

CATALOGUE No. 03

43-207

ANNUAL

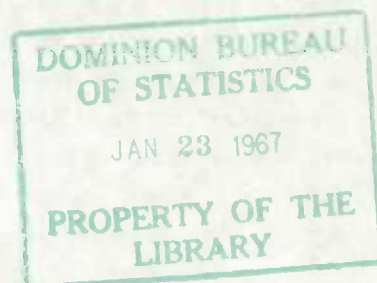


# MANUFACTURERS OF ELECTRICAL INDUSTRIAL EQUIPMENT

1964

ANNUAL CENSUS  
OF MANUFACTURES

*Published by Authority of*  
The Minister of Trade and Commerce



DOMINION BUREAU OF STATISTICS  
Industry Division

January 1967  
6506-836

Price: 50 cents

## PUBLICATIONS

In addition to the report, on this industry, the DBS publishes annual statistics on a number of related industries and current statistics on the more important commodities. Copies of reports provided in the following list are available from the Information and Public Relations Division of the DBS, Ottawa or from the Queen's Printer, Hull, P.Q.

Catalogue number	Title	Periodicity	Price	
			Per copy	Per year
31-001	Inventories, Shipments and Orders in Manufacturing Industries .....	M		\$4.00
31-201	General Review of the Manufacturing Industries of Canada .....	A	\$2.00	2.00
43-203	Manufacturers of Small Electrical Appliances .....	A	.50	.50
43-204	Manufacturers of Major Appliances (Electric and Non-electric) .....	A	.50	.50
43-205	Manufacturers of Household Radio and Television Receivers .....	A	.50	.50
43-206	Communications Equipment Manufacturers .....	A	.50	.50
43-207	Manufacturers of Electrical Industrial Equipment .....	A	.50	.50
43-208	Battery Manufacturers .....	A	.50	.50
43-209	Manufacturers of Electric Wire and Cable .....	A	.50	.50
43-210	Manufactures of Miscellaneous Electrical Products .....	A	.50	.50
65-004	Exports by Commodities .....	M	.75	7.50
65-007	Imports by Commodities .....	M	.75	7.50

A — Annual

M — Monthly

Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information and Public Relations Division, Ottawa or to the Queen's Printer, Hull, P.Q.

## MANUFACTURERS OF ELECTRICAL INDUSTRIAL EQUIPMENT

1964

For statistical purposes the industry titled Manufacturers of Electrical Industrial Equipment covers the operations of establishments primarily engaged in manufacturing electric motors, generators and other electric power equipment for use in the generation, transmission and utilization of electric energy. Important products of this industry are steam turbine generator sets, motors (except railway, motor vehicle and aircraft), generators, transformers, switchgear, pole-line hardware, lightning arresters, electric welding equipment, electric meters. Establishments primarily engaged in manufacturing electric wire and cable are in Industry No. 338—Manufacturers of Electric Wire and Cable.

## 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.



TABLE 1. Principal Statistics, 1961-64

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 .....	98	9,856	21,382	43,786	2,365	86,555	218,951	129,640	x	x	16,558	82,495	135,562
1962													
Totals .....	103	11,131	23,909	51,504	2,371	98,555	256,124	158,749	x	x	18,192	93,133	163,568
1963													
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec .....	16	1,114	2,323	4,485	239	9,138	21,637	11,982	-	-	1,621	7,570	13,199
Ontario .....	80	10,675	22,708	51,206	2,315	93,474	260,109	164,263	5	28	17,369	92,035	169,421
Manitoba .....	2	292	610	1,050	51	3,628	7,239	3,669	-	-	413	1,660	3,890
Saskatchewan .....	2												
Alberta .....	4												
British Columbia .....	8	174	371	832	37	2,555	5,114	2,638	-	-	276	1,485	2,653
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals .....	112	12,255	26,011	57,573	2,643	108,794	294,099	182,553	5	28	19,679	102,750	189,164
1964													
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec .....	20	1,234	2,726	5,288	255	11,349	27,710	16,198	-	-	1,819	8,668	16,972
Ontario .....	84	11,197	24,419	58,872	2,508	103,677	286,930	181,705	3	21	17,903	100,053	186,837
Manitoba .....	2	329	708	1,169	53	4,331	7,880	3,413	-	-	422	1,643	3,656
Saskatchewan .....	2												
Alberta .....	3												
British Columbia .....	8	199	412	941	40	2,935	5,935	2,998	-	-	303	1,605	3,072
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals .....	119	12,959	28,265	64,270	2,857	122,292	328,455	204,314	3	21	20,447	111,967	210,538

TABLE 2. Principal Statistics classified by Size Group based on Value of Shipments of Goods of Own Manufacture, 1963 and 1964

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		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000				\$'000			\$'000		\$'000	
1963													
Under \$10,000 .....													
\$ 10,000 to \$ 24,999 .....	4	7	14	20	1	29	70	48	—	—	10	28	48
25,000 " 49,999 .....	5	21	44	70	1	156	167	2	2	8	34	128	40
50,000 " 99,999 .....	7	32	65	100	5	250	525	278	3	21	47	166	298
100,000 " 199,999 .....	13	91	188	350	17	879	1,759	836	—	—	128	536	849
200,000 " 499,999 .....	21	401	817	1,337	110	3,433	7,025	3,884	—	—	645	2,660	4,443
500,000 " 999,999 .....	18	623	1,300	2,307	140	6,416	12,926	6,620	—	—	853	3,556	7,098
1,000,000 " 4,999,999 .....	32	3,426	7,196	13,636	662	36,753	79,392	41,122	—	—	5,331	24,525	43,844
5,000,000 and over .....	12	7,654	16,389	39,752	1,707	60,876	192,235	129,762	—	—	12,334	69,132	131,874
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
Totals .....	112	12,255	26,011	57,573	2,643	108,794	294,099	182,553	5	28	19,679	102,750	189,164
1964													
Under \$10,000 .....													
\$ 10,000 to \$ 24,999 .....	4	6	13	19	3	56	123	76	—	—	14	53	76
25,000 " 49,999 .....	8	27	54	96	7	325	598	278	1	5	45	175	304
50,000 " 99,999 .....	18	140	286	540	36	1,291	2,607	1,346	2	16	204	900	1,454
100,000 " 199,999 .....	25	378	781	1,402	113	4,288	8,646	4,326	—	—	618	2,890	5,218
200,000 " 499,999 .....	14	504	1,075	1,964	105	4,281	9,754	5,121	—	—	721	3,222	5,278
500,000 " 999,999 .....	36	3,267	7,058	13,250	551	38,574	78,687	41,648	—	—	4,830	22,571	44,857
1,000,000 " 4,999,999 .....	14	8,637	18,999	46,998	2,042	73,476	228,040	151,519	—	—	13,706	80,094	152,934
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
Totals .....	119	12,959	28,265	64,270	2,857	122,292	328,455	204,314	3	21	20,447	111,967	210,538

