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COPPER AND ALLOY ROLLING, CASTING AND EXTRUDING

1967

ANNUAL CENSUS OF MANUFACTURES

Published by Authority of
The Minister of Industry, Trade and Commerce

DOMINION BUREAU OF STATISTICS
Manufacturing and Primary Industries Division

June 1969
6506-505

Price: 50 cents

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COPPER AND ALLOY ROLLING, CASTING AND EXTRUDING
(S.I.C. 297)

1967

For statistical purposes the industry titled Copper and Alloy Rolling, Casting and Extruding in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing copper and copper alloy shapes such as bars, rods, plates, sheets and castings. Pressure die casting of copper alloys is included in the Metal Rolling, Casting and Extruding n.e.s. industry (S.I.C. 298), and the extraction of copper from the ore is classified in the Smelting and Refining industry (S.I.C. 295).

Value of shipments and other revenue of the Copper and Alloy Rolling, Casting and Extruding industry totalled $238 millions, a decrease of $42 millions from 1966. This amount included shipments of copper and copper-base alloy products valued at $223 millions shipments of other products (secondary products) valued at $13 millions, and other revenue of $2 millions.

This industry's shipments of copper and copper-base alloy products represented 94.6 per cent of its manufacturing revenue. Secondary products shipped by this industry in 1967 included aluminum products (castings, powder, sheets and strips etc.) and alloyed nickel products (castings, bars, rods, and shapes; pipe and tubing; plates, sheets, strip, and flat products; etc.) and sundry products.

The cost of materials and supplies, fuel and electricity, etc. (inputs), used in the production of goods of own manufacture, decreased by $43 millions. Cost of inputs in 1967 represented 78.0 per cent of the value of shipments of own manufacture (outputs), compared to 79.0 per cent in 1966.

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.
r revised figures.
x confidential to meet secrecy requirements of the Statistics Act.

NOTES TO USERS

See inside back cover

TABLE 1. PRINCIPAL STATISTICS, 1961-67

Year and province	Establishments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
	No.		'000	$'000						$'000		$'000	
1961													
Totals	69	2,704	5,769	12,493	1,562	92,042	121,599	28,897	29	98	3,482	16,886	28,904
1962													
Totals	67	2,742	6,034	13,163	1,590	110,114	142,210	26,826	29	105	3,492	17,856	26,926
1963													
Totals	62	2,874	6,483	14,287	1,677	120,037	152,793	31,951	25	88	3,651	19,227	32,077
1964													
Totals	59	3,048	7,052	16,276	1,937	128,972	171,324	40,031	23	98	3,849	21,405	40,186
1965													
Totals	56	2,778	6,280	15,056	1,825	157,134	201,391	42,443	20	96	3,620	20,417	42,627
1966													
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec	13	x	x	x	x	x	x	x	x	x	x	x	x
Ontario	35	2,124	4,967	12,843	1,252	107,855	141,435	33,885	12	58	2,569	16,379	34,320
Manitoba	-	-	-	-	-	-	-	-	-	-	-	-	-
Saskatchewan	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta	1	-	-	-	x	x	x	x	x	x	-	-	x
British Columbia	8	x	x	x	x	x	x	x	-	-	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	57	3,411	7,665	19,895	2,185	224,476	281,958	59,903	16	69	4,199	25,663	60,343
1967													
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec	13	x	x	x	x	x	x	x	x	x	x	x	x
Ontario	35	1,934	4,291	11,751	1,306	97,115	131,333	32,764	x	x	2,387	15,564	32,972
Manitoba	-	-	-	-	-	-	-	-	-	-	-	-	-
Saskatchewan	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta	-	-	-	-	-	-	-	-	-	-	-	-	-
British Columbia	8	x	x	x	x	x	x	x	-	-	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	56	3,171	6,899	18,499	2,201	181,354	236,353	51,968	12	48	4,027	25,092	52,163

