Foundry Ltd.	
Fulton Aluminum Foundry	77 Fulton St. Brantford
Harrington Aluminum Foundry Ltd.	
Industrial Fine Castings Ltd.	272 Geary Ave., Toronto 4
Precision Castings Ltd.	
Queen East Foundry	96 Gould St., Toronto 2
Ramsden Manufacturing Ltd.	130 Oakland Ave., London
Regal Die Casting Co. Ltd.	107 Kennedy Rd., Brampton
Reynolds Extrusion Co. Ltd.	
Reynolds Extrusion Co. Ltd.	5 Crockford Blvd., Scarborough
Robertson, Joseph, Foundries Ltd.	
Supreme Castings and Mfg. Co.	
Wallaceburg Aluminum Extrusions Ltd.	905 James St., Wanaceburg
Alberta:	FOOE TAIN CHILDRE
Albronze Foundry Ltd.	5325—1 A St. S.W., Calgary
American Brass and Aluminum Foundry Ltd.	
Custom-Aire Aluminum Ltd.	3606 Bonnybrook Rd., Catgary
British Columbia:	
	120 Vulcan Way, Richmond
Aluminum Co. of Canada Limited Bird Aluminum Foundry Ltd.	
	The second secon
Globe Foundry Ltd. Northrop Architectural Systems Ltd.	1421 East Pender St., Vancouver 6
Pacific Aluminum Foundry Ltd	1421 East Pender St., Vancouver 6 1236 E. Pender St., Vancouver 6
Pacific Aluminum Foundry Ltd.	1236 E. Pender St., Vangouver 6

CONCEPTS AND DEFINITIONS

Census of Manufactures

General

The Census of Manufactures is an annual mail survey covering Canada's Manufacturing Industries. It is based on the Standard Classification of Industries and full details concerning the system may be found in the Standard Industrial Classification manual. Catalogue No. 12-501 which is available from the Queen's Printer or the Dominion Bureau of Statistics. In summary, the Classification as it relates to the manufacturing industries provides for a breakdown into 140 industries arranged in 20 major industry groups. Of the 140 (3 digit) industries, 18 are further broken down into 58 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 178 separate industries. They cannot all be published separately by province, however, because of the confidential nature of the data in certain provinces.

The reporting unit for the Census is designated as the **establishment** (see definition of "Establishment" in following section) and a return is requested from every establishment classified to a manufacturing industry. Although respondents are required to submit reports covering the calendar year, financial year reports other than the calendar year are accepted in instances where respondents find it impossible to supply calendar year data from accounting records. When an establishment is operated for only part of a year a report is required covering the period of operation.

There are four different questionnaires used in the Census of Manufactures; (a) short form (b) long form (c) head office questionnaire and (d) commodity questionnaire. The short and long forms are used to obtain principal statistics and commodities shipped from establishments classified to manufacturing industries and differ only in the amount of detail requested. The short form is a single-sheet questionnaire sent to small manufacturers generally reporting shipments of less than \$100,000; this cut-off, however, varies somewhat between industries. The head office questionnaire is generally used for company head offices and/or auxiliary units separately located from the manufacturing establishment(s), (see following notes on Head offices and auxiliary units). The Commodity questionnaire is used to survey certain establishments which are coded (on the basis of their principal activity) to industries other than manufacturing in the Standard Industrial Classification system, but which undertake some manufacturing as a subsidiary activity. This single-sheet questionnaire is designed to collect information on the quantity and value of goods of own manufacture shipped by such establishments in order to achieve full coverage of domestically manufactured commodities (see the following note under Shipments).

The results of the Census are presented in some 140 publications. In addition to these annual industry publications there are annual summary reports for Canada and the provinces and special reports giving principal statistics by detailed geographic areas, by type of ownership and size of establishment. A special annual report covering the shipments of all manufactured commodities arranged in alphabetical order is also published.

Since 1960 the following major changes have been implemented in the Census of Manufactures: (a) a revised Standard Industrial Classification (b) a new establishment definition and (c) an extension of the establishment definition to cover the non-manufacturing activities of manufacturing establishments. The statistics presented in the various 1963 reports reflect the complete implementation of these changes and enable comparisons to be made with the years 1961 and 1962. For a complete description of the procedures followed in establishing the revised series, reference should be made to the Explanatory Notes included in the 1960, 1961 and 1962 industry publications. The statistical framework within which the Census of Manufactures is now carried out is based on the following concepts and definitions which have been developed as part of a general programme to achieve a fully integrated system of economic statistics.

