

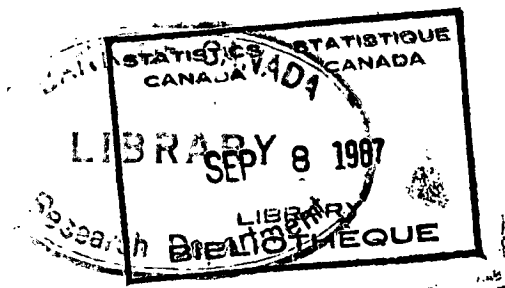
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42-215

ANNUAL

d. 2

JAN 21 1966



COMMERCIAL REFRIGERATION AND AIR CONDITIONING EQUIPMENT MANUFACTURERS 1963

ANNUAL CENSUS
OF MANUFACTURES

Published by Authority of
The Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS
Industry Division

January 1966
6521-820

Price: 50 cents

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COMMERCIAL REFRIGERATION AND AIR CONDITIONING EQUIPMENT MANUFACTURERS

1963

Data presented in this report under the heading of Commercial Refrigeration and Air Conditioning Equipment Manufacturers reflect the implementation of the revised Standard Industrial Classification (SIC) and the new Establishment Concept which are being used by the Dominion Bureau of Statistics in its compilation of industry statistics — see items "Standard Industrial Classification" and "Establishment" in the Explanatory Notes section of this report.

For statistical purposes the industry titled Commercial Refrigeration and Air Conditioning Equipment Manufacturers in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing electric and non-electric commercial refrigerating equipment such as display cases, counters and frozen food storage cabinets; and refrigeration units for installation in custom or built-in refrigeration facilities.

The industry also includes establishments primarily engaged in manufacturing self-contained air conditioning units (except window type) and air conditioning equipment for installation in custom and built-in air conditioning systems.

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.
- x confidential to meet secrecy requirements of the Statistics Act.