TABLE 2. PRINCIPAL STATISTICS CLASSIFIED BY SIZE GROUP BASED ON VALUE OF SHIPMENTS OF GOODS OF OWN MANUFACTURE, 1966 AND 1967

Size group	Establishments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
	No.		'000		$'000					$'000		$'000	
1966													
Under $10,000	4	2	4	5	1	17	32	16	3	5	3	7	16
$ 10,000 to $ 24,999	7	6	11	15	3	49	120	67	8	26	7	21	68
25,000 " 49,999	9	34	74	135	16	296	575	266	4	33	44	173	265
50,000 " 99,999													
100,000 " 199,999	4	35	72	169	13	292	553	247	-	-	43	212	260
200,000 " 499,999	15	269	602	1,259	102	2,666	5,054	2,305	1	5	314	1,540	2,466
500,000 " 999,999	6	186	387	821	65	1,660	4,052	2,338	-	-	211	963	2,352
1,000,000 " 4,999,999	5	255	537	1,171	141	4,316	7,440	3,269	-	-	315	1,602	3,280
5,000,000 and over	7	2,624	5,978	16,321	1,844	215,181	264,131	51,395	-	-	3,262	21,145	51,637
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	57	3,411	7,665	19,895	2,185	224,476	281,958	59,903	16	69	4,199	25,663	60,343
1967													
Under $10,000	3	2	4	5	1	11	23	13	1	2	3	7	13
$ 10,000 to $ 24,999	6	6	11	15	3	44	110	63	7	22	7	21	64
25,000 " 49,999	6	18	36	69	5	79	215	132	2	11	21	80	132
50,000 " 99,999	6	29	55	110	10	244	452	204	2	13	36	137	201
100,000 " 199,999													
200,000 " 499,999	18	285	582	1,426	103	3,155	5,437	2,172	-	-	336	1,734	2,333
500,000 " 999,999	6	240	490	1,162	91	1,697	4,624	2,951	-	-	278	1,430	2,973
1,000,000 " 4,999,999	4	218	465	1,094	107	3,157	6,426	2,945	-	-	276	1,583	2,931
5,000,000 and over	7	2,373	5,256	14,616	1,881	172,968	219,065	43,488	-	-	3,070	20,100	43,518
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	56	3,171	6,899	18,499	2,201	181,354	236,353	51,968	12	48	4,027	25,092	52,143

TABLE 3. PRINCIPAL STATISTICS CLASSIFIED BY SIZE GROUP BASED ON TOTAL EMPLOYED, 1966 AND 1967

Size group	Establishments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
	No.		'000		$'000					$'000		$'000	
1966													
Under 5 employed	14	17	35	57	8	158	312	148	13	52	20	67	149
5- 14 "	14	102	216	489	49	1,128	2,113	936	3	17	123	596	947
15- 49 "	18	412	897	1,981	210	30,385	36,650	6,162	-	-	485	2,475	6,318
50- 99 "	5	286	605	1,237	116	3,537	6,657	3,263	-	-	340	1,579	3,293
100-199 "													
200-499 "	6	2,594	5,912	16,131	1,802	189,268	236,226	49,394	-	-	3,231	20,945	49,635
500 employed and over													
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	57	3,411	7,665	19,895	2,185	224,476	281,958	59,903	16	69	4,199	25,663	60,343
1967													
Under 5 employed	14	22	43	75	7	155	328	168	10	39	25	85	168
5- 14 "	12	81	156	390	35	878	1,558	657	2	9	98	473	681
15- 49 "	20	456	957	2,377	224	29,812	36,280	6,303	-	-	542	3,015	6,457
50- 99 "	4	269	553	1,229	94	2,704	5,884	2,855	-	-	324	1,622	3,442
100-199 "													
200-499 "	6	2,343	5,190	14,427	1,841	147,805	192,303	41,986	-	-	3,038	19,897	42,015
500 employed and over													
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	56	3,171	6,899	18,499	2,201	181,354	236,353	51,968	12	48	4,027	25,092	52,143