TABLE 3. Principal Statistics classified by Size Group based on Manufacturing Value Added, 1963 and 1964

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		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000				\$'000			\$'000		\$'000	
1963													
Under \$10,000 .....	3	9	20	25	—	75	98	6	—	—	19	53	45
\$ 10,000 to \$ 24,999 .....	5	11	22	38	1	39	101	74	2	8	13	43	74
25,000 " 49,999 .....	11	54	110	194	9	769	1,138	371	3	21	83	344	403
50,000 " 99,999 .....	10	62	129	241	13	576	1,237	628	—	—	89	371	628
100,000 " 199,999 .....	15	262	518	927	72	2,818	5,300	1,935	—	—	430	2,010	2,802
200,000 " 499,999 .....	24	789	1,642	2,800	186	7,776	15,220	7,716	—	—	1,129	4,737	8,546
500,000 " 999,999 .....	14	947	1,968	3,501	146	10,178	20,521	10,409	—	—	1,445	5,895	11,009
1,000,000 " 4,999,999 .....	23	3,755	7,873	15,865	781	37,652	87,568	48,834	—	—	5,911	28,735	50,964
5,000,000 and over .....	7	6,366	13,732	33,982	1,434	48,912	162,916	112,579	—	—	10,263	58,543	114,024
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
Totals .....	112	12,255	26,011	57,573	2,643	108,794	294,099	182,553	5	28	19,679	102,750	189,164
1964													
Under \$10,000 .....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999 .....	6	11	23	37	4	147	256	121	1	5	20	76	121
25,000 " 49,999 .....	13	50	100	182	14	966	1,479	541	—	—	86	353	600
50,000 " 99,999 .....	14	130	279	563	52	1,806	3,068	1,117	2	16	199	944	1,228
100,000 " 199,999 .....	14	172	359	681	39	2,174	4,176	1,991	—	—	267	1,255	1,991
200,000 " 499,999 .....	24	827	1,729	3,043	161	7,587	16,183	8,022	—	—	1,198	5,283	9,111
500,000 " 999,999 .....	14	732	1,556	2,740	126	8,738	17,935	9,815	—	—	1,141	4,911	10,592
1,000,000 " 4,999,999 .....	28	4,569	9,904	20,365	916	49,861	112,882	63,201	—	—	7,339	37,648	66,887
5,000,000 and over .....	6	6,468	14,315	36,659	1,545	51,014	172,475	119,506	—	—	9,888	59,435	119,593
Head offices, sales offices and a auxiliary units .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
Totals .....	119	12,959	28,265	64,270	2,857	122,292	328,455	204,314	3	21	20,447	111,967	210,538

TABLE 4. Principal Statistics classified by Size Group based on Total Value Added, 1963 and 1964

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		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
<b>1963</b>													
Under \$10,000 .....	7	13	26	44	2	77	161	79	2	8	22	69	89
\$ 10,000 to \$ 24,999 .....	10	52	107	176	5	679	968	291	3	21	74	277	317
25,000 " 49,999 .....	12	71	147	279	17	703	1,445	709	—	—	108	465	744
50,000 " 99,999 .....	12	190	374	584	41	1,717	3,482	1,783	—	—	271	1,021	1,824
100,000 " 199,999 .....	24	720	1,504	2,573	170	7,332	14,398	7,290	—	—	1,065	4,493	7,861
200,000 " 499,999 .....	16	1,009	2,086	3,764	183	10,548	21,100	10,137	—	—	1,520	6,432	11,656
500,000 " 999,999 .....	24	3,834	8,037	16,172	791	38,827	89,630	49,684	—	—	6,059	29,432	51,980
1,000,000 " 4,999,999 .....	7	6,366	13,732	33,982	1,434	48,912	162,916	112,579	—	—	10,263	58,543	114,024
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
<b>Totals</b> .....	<b>112</b>	<b>12,255</b>	<b>26,011</b>	<b>57,573</b>	<b>2,643</b>	<b>108,794</b>	<b>294,099</b>	<b>182,553</b>	<b>5</b>	<b>28</b>	<b>19,679</b>	<b>102,750</b>	<b>189,164</b>
<b>1964</b>													
Under \$10,000 .....	6	11	23	37	4	147	256	121	1	5	20	76	121
\$ 10,000 to \$ 24,999 .....	11	41	84	151	11	819	1,252	447	—	—	68	267	467
25,000 " 49,999 .....	14	118	251	494	37	1,649	2,979	1,061	2	16	184	851	1,137
50,000 " 99,999 .....	16	193	404	781	57	2,279	4,491	2,141	—	—	300	1,435	2,216
100,000 " 199,999 .....	19	611	1,262	2,125	111	5,535	11,687	6,018	—	—	810	3,319	6,246
200,000 " 499,999 .....	16	783	1,676	2,964	131	8,311	17,390	8,938	—	—	1,196	5,200	10,067
500,000 " 999,999 .....	31	4,734	10,251	21,059	962	52,340	117,923	66,082	—	—	7,672	39,323	70,276
1,000,000 " 4,999,999 .....	6	6,468	14,315	36,659	1,545	51,014	172,475	119,506	—	—	9,888	59,435	119,593
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
<b>Totals</b> .....	<b>119</b>	<b>12,959</b>	<b>28,265</b>	<b>64,270</b>	<b>2,857</b>	<b>122,292</b>	<b>328,455</b>	<b>204,314</b>	<b>3</b>	<b>21</b>	<b>20,447</b>	<b>111,967</b>	<b>210,538</b>