Establishment

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. The majority of such establishments are firms but many firms have more than one establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements embodied in the following definition of the "establishment":

"The smallest unit which is a separate operating entity capable of reporting the following principal statistics:

Materials and supplies used
Goods purchased for resale as such
Fuel and power consumed
Number of employees and salaries and wages
Man-hours worked and paid
Inventories
Shipments or sales."

Each establishment is required to report on all the activities carried out within it's accounting boundaries (except income from investments such as rent, interest and dividends) and data on the different activities (manufacturing, trading in goods not of own manufacture, construction by own labour force, revenue from services, etc.) are requested to be reported separately. It should be noted that the statistics for separate activities are not completely consistent since some respondents cannot distinguish, in their records, materials, shipments and inventories relating solely to their own manufacturing activities. For example, inventory of goods purchased for re-sale may not be distinguishable from inventory of own manufactured goods. Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level and for studies or statistical measures requiring accurate coordinated data, the "total" statistics should be used.

The number of establishments represents the number of operating units that are principally engaged in the activities of the manufacturing industries to which they have been classified. These units do not necessarily represent the total number engaged in the production of a commodity mainly produced in a certain industry. Some commodities are produced as secondary products in other manufacturing and non-manufacturing industries. It should be noted that head offices and auxiliary units which are surveyed separately are not included in the establishment count, (see following notes on head offices and auxiliary units).

Head Offices and Auxiliary Units

All head offices and auxiliary units of companies classified to the manufacturing industries such as sales offices, administrative offices, warehouses, laboratories, etc. are now surveyed as part of the Census of Manufactures.

These head offices and auxiliary units are either included in an establishment report or are surveyed by means of the head office questionnaire. The former is the most common case where a single establishment firm has its executive personnel, sales office, etc. located at the site of the manufacturing plant (establishment). The special head office questionnaire is generally used where a firm, regardless of the number of establishments, has separately located offices or auxiliary units. Such offices or units do not constitute establishments within the Census of Manufactures as they do not normally generate operational revenues, but give rise only to costs of operations (mainly salaries and wages) which are automatically included in the value of shipments or sales. Although not considered as establishments, and hence, not included in the "establishment" count for an industry, the operational costs are reflected in either the "Industry" statistics (3 or 4 digit level) or the "Major group" statistics (2 digit level) according to the following rules:

- (a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;
- (b) In the case of multi-establishment firms, the statistics for such offices and units are coded to the same industry as the establishments of the

firm, when all establishments are in the same industry (3 or 4 digit). When establishments of such firms are coded (1) to different industries within a major group, (2) to industries in different major groups or (3) to industries in different divisions of the Standard Industrial Classification, then the statistics are included in the major group totals (2 digit level) in which the major part of the company's operations are classified. Although this may result in some distortion of major group statistics in the case of (2) and (3) the statistics at the industry (3 or 4 digit) level in all cases will be left free of these company-wide data.

Employees

(a) Production and related workers — Manufacturing activity

In addition to those engaged in production and assembling activities, they include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. Production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual fulltime employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

(b) Production and related workers - Non-manufacturing activities

Such employees include those on manufacturing establishments' payrolls engaged in activities such as construction undertaken for the use of these establishments, some outside piece-workers employed in certain industries, logging employees who are reported as part of a sawmllling establishment and any other production workers who are not engaged in manufacturing-type operations.

(c) Administrative and office employees

This category includes all executive and supervisory officials such as presidents, vice-presidents, comptrollers, secretaries, treasurers.

etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the line supervisor or working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical, etc. It should be noted that prior to 1961 this category also included working owners and partners. Also included in this category are employees located at head offices or auxiliary units separately located from the establishment; these are generally included in the figures for the province in which they are located according to the rules outlined under "Head offices and auxiliary units" above.

(d) Sales and distribution workers

This category includes office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truckdrivers and their helpers, etc. It may also include some sales employees who are reported as part of a manufacturing establishment but are not working at the establishment's location. These are generally broken down by province in cases where more than 15 employees are involved in any one province. The figures exclude persons working on a commission basis who are not considered regular employees of the establishment.

(e) Total Employees

This total comprises the foregoing categories including employees located at separately located head offices and auxiliary units. The numbers of employees included under categories (b), (c) and (d) are reported in the form of annual averages and represent as closely as possible full time employment; adjustments are made when reported figures indicate the existence of part time or seasonal employment. In all the above categories, figures on employment refer to the calendar year whether or not other establishment statistics can only be reported on a fiscal year other than the calendar year.