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

Year and province	Estab-lish-ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961													
Totals	34	1,130	2,451	4,494	280	10,224'	23,182	12,833'	8	51	1,636	7,320	13,597'
1962													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick	1	119	260	406	33	924	2,315	1,366	x	x	175	718	1,443
Quebec	7												
Ontario	21	869	1,849	3,551	227	10,018'	21,512	11,336'	x	x	1,310	6,073	12,026'
Manitoba	3	87	178	293	15	479	971	478	—	—	101	351	516
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	3	56	138	328	9	820	1,364	576	4	30	66	409	572
Yukon and Northwest Terri- tories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	35	1,131	2,424	4,578	284	12,242'	26,162	13,756'	8	57	1,652	7,551	14,558'
1963													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick	1	123	256	436	33	1,098	2,750	1,626	3	20	189	761	1,656
Quebec	7												
Ontario	20	809	1,563	3,208	198	9,716	20,993	11,206	3	15	1,201	5,510	12,044
Manitoba	3	96	186	323	17	687	1,278	633	—	—	113	392	626
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	1	60	120	334	10	695	1,313	593	4	36	70	415	658
British Columbia	2												
Yukon and Northwest Terri- tories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
1962	No.		'000			'000				\$'000		\$'000	
Under \$10,000.....	4								x	x	24	96	157
\$ 10,000 to \$ 24,999.....		20	40	68	5	80	241	157					
25,000 " 49,999.....													
50,000 " 99,999.....		76	168	271	20	369	960	568	x	x	93	352	650
100,000 " 199,999.....		93	216	340	27	680	1,658	963	4	30	125	512	1,003
200,000 " 499,999.....	7	263	551	1,126	57	2,984	5,715	2,741			340	1,620	2,842
500,000 " 999,999.....	8	679	1,449	2,774	174	8,129	17,588	9,327			1,070	4,971	9,906
1,000,000 " 4,999,999.....	9												
5,000,000 and over.....	—												
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	35	1,131	2,424	4,578	284	12,242	26,162	13,756	8	57	1,652	7,551	14,558
1963													
Under \$10,000.....	—												
\$ 10,000 to \$ 24,999.....	—												
25,000 " 49,999.....	5	23	45	76	6	153	297	156	4	18	28	91	156
50,000 " 99,999.....		47	92	171	14	351	842	504	2	17	59	226	504
100,000 " 199,999.....		74	153	295	24	668	1,526	860			101	441	890
200,000 " 499,999.....		283	579	1,145	58	3,183	6,810	3,486	4	36	380	1,686	3,574
500,000 " 999,999.....		661	1,255	2,614	157	7,841	16,859	9,052			1,005	4,633	9,860
1,000,000 " 4,999,999.....	8												
5,000,000 and over.....	—												
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
1962	No.		'000			'000				\$'000		\$'000	
Under \$10,000.....	3	8	15	25	4	60	146	81	x	x	9	28	81
\$ 10,000 to \$ 24,999.....													
25,000 " 49,999.....													
50,000 " 99,999.....		68	148	268	15	410	935	520	x	x	86	364	563
100,000 " 199,999.....		143	330	526	41	1,797	3,249	1,414			189	804	1,489
200,000 " 499,999.....	7	244	519	961	55	3,356	5,775	2,359	4	30	331	1,463	2,449
500,000 " 999,999.....	5	235	484	1,039	61	2,161	5,585	3,377			401	1,953	3,607
1,000,000 " 4,999,999.....	3	433	928	1,759	107	4,457	10,471	6,005			636	2,939	6,369
5,000,000 and over.....	—												
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	35	1,131	2,424	4,578	284	12,242	26,162	13,756	8	57	1,652	7,551	14,558
1963													
Under \$10,000.....	—												
\$ 10,000 to \$ 24,999.....	—												
25,000 " 49,999.....	5	15	30	50	5	182	315	141	4	18	20	70	141
50,000 " 99,999.....		45	90	174	12	346	720	363	2	17	56	217	362
100,000 " 199,999.....		71	148	283	25	532	1,266	763			93	396	794
200,000 " 499,999.....		265	545	1,042	59	3,985	7,615	3,463	4	36	364	1,592	3,556
500,000 " 999,999.....		249	531	1,034	62	3,068	6,908	3,842			379	1,747	3,857
1,000,000 " 4,999,999.....	3	443	782	1,718	96	4,082	9,510	5,485			661	3,055	6,273
5,000,000 and over.....	—												
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	3	8	15	25	4	60	146	81	x	x	9	29	81
25,000 " 49,999.....	6	55	114	190	12	362	790	427	x	x	69	270	426
50,000 " 99,999.....	11	156	364	603	44	1,845	3,395	1,507	—	—	206	898	1,626
100,000 " 199,999.....	7	244	519	961	55	3,356	5,775	2,359	4	30	331	1,463	2,449
200,000 " 499,999.....	4	174	359	694	48	1,849	4,319	2,547	—	—	270	1,211	2,553
500,000 " 999,999.....	4	494	1,053	2,105	120	4,768	11,738	6,835	—	—	767	3,680	7,423
1,000,000 " 4,999,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
5,000,000 and over.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	35	1,131	2,424	4,578	284	12,242	26,162	13,756	8	57	1,652	7,551	14,558
1963													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	5	15	30	50	5	182	315	141	4	18	20	70	141
25,000 " 49,999.....	5	45	90	174	12	346	720	363	2	17	56	217	362
50,000 " 99,999.....	6	71	148	283	25	532	1,266	763	—	—	93	396	794
100,000 " 199,999.....	9	229	460	872	55	3,576	6,676	2,964	4	36	306	1,267	3,036
200,000 " 499,999.....	6	285	616	1,203	66	3,477	7,848	4,342	—	—	437	2,072	4,378
500,000 " 999,999.....	3	443	782	1,718	96	4,082	9,510	5,485	—	—	661	3,055	6,273
1,000,000 " 4,999,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
5,000,000 and over.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under 5 employed.....	6	25	51	85	10	256	527	263	4	27	30	106	263
5- 14 ".....	18	295	651	1,158	82	3,985	7,387	3,414	4	30	390	1,665	3,535
15- 49 ".....	7	317	668	1,230	71	3,233	6,511	3,243	—	—	465	2,100	3,337
50- 99 ".....	4	494	1,053	2,105	120	4,768	11,738	6,835	—	—	767	3,680	7,423
100-199 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—
200-499 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—
500 employed and over.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	35	1,131	2,424	4,578	284	12,242	26,162	13,756	8	57	1,652	7,551	14,558
1963													
Under 5 employed.....	11	70	138	246	20	505	1,139	660	6	35	87	317	660
5- 14 ".....	13	214	444	901	66	3,630	6,912	3,098	4	36	304	1,369	3,206
15- 49 ".....	7	361	761	1,435	77	3,979	8,772	4,815	—	—	521	2,336	4,845
50- 99 ".....	3	443	782	1,718	96	4,082	9,510	5,485	—	—	661	3,055	6,273
100-199 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—
200-499 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—
500 employed and over.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