TABLE 5. Principal Statistics classified by Size Group based on Total Employed, 1963 and 1964

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		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
<b>1963</b>													
Under 5 employed .....	8	16	32	52	4	178	463	277	2	8	22	76	277
5- 14 employed .....	23	127	265	480	23	1,616	2,892	1,244	3	21	196	801	1,319
15- 49 " .....	24	460	968	1,746	116	5,465	10,908	5,655	—	—	665	3,006	5,832
50- 99 " .....	21	908	1,879	3,304	204	9,332	18,651	8,946	—	—	1,328	5,771	10,632
100-199 " .....	13	1,107	2,388	4,839	207	18,069	33,863	16,049	—	—	1,781	8,880	16,523
200-499 " .....	15	2,813	5,819	11,232	601	22,820	58,319	34,072	—	—	4,451	20,424	36,116
500 employed and over .....	8	6,824	14,661	35,920	1,487	51,313	169,003	116,309	—	—	10,919	61,774	117,796
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
<b>Totals</b> .....	<b>112</b>	<b>12,255</b>	<b>26,011</b>	<b>57,573</b>	<b>2,643</b>	<b>108,794</b>	<b>294,099</b>	<b>182,553</b>	<b>5</b>	<b>28</b>	<b>19,679</b>	<b>102,750</b>	<b>189,164</b>
<b>1964</b>													
Under 5 employed .....	8	14	28	50	4	298	537	270	1	5	24	101	270
5- 14 employed .....	27	140	294	597	40	2,497	4,568	2,224	2	16	233	1,086	2,311
15- 49 " .....	28	583	1,214	2,213	149	7,377	14,981	7,282	—	—	868	3,633	7,643
50- 99 " .....	21	1,015	2,166	3,903	178	9,709	21,666	12,276	—	—	1,432	6,431	13,339
100-199 " .....	13	1,172	2,517	4,999	220	18,191	33,103	15,378	—	—	1,896	9,337	16,938
200-499 " .....	14	2,892	6,233	12,514	590	27,689	66,144	39,348	—	—	4,343	21,331	41,995
500 employed and over .....	8	7,143	15,812	39,995	1,676	56,531	187,455	127,536	—	—	11,342	67,788	127,625
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
<b>Totals</b> .....	<b>119</b>	<b>12,959</b>	<b>28,265</b>	<b>64,270</b>	<b>2,857</b>	<b>122,292</b>	<b>328,455</b>	<b>204,314</b>	<b>3</b>	<b>21</b>	<b>20,447</b>	<b>111,967</b>	<b>210,538</b>



TABLE 6. Principal Statistics classified by Type of Organization, 1963 and 1964

Type of organization	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	
<b>1963</b>													
Individual ownerships .....	1	13	27	37	1	99	184	83	5	28	14	40	83
Partnerships .....	2												
Incorporated companies .....	109	12,242	25,985	57,536	2,642	108,695	293,915	182,469	—	—	19,368	100,692	188,413
Co-operatives .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	297	2,018	668
<b>Totals</b> .....	<b>112</b>	<b>12,255</b>	<b>26,011</b>	<b>57,573</b>	<b>2,643</b>	<b>108,794</b>	<b>294,099</b>	<b>182,553</b>	<b>5</b>	<b>28</b>	<b>19,679</b>	<b>102,750</b>	<b>189,164</b>
<b>1964</b>													
Individual ownerships .....	1	12,959	28,265	64,270	2,857	122,292	328,455	204,314	3	21	20,138	109,906	210,121
Partnerships .....	1												
Incorporated companies .....	117	—	—	—	—	—	—	—	...	...	—	—	—
Co-operatives .....	—	—	—	—	—	—	—	—	...	...	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	309	2,061	416
<b>Totals</b> .....	<b>119</b>	<b>12,959</b>	<b>28,265</b>	<b>64,270</b>	<b>2,857</b>	<b>122,292</b>	<b>328,455</b>	<b>204,314</b>	<b>3</b>	<b>21</b>	<b>20,447</b>	<b>111,967</b>	<b>210,538</b>

TABLE 7. Calculation of Output, Input and Value Added, 1963 and 1964

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1963	1964	1963	1964	1963	1964
<b>\$'000</b>						
<b>Output</b>						
1. Shipments and other revenue .....	294,099	328,455	39,631	33,524	333,730	361,979
Inventories—Goods of own manufacture:						
Add closing—Goods in process .....	22,813	20,257	...	...	22,813	20,257
Finished goods .....	23,615	26,672	...	...	23,615	28,672
Deduct opening—Goods in process .....	26,292	23,813	...	...	26,292	23,813
Finished goods .....	20,245	22,108	...	...	20,245	22,108
2. Net inventory change .....	(109)	1,008	...	...	(109)	1,008
3. Gross output (1 + 2) .....	293,990	329,463	39,831	33,524	333,621	362,987
<b>Input</b>						
4. Purchases of goods not of own manufacture .....	...	...	31,283	25,625	31,283	25,625
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	2,539	2,775	2,539	2,775
Deduct closing .....	...	...	2,492	3,002	2,492	3,002
5. Cost of goods sold (not of own manufacture) .....	...	...	31,330	25,398	31,330	25,398
6. Materials, supplies, etc. ....	108,794	122,292	1,647	1,901	110,441	124,193
7. Fuel and electricity .....	2,643	2,857	42	...	2,685	2,857
8. Gross input (5 + 6 + 7) .....	111,437	125,149	33,019	27,299	144,456	152,448
Value added (3 - 8) .....	182,553	204,314	6,612	6,224	189,164	210,538