Working Owners or Partners

These are not now included in the statistics of employees and salaries and wages. There is some duplication in numbers when a person owns more than one establishment and is reported as a working owner on each Census return. Withdrawals of working owners defined as amounts withdrawn by owners or partners for normal living expenses excluding withdrawals for payment of income tax.

Salaries and Wages

Salaries and wages refer to gross earnings of employees before deductions for income tax and employees contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages, bonuses, profits shared with employees, the value of room and board where provided, commissions paid to regular employees only) as well as any

other allowance forming part of the worker's earnings. Payments for over-time are included. Figures on salaries and wages refer to the calendar year.

Fuel and Electricity

Figures for fuel refer to amounts actually used (including fuel used in cars, trucks, locomotives, etc.), not to purchases unless the quantities are substantially the same. Any fuel and electricity produced by establishments for internal consumption are not included in the total cost. Values represent laid down cost at the establishment including freight, duty, etc. Although fuel and electricity used is considered part of manufacturing activity it should be noted that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.

Materials and Supplies

(a) Manufacturing activities

Figures represent quantities and laid down cost values, at the establishment, of materials, supplies and purchased components owned and used during the year in manufacturing activities and related processes. These statistics represent only commodity items or physical goods (cost of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Included are maintenance and repair supplies not chargeable to fixed assets accounts and any amounts charged by other establishments for work done on materials owned by the reporting establishment. Cost of repairs or maintenance done by outside contractors and cost of returnable containers are not included.

(b) Non-manufacturing activities

1. Purchases for re-sale as such

Figures represent cost of materials or products purchased from others by the reporting establishment (or received as transfers from other establishments of the reporting company) for re-sale as such in the same condition as purchased. Included are any finished products received on consignment from other countries.

2. Other materials and supplies used

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of purchased machinery and equipment. Also included is the cost of office supplies not chargeable to

fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

Shipments

(a) General

The figures represent revenue from all production, sales, services and related activities of reporting establishments with shipments valued in Canadian dollars at the point at which the establishment relinquishes control. The unsold portion at year end of consignment shipments in Canada is treated as inventory and not as shipments but all shipments to foreign countries for which the form B13 "Customs Canada Export Entry" has been completed, are treated as shipments.

In those industries where work on principal products extends over a relatively long period, (Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair Industry) the value of production rather than the value of shipments is recorded. There are certain establishments in other industries which also operate on a basis of progress payments. For these establishments, shipments are also adjusted to work put in place on the basis of the net change in progress payments over the year.

(b) Shipments of goods of own manufacture

These figures represent shipments of goods made from own materials either in the reporting establishments or by other manufacturers on the basis of a charge to the reporting establishments for work done. Included are revenue from repair and custom work, amounts received in payment for work done on materials owned by other establishments and the cost (book value) of any goods shipped on a rental basis.

All products and by-products of own manufacture shipped from the establishment are covered, including transfer shipments to sales outlets, distributing warehouses or to other manufacturing plants of the reporting firm, when such units are treated as separate establishments. The value of shipments are net of returned goods, discounts, returns, allowances, sales tax and excise taxes and duties, returnable containers and charges for outward transportation by common or contract carriers. Transportation or delivery expense incurred by the reporting establishment's own carriers are included.

Shipments of goods of own manufacture of establishments which are coded to some other division of the Standard Industrial Classification (on the basis of principal activity) but which are engaged in manufacturing as a subsidiary activity are collected by means of the Commodity questionnaire referred to earlier. Such shipments together

with shipments of goods of own manufacture of establishments forming the universe of manufacturing industries are compiled and recorded in the various industry publications.

(c) Shipments of goods not of own manufacture

These figures represent the net selling value at establishment (net of discounts, returns, allowances, sales taxes and excise duties and taxes and transportation charges by common or contract carriers) of all products or materials (including products transferred from other establishments of the reporting firm) sold as such in the same condition as purchased or received as transfers. For those industries which ship such goods on a rental basis, the value of shipments represents the book value of these goods. All sales of consignment goods from other countries are included.

(d) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees. such as revenue from goods produced or purchased for rental (the book value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for companyoperated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishment's own products, sale of used materials (excluding sale of used fixed assets) research and development work, etc. As mentioned previously the figures do not include non-operating revenue such as rent, dividends, interest, etc.