TABLE 4. EMPLOYMENT AND PAYROLL, 1966 AND 1967

Year and province	Employees										Salaries and wages				
	Production and related workers				Administrative and office		Sales and distribution		Total		Production and related workers		Administrative and office	Sales and distribution	Total
	Manufacturing		Other												
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufacturing	Other			
	number										$'000				
1966															
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x
Ontario	2,114	10	-	-	274	106	53	12	2,441	128	12,843	-	2,957	578	16,379
Manitoba	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saskatchewan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
British Columbia	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	3,398	13	1	-	451	154	124	58	3,974	225	19,895	3	4,548	1,218	25,663
1967															
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec	x	x	x	-	x	x	x	x	x	x	x	x	x	x	x
Ontario	1,918	x	x	-	276	110	x	x	2,252	135	11,751	x	3,191	x	15,564
Manitoba	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saskatchewan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
British Columbia	x	-	-	-	x	x	x	x	x	x	x	-	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	3,245	26	2	-	527	179	113	33	3,789	238	18,499	9	5,463	1,122	25,093

TABLE 5. INVENTORIES, 1967

Province	Manufacturing				Non-manufacturing
	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale
	book value $'000				
Opening					
Newfoundland	-	-	-	-	-
Prince Edward Island	-	-	-	-	-
Nova Scotia	-	-	-	-	-
New Brunswick	-	-	-	-	-
Quebec	x	x	x	x	x
Ontario	12,404	1,049	2,857	16,309	73
Manitoba	-	-	-	-	-
Saskatchewan	-	-	-	-	-
Alberta	-	-	-	-	-
British Columbia	x	x	x	x	x
Yukon and Northwest Territories	-	-	-	-	-
Totals	23,592	3,754	5,055	32,401	94
Closing					
Newfoundland	-	-	-	-	-
Prince Edward Island	-	-	-	-	-
Nova Scotia	-	-	-	-	-
New Brunswick	-	-	-	-	-
Quebec	x	x	x	x	x
Ontario	9,672	1,634	2,124	13,429	217
Manitoba	-	-	-	-	-
Saskatchewan	-	-	-	-	-
Alberta	-	-	-	-	-
British Columbia	x	x	x	x	x
Yukon and Northwest Territories	-	-	-	-	-
Totals	20,472	3,708	4,271	28,450	236

TABLE 6. PURCHASED FUEL AND ELECTRICITY USED, 1966 AND 1967

Description		1966		1967	
		Quantity	Cost	Quantity	Cost
			$'000		$'000
1. Large establishments reporting commodity detail					
Bituminous coal:					
(a) From Canadian mines	ton	-	-	-	-
(b) Imported	"	-	-	-	-
Sub-bituminous coal (from Alberta mines only)	"	-	-	-	-
Anthracite coal	"	-	-	-	-
Lignite coal	"	-	-	-	-
Coke	"	-	-	-	-
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	89,225	33	94,688	35
Fuel oil including kerosene or coal oil	"	4,240,963	363	4,202,654	360
Wood	cord	-	-	-	-
Gas:					
(a) Liquefied petroleum gases	Imp. gal.	196,886	50	333,563	73
(b) Other manufactured gas	M cu. ft.	-	-	-	-
(c) Natural gas	"	613,760	403	620,422	409
Other fuel		...	7	...	6
Electricity purchased	kwh.	147,760,975	1,205	142,233,144	1,235
Steam purchased		...	25	...	27
2. Small establishments not reporting commodity detail					
Estimate for fuel and electricity		...	99	...	56
3. All establishments					
Total fuel and electricity used		...	2,185	...	2,201