TABLE 8. Employment and Payroll, 1963 and 1964

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total		Production and related workers		Admin- istra- tive and office	Sales and distri- bution	Total
	Manufacturing		Other								Manufacturing	Other			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female					
1963	number										\$'000				
Newfoundland .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quebec .....	824	290	—	—	299	92	92	24	1,215	406	4,485	—	2,348	737	7,570
Ontario .....	8,815	1,860	42	3	4,423	1,230	786	210	14,066	3,303	51,206	193	34,229	6,408	92,035
Manitoba .....	277	15	7	—	89	18	6	1	379	34	1,050	28	541	41	1,660
Saskatchewan .....															
Alberta .....															
British Columbia .....	161	13	—	—	83	16	18	5	242	34	832	—	490	164	1,485
Yukon and Northwest Terri- tories .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .....	10,077	2,178	49	3	4,874	1,356	902	240	15,902	3,777	57,573	221	37,608	7,349	102,750
1964															
Newfoundland .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Brunswick .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quebec .....	903	331	—	—	349	101	107	28	1,359	460	5,288	1	2,301	1,076	8,666
Ontario .....	9,205	1,992	51	5	4,449	1,281	741	179	14,446	3,457	56,872	274	36,357	6,550	100,053
Manitoba .....	302	27	—	—	69	19	4	1	375	47	1,169	—	435	39	1,643
Saskatchewan .....															
Alberta .....															
British Columbia .....	191	8	—	—	57	23	19	5	267	36	941	—	492	172	1,605
Yukon and Northwest Terri- tories .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .....	10,601	2,358	51	5	4,924	1,424	871	213	16,447	4,000	64,270	275	39,585	7,837	111,967

TABLE 9. Production and Related Workers, - Manufacturing Activity, 1963 and 1964

Month	1963		1964	
	Male	Female	Male	Female
	number			
Establishments reporting monthly detail (large establishments only):				
January .....	9,594	1,993	9,901	2,214
February .....	9,593	1,996	9,959	2,220
March .....	9,650	2,011	10,066	2,201
April .....	9,696	1,991	10,165	2,204
May .....	9,718	1,970	10,160	2,123
June .....	10,091	2,097	10,342	2,153
July .....	10,058	2,066	10,506	2,207
August .....	10,165	2,099	10,673	2,299
September .....	10,119	2,138	10,733	2,409
October .....	9,983	2,087	10,660	2,437
November .....	9,937	2,085	10,771	2,420
December .....	9,840	2,118	10,813	2,349
Averages .....	9,973	2,056	10,405	2,271
Establishments reporting annual averages (small establishments only) .....	104	122	196	87
Average for all establishments .....	10,077	2,178	10,601	2,358

TABLE 10. Inventories, 1964

Province	Manufacturing				Non-manufacturing	Total inventories
	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 .....	2,495	2,218	1,313	6,026	846	6,872
Ontario .....	21,301	20,699	20,454	62,454	1,776	64,229
Manitoba .....	796	422	203	1,421	72	1,494
Saskatchewan .....						
Alberta .....						
British Columbia .....	560	474	138	1,172	81	1,254
Yukon and Northwest Territories .....	—	—	—	—	—	—
Totals .....	25,152	23,813	22,108	71,073	2,775	73,848
Closing:						
Newfoundland .....	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	—	—	—	—	—	—
New Brunswick .....	—	—	—	—	—	—
Quebec .....	3,811	2,275	1,347	7,433	828	8,261
Ontario .....	23,124	17,284	24,829	65,236	2,009	67,245
Manitoba .....	914	255	288	1,457	106	1,563
Saskatchewan .....						
Alberta .....						
British Columbia .....	762	443	208	1,413	59	1,471
Yukon and Northwest Territories .....	—	—	—	—	—	—
Totals .....	28,610	20,257	26,672	75,538	3,002	78,541

TABLE 11. Purchased Fuel and Electricity Used in Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Large establishments reporting commodity detail:				
Bituminous coal:				
(a) From Canadian mines .....	ton	1,143	15	—
(b) Imported .....	"	30,650	345	31,897
Sub-bituminous coal (from Alberta mines only) .....	"	—	—	—
Anthracite coal .....	"	35	1	55
Lignite coal .....	"	—	—	—
Coke .....	"	—	—	—
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	272,566	109	249,952
Fuel oil including kerosene or coal oil .....	"	4,174,198	416	4,663,085
Wood .....	cord	1	—	—
Gas:				
(a) Liquefied petroleum gases .....	Imp. gal.	8,865	3	93,939
(b) Other manufactured gas .....	M cu. ft.	—	—	—
(c) Natural gas .....	"	181,582	188	265,515
Other fuel .....	...	...	20	...
Electricity purchased .....	kwh.	163,985,090	1,411	183,951,961
Steam purchased .....	...	...	35	...
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity .....	...	101	...	77
3. All establishments:				
<b>Total fuel and electricity used .....</b>	...	<b>2,643</b>	...	<b>2,837</b>