Inventories

(a) Manufacturing activities

Values represent the book values of manufacturing inventory owned in Canada. Inventories held for which progress payments have been received are not included. Where progress payment accounts are maintained, the change in these accounts is treated as a net adjustment to shipments. Figures consist of inventory owned at the plant and at warehouses or selling outlets which are treated as extensions of establishments for the purpose of reporting shipments. Inventory owned in transit in Canada or on consignment in Canada is included. Goods shipped abroad and held in inventory are included in shipments. Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the

receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

(b) Non-manufacturing activities

Figures represent the book value of inventory of goods purchased for re-sale as such without further processing, owned by the reporting establishments and held at plants and at any warehouses or selling outlets which are treated as extensions of establishments. Other characteristics are the same as in (a) above.

Value Added

(a) By manufacturing activities

Figures are compiled by deducting the cost of materials and fuel and electricity consumed from the value of production (value of shipments adjusted for changes in the value of inventories of finished goods and goods in process).

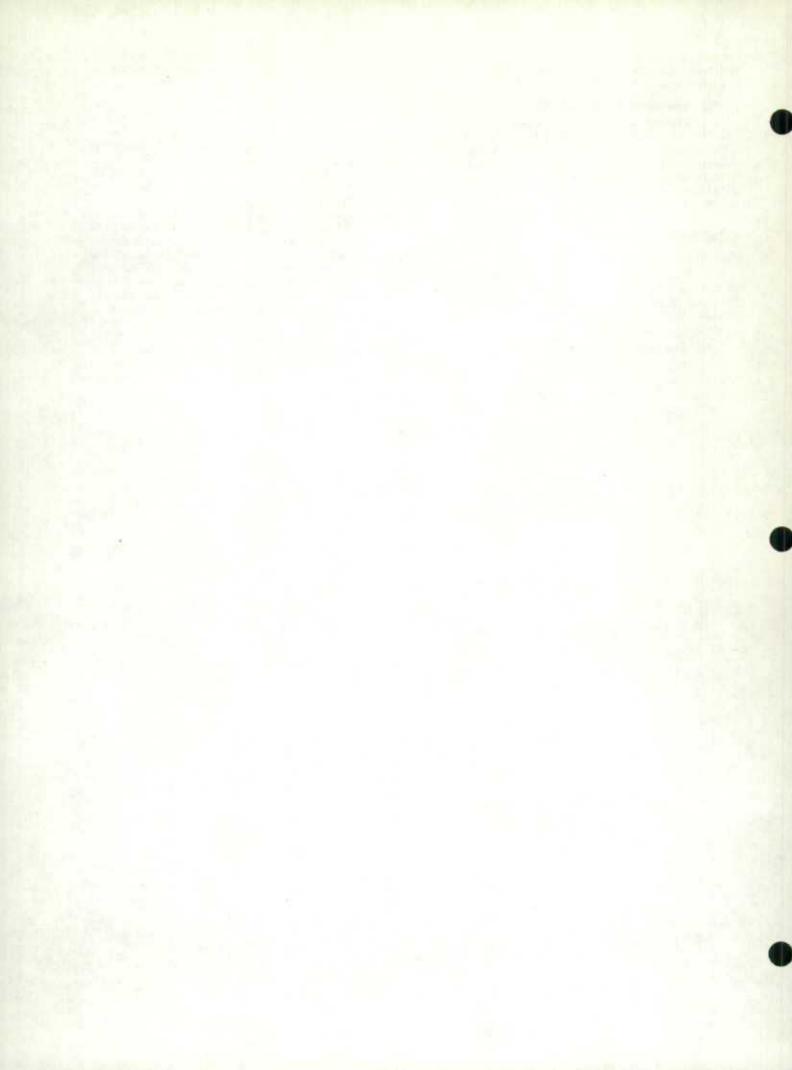
(b) By non-manufacturing activities

The figures are compiled by deducting the the cost of goods purchased for re-sale (adjusted for changes in the value of inventories of goods

purchased for re-sale) and the cost of other materials and supplies used from the value of shipments of goods not of own manufacture, plus other revenue.

(c) By Total activities

The figures consist of value added by manufacturing activities plus value added by non-manufacturing activities. This total value added figure may, in some cases, be less than value added by manufacturing activities as a result of expenditures associated with non-manufacturing exceeding revenues from such activities or because of a decrease in inventory of goods not of own manufacture exceeding the mark-up on the sale of such goods. "Value added" is sometimes referred to as net production. However, to arrive at the National Accounts concept of net production, or Gross Domestic Product at "Factor cost" it would be necessary to subtract also the cost of advertising, insurance and other business expenses which are not collected as part of the annual Census of Manufactures. "Value added" figures for the primary industries, manufacturing and construction are published in DBS publication Catalogue No. 61-202, "Survey of Production".





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