Type of organization	Estab-lish-ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages	
	No.		'000			'000				'000		'000	
1962													
Individual ownerships	4	51	120	266	12	310	778	500	8	57	53	274	498
Partnerships													
Incorporated companies	31	1,080	2,304	4,312	271	11,932	25,385	13,256	—	—	1,599	7,277	14,060
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	35	1,131	2,424	4,578	284	12,242	26,162	13,756	8	57	1,652	7,551	14,558
1963													
Individual ownerships	5	58	102	277	15	390	940	517	10	71	60	285	584
Partnerships													
Incorporated companies	29	1,030	2,023	4,024	243	11,806	25,394	13,541	—	—	1,513	6,792	14,400
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	34	1,088	2,125	4,301	259	12,196	26,334	14,058	10	71	1,573	7,077	14,984

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

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1962	1963	1962	1963	1962	1963
	\$'000					
Output						
1. Shipments and other revenue	26,162	26,334	5,294	4,702	31,456	31,036
Inventories—Goods of own manufacture:						
Add closing—Goods in process	1,119	1,239	...	...	1,119	1,239
Finished goods	1,688	1,393	...	...	1,688	1,393
Less opening—Goods in process	1,067	931	...	...	1,067	931
Finished goods	1,621	1,522	...	...	1,621	1,522
2. Net inventory change	119	179	...	...	119	179
3. Gross output (1 + 2)	26,281	26,513	5,294	4,702	31,575	31,215
Input						
4. Purchases of goods not of own manufacture .....	...	...	4,288	3,493	4,288	3,493
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	304	387	304	387
Less closing .....	...	...	298	257	298	257
5. Costs of goods sold (not of own manufacture) .....	...	...	4,294	3,623	4,294	3,623
6. Materials, supplies, components and semi-processed goods	12,242	12,196	198	152	12,440	12,348
7. Fuel and electricity	284	259	...	...	284	259
8. Gross input (5 + 6 + 7)	12,526	12,455	4,492	3,775	17,018	16,230
Census value added (3-8)	13,758	14,058	802	927	14,558	14,984

TABLE 3. Employment and Payroll, 1962 and 1963

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total employees		Production and related workers		Adminis- trative and office	Sales and distri- bution	Total salaries and wages
	Manufacturing		Other								Manufacturing	Other			
	Male	Female	Male	Female	Male	Female	Male	Female	Manufacturing	Other					
	number										\$'000				
1962															
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick	114	5	—	—	29	9	18	—	161	14	406	—	194	118	718
Quebec															
Ontario	854	15	—	—	250	85	89	17	1,193	117	3,551	—	1,775	747	6,073
Manitoba	87	—	—	—	11	3	—	—	98	3	293	—	58	—	351
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	56	—	—	—	9	1	—	—	65	1	328	—	81	—	409
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	1,111	20	—	—	299	98	107	17	1,517	135	4,578	—	2,108	864	7,551
1963															
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick	114	9	—	—	33	13	20	—	167	22	436	—	196	130	761
Quebec															
Ontario	787	22	—	—	214	78	84	16	1,085	116	3,208	—	1,611	691	5,510
Manitoba	96	—	—	—	12	3	2	—	110	3	323	—	62	7	392
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	59	1	—	—	9	1	—	—	68	2	334	—	81	—	415
British Columbia															
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	1,056	32	—	—	268	95	106	16	1,430	143	4,301	—	1,949	828	7,077

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

Month	Establishments reporting monthly detail			
	1962		1963	
	Male	Female	Male	Female
	number			
January	873	16	991	33
February	902	14	1,003	32
March	915	20	1,029	32
April	949	18	1,022	32
May	999	20	1,088	33
June	1,071	20	1,112	34
July	1,063	19	1,116	32
August	976	16	1,100	31
September	1,090	23	1,068	33
October	928	16	1,069	33
November	932	18	1,043	27
December	950	19	1,024	31
Average for establishments reporting monthly detail (collected only for large establishments)	974	19	1,056	32
Average for small establishments (only annual averages collected)	137	1	...	...
Average for all establishments	1,111	20	1,056	32