TABLE 12. Materials and Supplies - Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost \$'000	Quantity	Cost \$'000
<b>1. Materials used:</b>				
Aluminum:				
Castings .....	lb. 2,096,965	1,372	1,387,989	1,150
Wire rods .....	" 125,097	85	96,024	67
Sheets and strip .....	" 749,891	432	1,013,423	503
Other .....	...	626	...	1,150
Brass and bronze:				
Castings .....	lb. 1,522,159	1,159	1,565,583	1,304
Wire rods .....	" 314,707	194	291,765	162
Sheets and strip .....	" 392,830	257	574,024	371
Other .....	...	188	...	318
Copper:				
Wire rods .....	lb. 2,531,746	1,294	2,776,593	1,489
Sheets and strip .....	" 1,767,743	1,061	2,367,991	1,460
Tubing and pipe .....	" 383,015	225	358,678	246
Wire, enamelled .....	" 9,281,230	6,514	10,965,937	7,613
Wire, other insulated .....	...	3,984	...	5,440
Other .....	...	2,679	...	1,844
Insulating varnishes, japans, enamels and lacquers .....	...	403	...	407
Insulators, porcelain and glass .....	...	2,665	...	2,966
Iron and steel (except alloy):				
Castings:				
Iron .....	ton 6,187	2,557	7,802	3,193
Steel .....	" 4,401	1,042	8,586	1,906
Steel bars and rods .....	" 17,206	2,955	19,525	3,205
Steel sheets and strip:				
Plain .....	" 29,631	5,452	38,168	6,245
Galvanized .....	" 409	76	1,381	295
Steel wire .....	" 1,549	241	1,772	279
Structural steel .....	" 3,358	616	4,075	716
Other (except alloy) .....	...	957	...	986
Alloy steel:				
Stainless .....	...	639	...	665
Silicon sheets and strips .....	ton 26,531	11,148	27,841	11,844
Other alloy including tool steel .....	...	296	...	467
Lead .....	lb. 338,811	84	516,104	75
Mica .....	" 173,728	165	459,945	689
Motors, electric:				
Under 1 h.p. ....	No. 14,920	173	20,092	223
1 h.p. and over A.C. or D.C. ....	" 280	25	2,058	64
Paints, stains, lacquers .....	...	512	...	496
Resins, synthetic .....	...	721	...	667
Resistance wire, ribbon and strip .....	lb. 35,511	96	34,845	91
Sulphuric acid .....	" 297,673	7	431,536	15
All other materials and components used <sup>1</sup> .....	...	52,003	...	57,131
<b>2. Containers and other packaging materials and supplies used .....</b>	...	1,491	...	2,012
<b>3. Operating, maintenance and repair supplies used (excluding fuel) .....</b>	...	3,736	...	3,824
<b>4. Amount paid out to others for work done on materials owned by establishments .....</b>	...	662	...	713
<b>Totals .....</b>	...	108,794	...	122,292

<sup>1</sup> No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated costs were \$2,597,000 in 1963 and \$2,949,000 in 1964.



TABLE 13. Shipments of Goods of Own Manufacture, 1963 and 1964

Description	Value	
	1963	1964
	\$'000	
1. Products:		
Electrical industrial equipment:		
Industrial control equipment .....	31,187	35,769
Converter equipment .....	3,633	3,239
Electric generators and parts .....	15,632	16,067
Electric motors and parts .....	48,911	57,094
Transformers and parts .....	71,152	73,079
Electrical switchgear and protective equipment (except telephone switchboards) .....	46,163	51,492
Electric welding apparatus and welding rod .....	8,000	9,335
Cutouts and fuses .....	2,966	3,749
Instruments and meters .....	11,888	12,979
Pole line hardware .....	8,225	9,586
Miscellaneous electrical equipment:		
Industrial electric heating equipment .....	639	1,254
Lighting equipment .....	1,528	2,114
Telecommunication equipment other than domestic radio and television receiving sets .....	2,697	7,548
Rectifiers (other than power) (semi-conductor and/or electron tube type) (see Table 8H) .....	1,692	1,305
Miscellaneous electrical products .....	14,190	13,295
All other products .....	24,122	23,847
2. Amount received in payment for work done on materials and products owned by others .....	910	1,094
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above .....	364	(2,282)
Net adjustment for establishments receiving progress payments .....	-	7,890
Total adjusted value of shipments and work done .....	294,099	328,455

TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries  
(Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)  
A. Electric Generators and Parts, 1963 and 1964

Item	1963			1964		
	Number	Total rating	Value	Number	Total rating	Value
			\$'000			\$'000
A.C. generators (except for vehicle and marine use) including horizontal water-wheel driven synchronous generators but not including vertical water-wheel synchronous generators:						
Up to and including 100 kw. ....	822	51,596	1,307	675	71,172	1,370
101 to 500 kw. ....						
501 to 1,500 kw. ....	67	97,575	1,172			
1,501 and above .....						
A.C. vertical water-wheel driven generators, all ratings .....	...	...	13,154	...	...	14,691
Accessories and parts for a.c. generators .....						
Steam or gas turbo-driven a.c. generators 5,001 kw. and above .....	...	...	...	...	...	...
Totals .....	...	...	15,633	...	...	16,061

TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries - Continued  
B. Electric Motors<sup>1</sup> and Parts, 1963 and 1964