TABLE 7. MATERIALS AND SUPPLIES - MANUFACTURING ACTIVITY, 1966 AND 1967

Description		1966		1967	
		Quantity	Cost	Quantity	Cost
			$'000		$'000
1. Large establishments reporting commodity detail:					
Materials used:					
Aluminum:					
Ingots	lb.	660,306	221	726,737	242
Scrap	"	1,468,123	338	1,820,959	407
Other forms		..	2,491	..	1,638
Antimony	lb.	5,041	1	6,452	2
Brass and bronze:					
Ingots	"	5,365,342	2,995	5,003,391	2,560
Scrap	"	11,399,183	4,156	13,467,407	4,546
Bars and rods	"	448,027	285	43,388	21
Pipe and tubing	"	130,608	75	5,967	5
Other forms		..	1,482	..	1,778
Copper:					
Ingots, slabs, wire bars, etc.	lb.	392,366,885	178,917	313,243,174	149,660
Scrap	"	25,057,606	14,923	6,682,258	3,056
Plates, sheets and strip	"	5,703	3	148,603	110
Wire	"	1,594	1	2,951,370	1,472
Other forms		..	131	..	68
Lead, all forms	lb.	865,111	131	643,416	99
Manganese metal	"	526,158	325	176,342	92
Monel metal	"	93,404	69	7,355	8
Nickel	"	780,306	688	817,494	753
Nickel-copper shot	"	3,083	3	2,992	3
Nickel-silver, all forms	"	915,130	381	1,254,792	563
Tin all forms:					
Phosphor tin	"	367,825	660	303,264	532
Other tin	"	..	55	..	70
Zinc, all forms	"	26,622,516	4,002	22,183,198	3,211
Other non-ferrous metals		..	341	..	455
Lumber	M bd. ft.	145	14	170	20
Silica sand	ton	864	23	1,221	21
Foundry sands	"	803	13	1,151	25
Graphite	lb.	446,100	36	224,403	15
Refractories		...	51	...	33
All other materials and components used		...	1,226[r]	...	1,387
2. Small establishments not reporting commodity detail		...	2,214	...	1,525

TABLE 7. MATERIALS AND SUPPLIES - MANUFACTURING ACTIVITY, 1966 AND 1967 - Concluded

Description	1966		1967	
	Quantity	Cost	Quantity	Cost
		$'000		$'000
3. Containers and other packaging materials and supplies used:				
Folding and set-up (rigid) boxes, paperboard	..	9	..	21
Corrugated boxes and cartons	..	298	..	251
Cans, metal	..	35	..	36
Wooden boxes, crates, barrels, kegs	..	778	..	641
Paper, all kinds	..	48	..	38
All other	..	191	..	165
4. Operating, maintenance and repair supplies used (excluding fuel)	...	6,558	...	5,924
5. Amount paid out to others for work done on materials owned by establishments	...	311	...	223
Totals	...	224,476	...	181,354

TABLE 8. SHIPMENTS OF GOODS OF OWN MANUFACTURE, 1966 AND 1967

Description	1966		1967	
	Quantity	Value	Quantity	Value
		$'000		$'000
1. Products:				
Aluminum:				
Castings	1,923,869	2,007	1,925,778	2,042
Other forms (powder, etc.)	..	3,896	..	3,314
Copper and copper alloy (brass, bronze, etc.):				
Pipe and tubing	110,180,884	81,020	94,181,297	70,845
Plates, sheets, strip and flat products	71,355,844	46,228	70,130,122	45,168
Other forms (wire rods, casting, powder, etc.)	...	145,535	...	110,528
All other products	...	7,036	...	7,153
2. Amount received in payment for work done on materials and products owned by others	...	1,495	...	1,880
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above	...	(5,260)	...	(4,578)
Total adjusted value of shipments and work done	...	281,958	...	236,353

LIST OF ESTABLISHMENTS CLASSIFIED TO THIS INDUSTRY, 1967

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

Name	Location
Quebec	
Archambault Foundry Inc.	8016 Henri Julien, Montreal
Aubertin Fonderie Ltée	1010 Hebert St., Montreal North
Canada Wire and Cable Co. Ltd.	Durocher St., Montreal E.
Canadian Bronze Powder Works Ltd.	Valleyfield
Dauncey, P.A., Ltd.	Sherbrooke
Diversified Metallurgical Industries Ltd.	Dunham
Dominion Brass and Aluminum Foundry Ltd.	Ville St-Pierre
Fonderie d'Art	Longueuil
Fonderie St-Maurice Ltée	Cap-de-la-Madeleine
Miller's Brass Foundry	Trois-Rivières
Miranda Copper Mills Ltd.	Sherbrooke and Durocher Sts., Montreal E.
Rapid Foundry	Napierville
Victory Brass and Aluminum Foundry	5244 Casgrain St., Montreal