TABLE 4. Industry Inventories, 1963

Province	Manufacturing				Non-manufacturing	Total inventories
	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	
book value \$'000						
Opening:						
Newfoundland	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—
New Brunswick	—	—	—	—	—	—
Quebec	208	23	212	443	6	449
Ontario	2,529	814	1,164	4,507	292	4,799
Manitoba	171	17	137	325	—	325
Saskatchewan	—	—	—	—	—	—
Alberta	—	—	—	—	—	—
British Columbia	236	77	9	322	89	411
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	3,143	931	1,522	5,596	387	5,983
Closing:						
Newfoundland	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—
New Brunswick	—	—	—	—	—	—
Quebec	243	43	199	485	6	491
Ontario	2,305	1,091	1,013	4,409	158	4,567
Manitoba	213	44	171	428	—	428
Saskatchewan	—	—	—	—	—	—
Alberta	—	—	—	—	—	—
British Columbia	277	61	11	349	93	442
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	3,038	1,239	1,393	5,670	257	5,927

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

Description	1962		1963	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Large establishments which reported commodity detail:				
Bituminous coal:				
(a) From Canadian mines	ton	—	—	—
(b) Imported	280	4	279	4
Sub-bituminous coal (from Alberta mines only)	"	—	—	—
Anthracite coal	"	—	—	—
Lignite coal	"	—	—	—
Coke	"	—	—	—
Gasoline (including gasoline used in cars and trucks) ..	Imp. gal.	23,816	26,846	11
Fuel oil including kerosene or coal oil	"	647,429	764,482	77
Wood	cord	—	—	—
Gas:				
(a) Liquefied petroleum gases	Imp. gal.	8,833	4,306	1
(b) Other manufactured gas	M cu. ft.	—	—	—
(c) Natural gas	"	31,927	26,738	27
Other fuel	—	—	—	—
Electricity purchased	kwh.	8,027,854	8,924,401	107
Steam purchased	—	1	—	1
2. Estimate for small establishments:				
Fuel and electricity	—	41	—	32
3. All establishments:				
Total fuel and electricity used	—	284	—	259

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

Description	1962		1963	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Materials used:				
Steel (except alloy and tool steel):				
Bars..... ton	85	16	82	16
Plates (3/16 in. and thicker)	436	94	653	111
Sheets (under 3/16 in.):				
Plain	5,215	784	4,950	689
Galvanized	1,651	324	2,384	451
Strip	455	84	242	47
Structural shapes, unfabricated (channels, angles, etc.)	151	30	159	33
Wire.....	43	9	60	14
Alloy and tool steel in all forms:				
Alloy steel (other than stainless and tool steel)	-	-	-	-
Stainless:				
Billets, bars and rods .....	..	39	..	19
Sheet.....	..	333	..	297
Other	-	-	..	3
Tool steel (all types including high speed) .....	..	2	..	3
Pipe and fittings, iron and steel .....	..	191	..	187
Other iron and steel .....	..	779	..	783
Non-ferrous metals in all forms:				
Aluminum:				
Castings..... lb.	2,306	3	3,107	3
Pipe and tubing.....	225,746	99	189,157	99
Sheet.....	401,911	170	467,441	210
Other forms	605,814	265	206,657	301
Brass and bronze	9,345	7	9,333	9
Copper:				
Pipe and tubing.....	1,640,749	1,203	2,097,683	1,421
Sheet.....	..	..	2,000	2
Wire.....	-	-	-	-
Other forms	96,000	82	146,000	97
Lead	-	-	-	-
Zinc	6,677	3	4,566	2
Babbitt metal and solders	10,268	9	8,003	6
Other materials and supplies:				
Paints and varnishes .....	...	260	...	203
Plywood	M sq. ft. 452	163	160	36
Lumber	M bd. ft. 2,629	287	2,805	277
Electric motors:				
Less than 1 h.p.	No. 23,105	234	22,956	264
1 h.p. and over	" 1,232	113	1,423	100
All other materials and components used ¹ .....	...	5,802 ^r	...	5,757
2. Containers and other packaging materials and supplies used .....	...	303	...	225
3. Operating, maintenance and repair supplies used (excluding fuel).....	...	465	...	419
4. Amount paid out to others for work done on materials owned by establishments ....	...	89	...	111
Totals.....	...	12,242 ^r	...	12,196

¹ No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated costs were \$707,200 in 1962 and \$661,200 in 1963.