Item	1963			1964		
	Number	Total rating	Value	Number	Total rating	Value
		h.p.	\$'000		h.p.	\$'000
<b>A.C. Motors (except for railway and vehicle use):</b>						
Single phase induction:						
1/3 h.p. and under (except shaded pole or universal motors).....	1,049,556	..	14,037	1,167,200	..	15,129
1/2 h.p. and 3/4 h.p.....	95,354	..	2,627	107,116	..	2,862
1 h.p. to 5 h.p. inclusive-open type.....	18,150	..	1,312	15,819	..	1,067
1 h.p. to 5 h.p. inclusive-enclosed type.....	670	1,440	88	3,129	7,335	321
Polyphase induction:						
1/3 h.p. and under.....	4,595	1,583	142	6,931	1,808	219
1/2 h.p. and 3/4 h.p.....	12,299	8,602	425	12,809	7,515	434
1 h.p. to 5 h.p. inclusive-open type.....	23,345	61,973	1,425	24,180	59,837	1,565
1 h.p. to 5 h.p. inclusive-enclosed type.....	12,030	32,244	1,033	15,035	39,582	1,362
6 h.p. to 25 h.p. inclusive-open type.....	7,430	96,455	1,230	9,004	109,749	1,596
6 h.p. to 25 h.p. inclusive-enclosed type.....	6,230	81,978	1,377	7,743	101,380	1,916
26 h.p. to 100 h.p. inclusive-open type.....	2,502	133,288	1,517	2,840	144,786	1,727
26 h.p. to 100 h.p. inclusive-enclosed type.....	1,831	95,651	1,530	2,378	124,951	2,270
101 h.p. to 200 h.p. inclusive-open type.....	560	86,130	1,004	620	74,813	1,270
101 h.p. to 200 h.p. inclusive-enclosed type.....	186	25,883	525	300	43,311	840
201 h.p. to 1000 h.p. inclusive.....	624	264,022	3,424	605	232,257	3,479
1001 h.p. and over.....	101	192,050	2,568	41	73,500	994
Synchronous motors and condensers:						
Up to and including 500 h.p.....	—	—	2	—	—	2
501 h.p. to 2000 h.p.....	113	—	692	74	94,436	1,239
2001 h.p. and above.....	—	—	2	—	—	2
Accessories and parts for a.c. motors.....	—	—	582	—	—	1,149
Railway and vehicle motors, a.c. and d.c.....	—	—	2	—	—	2
Shaded pole type motors, all ratings.....	718,038	—	2,324	1,313,541	—	3,700
Universal type motors, all ratings.....	—	—	960	55,878	—	1,153
<b>D.C. motors and generators, including exciters, (except for railway and vehicle use):</b>						
D.C. motors:						
1/3 kw. and under.....	—	—	2,286	442,880	—	2,763
1/2 kw. and 3/4 kw.....	—	—	2	—	—	2
D.C. motors or generators:						
1 h.p. or kw. to 5 h.p. or kw.....	345	1,162	116	177	468	117
6 h.p. or kw. to 25 h.p. or kw.....	149	2,438	361	263	5,053	523
26 h.p. or kw. to 100 h.p. or kw.....	283	16,207	1,260	452	25,658	2,036
101 h.p. or kw. to 200 h.p. or kw.....	54	8,740	327	76	11,763	541
201 h.p. or kw. to 1000 h.p. or kw.....	66	28,461	1,094	107	58,852	3,136
1001 h.p. or kw. and over.....	—	—	2	—	—	2
Accessories and parts for d.c. motors and generators.....	—	—	2,023	—	—	2,059
All other motors or generators <sup>3</sup> .....	—	—	7,750	—	—	7,096
<b>Totals</b> .....	...	...	54,039	...	...	62,503

C. Transformers, by Types, 1963 and 1964

Type	1963			1964		
	Number	Total rating	Value	Number	Total rating	Value
		kva.	\$'000		kva.	\$'000
Distribution transformers - Dry type up to and including 200 kva. 1 phase, 15 kv. and below; except dry type transformers 2 kva. and below.....	7,824	335,187	2,240	8,265	339,753	2,358
Distribution transformers - Dry type up to and including 225 kva. 3 phase, 15 kv. and below; except dry type transformers 1 kva. and below.....	5,143	148,911	2,359	3,037	159,505	1,947
Distribution transformers - Liquid filled type, up to and including 200 kva. 1 phase, 15 kv. and below.....	51,730	1,391,448	12,902	63,175	1,527,888	15,042
Distribution transformers - Liquid filled type, up to and including 225 kva. 3 phase, 15 kv. and below.....	1,476	172,698	1,787	1,699	139,471	1,544
Power transformers 7,500 kva. and less, up to and including 138 kv. class.....	1,698	3,756,871	12,669	1,684	2,547,918	12,007
Power transformers above 7,500 kva. at all voltages, also all kva. ratings in voltages above 138 kv. class.....	201	9,662,933	18,218	130	5,260,250	18,186
Feeder regulators:						
Single phase step voltage regulators.....	132	4,532	377	185	17,486	568
Three phase step voltage regulators with 750 kva. of regulation or less.....	25	9,107	342	40	13,031	477
Current transformers:						
Up to and including 15 kv.....	30,039	..	1,504	31,190	..	1,768
Above 15 kv.....						
Potential transformers:						
Up to and including 15 kv.....	8,645	..	1,024	9,076	..	1,191
Above 15 kv.....						

See footnotes at end of table.

**TABLE 14. Shipments of Selected Goods of Own Manufacture — All Industries — Continued**  
**C. Transformers, by Types, 1963 and 1964 — Concluded**

Type	1963			1964		
	Number	Total rating	Value	Number	Total rating	Value
		kva.	\$'000		kva.	\$'000
Metering outfits (combination of current and potential transformers in one enclosure):						
Up to and including 15 kv.....	526	..	527	493	..	427
Above 15 kv. ....						
Luminous tube transformers .....	..	..	2,009	..	..	2,193
Ignition transformers (oil and gas) .....						
Radio and TV transformers:						
Air core .....	1,735,617	..	1,191	3,540,747	..	2,932
Powdered iron and ferrite core .....						
Laminated core .....						
Transformers for electronic equipment (other than radio and TV) .....	280,920	..	1,830	283,838	..	1,807
Fluorescent transformers and ballasts .....	2,026,263	..	11,899	2,106,620	..	12,158
Mercury lamp transformers .....	64,805	..	2,153	84,330	..	2,614
Bell ringing and chime transformers .....	—	—	4	—	—	4
Control and signalling transformers .....	63,793	..	529	72,654	..	598
General purpose dry type transformers, up to and including 2 kva. ....	—	—	4	—	—	936
All other transformers .....	..	..	5,466	..	..	5,687
Parts and supplies for transformers .....	..	..	1,591	..	..	838
<b>Totals</b> .....	<b>...</b>	<b>...</b>	<b>83,836</b>	<b>...</b>	<b>...</b>	<b>87,502</b>