LIST OF ESTABLISHMENTS CLASSIFIED TO THIS INDUSTRY, 1967 - Concluded

Name	Location
Ontario	
Anaconda American Brass Ltd.	260-8th St., Toronto
Bond Brass Ltd.	Eastview
Calumet and Hecla of Canada Ltd. (Wolverine Tube Div.)	London
Craig Bronze Co.	330 Horner Ave., Toronto
Dominion Gas Meter Co. Ltd. The	London
Eramosa Brass and Aluminum	Guelph
Fisher and Son Ltd.	Hamilton
Gamma Foundry Co. Ltd.	Richmond Hill
Johnson, Matthey and Mallory Ltd.	St. Catharines
Kitchener Brass and Aluminum Foundry Ltd.	Kitchener
Lawrence, T.C., and Sons Limited	Galt
Long Branch Foundry, The	3 Magnificent Rd., Toronto
Matthews, Jas H., and Co. (Canada) 1959 Ltd.	Milton
May Foundry Co. Ltd.	Niagara Falls
National Brass and Aluminum Foundry	117 St. Patrick St., Toronto
Niagara Bronze Brass and Metal Services Ltd.	Niagara Falls
Non-Ferrous Castings Ltd.	Mississauga
Ottawa Brass Mfg. Co.	Ottawa
Pal Foundries Ltd.	Scarborough
Phillips Cables Ltd.	Brockville
Quality Brass Foundry	Ajax
Rahn Metals Ltd.	North Bay
Ratcliffs (Canada), Ltd.	Richmond Hill
Riverside Brass and Aluminum Foundry Ltd.	Preston
Robinson, J., and Son	Ottawa
Roto-Cast Ltd.	721 Eastern Ave., Toronto
S.B. and A. Foundry Ltd.	Guelph
Samco Brass Ltd.	St. Catharines
Schlege, Elmer, Foundry	Bloomingdale
Stoemer Bell and Brass Foundry	Breslau
Sully Castings Ltd.	Richmond Hill
Tallman, A.H., Bronze Co. Ltd.	Burlington
Warren Alloy (Canada) Ltd.	Chatham
Wilson Brass and Aluminum Foundries Ltd.	Scarborough
Windsor Match Plate and Tool Ltd.	Windsor
British Columbia	
Noranda Copper Mills Ltd.	New Westminster
North Shore Foundry Ltd.	North Vancouver
Osborne Propellers Ltd.	Vancouver
Pacific Bronze Co. Ltd.	Vancouver
Power Machinery Ltd., Metro Foundry Div.	South Burnaby
Seymour Industries Ltd.	Vancouver
Summer Brass Foundry Ltd.	Vancouver
Terrace Foundry Ltd.	Terrace

NOTES TO USERS

1. The detailed explanations of "Concepts and Definitions" omitted from this report may be consulted in any 1965 report in this series. If not available to the user, the relevant pages may be obtained free of charge from the Manufacturing and Primary Industries Division of the Bureau.

2. Tables on principal statistics classified by manufacturing value added, by total value added, and by type of organization, published in the 1966 report as Tables 3, 4 and 6, respectively, have been omitted from this report because of their limited interest. They are available, however, from the Manufacturing and Primary Industries Division. In the case of an extensive request involving a large number of industries, it may be necessary to levy a charge.

3. Users interested in obtaining the value of production (manufacturing activity) can do so by adding cost of materials and supplies used (manufacturing activity), cost of fuel and electricity, and value added (manufacturing activity). The resulting statistic is equivalent in concept to "gross output" shown in Table 7 of the 1966 report.

The Queen's Printer, Ottawa

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