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

Description	Value	
	1962	1963
	\$'000	
1. Products:		
Air conditioners	1,649	2,026
Refrigeration equipment:		
Commercial refrigeration.....	11,420	11,733
Condensing equipment.....	2,946	2,732
Refrigeration and air conditioning equipment, other, and parts	6,125	5,968
All other products	3,823	3,673
2. Amount received in payment for work done on materials and products owned by others	549	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	(348)	(72)
Net adjustment for establishments receiving progress payments	-	-
Total adjusted value of shipments and work done	26,162	26,334

TABLE 8. Shipments of Selected Goods of Own Manufacture - All Industries, 1962 and 1963
(Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)

Commercial Refrigeration and Air Conditioning Equipment

Item	1962		1963	
	Quantity	Value	Quantity	Value
	number	\$'000	number	\$'000
Room air conditioners - Window sill type	11,219	2,024	17,546	3,216
Room air conditioners, self-contained, except window sill type.....	x	x	x	x
Other air conditioning units (includes units for location below windows, all other not self-contained, and packaged air conditioners excluding household).....	...	3,944	...	4,834
Ice cream cabinets, non-display.....	x	x	x	x
Frozen food cabinets, commercial	2,826	2,044	1,358	1,275
Display cases, refrigerated, other	3,582	2,935	4,225	3,464
Commercial refrigerators, including reach-in and walk-in types, self-contained and remote	2,047	1,967	2,534	2,406
Heat transfer coils .....	...	1,703	...	1,767
Unit coolers, floor and wall mounted.....	...	1,103	...	1,363
Compressor units	4,566	1,335	5,437	1,602
Condensing units, reciprocating (refrigeration)	5,621	1,696	4,302	1,447
Evaporative condensers, all types (refrigeration).....	...	466	...	357
Condensers, air or water cooled.....	2,357	1,355	2,075	1,345
Refrigeration and air conditioning equipment, other, and parts ¹ .....	...	13,208	...	15,848
Totals.....	...	33,780	...	38,924

¹ Includes "room air conditioners self contained" and "ice cream cabinets".

Note: For details on household refrigerators and freezers see bulletin Manufacturers of Major Appliances, Catalogue No. 43-204.

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
New Brunswick:	
Sussex Refrigeration Mfg. Co. Ltd.	Sussex
Quebec:	
Blanchard Industries Co.	7779 Casgrain St., Montreal
Canada's Best Refrigeration Eqpt.	8607 Notre Dame St. E., Montreal
Colsan Limited	636 St. Paul St. W., Montreal
Farr Mfg. Co. Ltd.	390 DesLauriers St., St. Laurent
Foster Refrigeration of Canada, Ltd.	Drummondville
Frigistors Ltd.	577 Andover Ave., Montreal
Gauvin, Inc.	220 Lee St., Quebec
Ontario:	
Aerofin Corp. (Canada) Ltd.	Gananoque
Air Coils Mfg. Co. Ltd.	346 Wycroft Rd., Oakville
Canadian Curtis Refrigeration Ltd.	50 George St., Hamilton
Canadian General Refrigeration Mfg.	303 Augusta Ave., Toronto
Canadian Ice Machine Co. Ltd.	65 Villiers St., Toronto
Canadian Tyler Refrigeration Ltd.	Tilbury
Carrier Air Conditioning (Canada) Ltd.	Bramalea
Coldmatic Refrigerator Co.	425 Enfield Rd., Burlington
Copeland Refrigeration of Canada Ltd.	145 Sherwood Drive, Brantford
Heavy Duty Products (Preston) Ltd.	Preston
Hill Refrigeration of Canada Division International Hardware Co. of Canada (1963) Ltd.	200 Brock St., Barrie
Hussmann Refrigerator Co. Ltd.	58 Frank St., Brantford
Ideal Venders Ltd.	Deseronto
Keep Rite Products Ltd.	44 Elgin St., Brantford
Kenmore Machine Products (Canada) Ltd.	Grimsby
Milner, Edward Co. Ltd., The	311 Pharmacy Ave., Scarborough
Northern Eureka Refrigeration Co. Ltd.	58 Milvan Drive, Weston
Rapid Refrigeration Mfg. Co. Ltd.	370 Birchmount Rd., Scarborough
Unifin Limited	1030 Clarkeside Rd., London
United Cooler (Niagara) Ltd.	72 Vine St., St. Catharines
Manitoba:	
Bell Refrigerator Co. Ltd.	1760 Sargent Ave., Winnipeg
Coldstream Refrigerator Mfg. Ltd.	1855 Sargent Ave., Winnipeg
Polar Equipment Co. Ltd.	467 Provencher Ave., St. Boniface
Alberta:	
Centra-Flo Mfg. Co. Ltd.	Raymond
British Columbia:	
Cory, Geo. J. Refrigeration Ltd.	Granville Island, Vancouver
Gair, Alex & Sons	955 East Hastings St., Vancouver

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 its 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 full-time 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 sawmilling 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 company-operated 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 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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