**D. Electrical Switch Gear and Protective Equipment (Except Telephone Switchboards), 1963 and 1964**

Item	Value	
	1963	1964
	\$'000	
Switchgear assemblies:		
Metalclad switchgear, 5 kv. and 15 kv. with drawout oil circuit breakers .....	1,468	2,044
Metalclad switchgear, 5 kv. and 15 kv. with drawout oilless circuit breakers (includes air and airblast breakers) .....	9,301	6,477
600 volt metal-enclosed switchgear (drawout or fixed breakers, but not including moulded case breakers) .....	4,700	4,365
Control desks, duplex and open switchboards and supervisory control .....	2,890	3,051
Metal-enclosed fusegear assemblies (above 600 volts) .....	4,337	3,543
Power circuit breakers (sold apart from assemblies and not including sectionalizers or reclosers):		
Indoor oil or oilless circuit breakers .....	5,189	6,601
Outdoor oil circuit breakers .....		
Outdoor oilless circuit breakers .....		
Low voltage air circuit breakers (sold apart from assemblies but not including moulded case breakers) .....	742	1,255
Disconnecting switches:		
Indoor type .....	753	698
Outdoor type .....	3,587	5,886
Lightning arresters:		
15 kv. and under .....	938	779
Over 15 kv. ....		
Power capacitors:		
Units (sold apart from assemblies) .....	1,068	1,326
Assemblies (including units) .....		
Low voltage switchboards (fused or circuit breaker types) .....	3,195	4,224
Distribution, lighting and residential panelboards (with fuses or moulded case circuit breakers) .....	12,882	13,353
Industrial and residential enclosed safety switches and circuit breakers .....	5,025	6,256
Miscellaneous cabinets, wireways, gutters, surface raceways (excluding conduit and metallic tubing) and bus ducts including feeder, plug and trolley types .....	3,710	2,238
Oil circuit reclosers and sectionalizers, up to and including 15,000 volts and repair parts .....	\$	\$
Relays, switchgear type, protective, auxiliary, regulation, etc. (sold apart from switchgear assemblies) .....	1,463	1,682
Potheads .....	\$	\$
Other switchgear and protective equipment .....	5,473	6,234
<b>Totals</b> .....	<b>66,721</b>	<b>70,014</b>

See footnotes at end of table.



TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries - Continued  
E. Electric Welding Apparatus and Welding Rod, 1955-64

Year	Welding apparatus		Welding rod*	
	Electric arc welding equipment with controls	Other electric welding apparatus <sup>7</sup>	Quantity	Value
	\$'000	\$'000	tons	\$'000
1955	1,546	1,837	15,100	4,800
1956	2,324	3,215	20,230	6,823
1957	2,426	1,738	20,199	7,675
1958	1,816	1,176	18,474	7,436
1959	1,975	2,300	21,777	8,459
1960	2,175	1,650	19,490	7,342
1961	1,861	2,068	21,236	9,053
1962	2,242	2,094	26,039	11,073
1963	3,192	2,368	25,620	12,230
1964	3,539	3,058	34,626	14,279

F. Industrial Control Equipment, 1963 and 1964

Item	Value	
	1963	1964
	\$'000	
A.C. single phase and d.c. full voltage fractional horsepower low voltage manual starting switches including horsepower rated snap switches 1 h.p., 250 v. max.	546	541
A.C. and d.c. full voltage single phase and 3 phase integral horsepower manual low voltage starters 7½ h.p., 600 v. max.	687	788
A.C. full voltage single speed and multispeed low voltage magnetic line starters size 0 and up, for squirrel cage motors, 600 v. max. (ampere rated starters for hermetic motors not included)	4,546	5,169
A.C. low voltage magnetic contractors size 0 and up, and a.c. or d.c. magnetic multipole relays including single-voltage, double-voltage and timing relays and thermal and magnetic relays intended for starting and running protection of motors, 600 v. max. (thermal overload relay heaters furnished separately not included)	2,410	3,062
A.C. reduced voltage manual low voltage starters for squirrel cage motors, 600 v. max. (synchronous and wound-rotor motor controllers not included)	534	226
A.C. reduced voltage magnetic low voltage starters for squirrel cage motors, auto-transformer, resistor, reactor, part-winding and wye-delta types, 600 v. max. (synchronous, hermetic and wound-rotor motor controllers not included)	476	654
A.C. full voltage and reduced voltage ampere-rated low voltage controllers for hermetic motors, 600 v. max.	143	160
A.C. motor control centres consisting of factory assembled groups of low voltage combination magnetic starters, 600 v. max. (self-standing starter racks and assemblies not included)	5,154	6,997
A.C. high voltage class E-1 and E-2 induction and synchronous motor controllers, 5,000 v. max. incorporating short circuit current interrupting means higher than 10 times contactor ampere rating	1,554	1,690
A.C. low-voltage and unfused high voltage synchronous motor controllers and field panels	75	87
A.C. combined motor drives including mine hoist and paper-machine drives and liquid rheostats (packaged adjustable voltage drives not included)	373	279
All other a.c. motor control equipment including a.c. machine tool control and general purpose panels, wall, floor or machine mounted, consisting of grouped general purpose components, devices and starters; racked group control; a.c. magnetic crane and traffic bridge control and a.c. crane protective panels; a.c. magnetic low voltage and unfused high voltage wound-rotor motor control including magnetic secondary panels; a.c. high voltage contactors; low voltage fireproof control; static adjustable voltage drives having static power conversion components; all other a.c. magnetic control n.o.p. all push button and indicating light stations larger than ordinarily listed by manufacturers. (Packaged adjustable voltage drives with rotating amplifiers and/or rotating converters, mine hoist drives and motor control centres not included)	2,566	3,878
D.C. low voltage magnetic contactors, controllers, starters and time starters including d.c. magnetic machine tool control, d.c. magnetic crane and traffic bridge control, d.c. crane protective panels, d.c. mill auxiliaries, and all other d.c. magnetic control n.o.p. (mine hoist drives not included)	698	747
D.C. mine and mill combined drives including steelmill, paper machine and rubber-mill drives, and static electronic and semi-conductor rectifier drives (d.c. mill auxiliaries not included)	2,822	3,480
A.C. and d.c. drum and cam switches and controllers, dial starters and rheostats and motor starting and speed controlling resistors mounted separately	429	430
Brakes with a.c. coils or d.c. coils, their clutches and actuators	126	397
Pushbutton and indicating light stations up to maximum grouping ordinarily listed by manufacturers, and pushbutton and indicating light components (not including pushbutton and indicating light stations)	1,693	1,868
Limit switches and all other pilot control equipment including pressure, vacuum, temperature, and liquid-level switches, plugging switches, speed switches, solenoids and terminal blocks. (Line starter modification kits, pilot devices used in appliances, air-conditioning, refrigeration, heating and domestic installations not included)	1,218	1,360
Resistance welding and electronic control equipment including electronic and static control assemblies, electronic and static magnetic amplifiers, electronic relays, photoelectric controllers, voltage, speed, followup, position, inspection and gauging apparatus and solid-state control devices. (Packaged static adjustable voltage drives not included)	1,322	726
Renewal parts for industrial control equipment including modification, accessory and repair kits and separately furnished overload relay heaters	2,559	2,344
All other industrial control equipment	2,407	3,751
<b>Totals</b>	<b>32,338</b>	<b>38,834</b>

See footnotes at end of table.

**TABLE 14. Shipments of Selected Goods of Own Manufacture—All Industries—Continued**  
**G. Cutouts and Fuses, 1963 and 1964**

Item	Value	
	1963	1964
	\$'000	
Cutouts and fuses:		
Open, semi-enclosed and enclosed distribution cutouts (601 volts and above), indoor and outdoor fused disconnect switches including porcelain housed, removable switch blades for use therewith (do not include fuse links therefor) and repair parts .....	1,683	1,999
Fuse links for distribution cutouts .....	345	343
Oil fuse cutouts including fuse links therefor and repair parts .....	"	"
Power fuses (solid material type) — Up to and including 600 volts .....	629	716
Power fuses 601 volts and above (solid material and current limiting types), fuse supports, fuse mountings and repair parts .....		
Fuse links for power fuses 601 volts and above (solid material and current limiting types) .....	"	"
Cartridge fuses .....	1,436	1,117
Plug fuses .....		
Individual cutouts for cartridge and plug fuses .....	"	"
All other fuses .....	1,668	1,259
Renewal elements for cartridge fuses .....	"	"
<b>Totals</b> .....	<b>5,761</b>	<b>5,434</b>

**H. Converter Equipment, 1963 and 1964**

Type	1963			1964		
	Number	Total rating	Value	Number	Total rating	Value
		kv.	\$'000		kv.	\$'000
Motor-generator sets up to and including 150 kw.—Induction and synchronous types (including frequency changers) .....	124	5,783	519	109	5,398	483
Motor-generator sets larger than 150 kw.—Induction and synchronous types (including frequency changers) .....	27	27,984	1,271	..	..	1,039
Mercury arc power rectifier and excitation cubicles (does not include associated switchgear or transformers) .....	..	..	1,567	..	..	1,709
Semi-conductor power rectifier equipment including plate and crystal junction types (does not include associated switchgear, transformers or commercial battery chargers):						
5 kw. to 50 kw. ....						
Over 50 kw. ....	...	...	276	...	...	x
Parts and supplies for converter equipment .....	—	—	3,633	—	—	3,231
<b>Totals of above items</b> .....	—	—	2,147	—	—	1,693
Rectifiers for storage battery charging (semi-conductor and/or electron tube type) .....	—	—	2,147	—	—	1,693

**I. Watt-hour Meters, 1955-64**

Year	Quantity	Value	Year	Quantity	Value
	No.	\$'000		No.	\$'000
1955 .....	471,354	7,053	1960 .....	315,992	5,978
1956 .....	534,742	8,019	1961 .....	364,089	6,292
1957 .....	469,188	7,951	1962 .....	340,752	5,991
1958 .....	399,935	6,915	1963 .....	392,065	6,325
1959 .....	410,943	7,493	1964 .....	389,889	7,063

See footnote at end of table.



TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries - Concluded  
J. Pole Line Hardware, 1955-64

Year	Value	Year	Value
	\$'000		\$'000
1955	9,130	1960	11,146
1956	11,888	1961	10,617
1957	11,988	1962	11,962
1958	12,303	1963	12,642
1959	12,251	1964	13,828

<sup>1</sup> Electric motors and/or generators as indicated.

<sup>2</sup> Included with "All other motors or generators".

<sup>3</sup> Includes rotors and stators.

<sup>4</sup> Included in "All other transformers".

<sup>5</sup> Included with "Other".

<sup>6</sup> Includes both gas and electric welding rod of ferrous type only.

<sup>7</sup> Includes "Resistance welding equipment with controls".

<sup>8</sup> Included in "All other fuses".

#### List of Establishments classified to This Industry, 1964

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

Name	Location
<b>Quebec:</b>	
Beaupre Engineering Works	2216 Church Ave., Montreal
Brown Boveri (Canada) Ltd.	4000 Trans-Canada Hwy., Pointe-Claire
Canada Iron Foundries Ltd.	Lachine
Canadian General Electric Co. Ltd.	1130 Blvd. Charest West, Quebec
Crompton Parkinson Electrical Ltd.	4104 St. Catherine St. W., Westmount, Montreal
Electrical Mfg. Co. Ltd.	Montmagny
Electrical Switchgear Ltd.	115 St. Denis St., St-Lambert
Federal Pacific Electric of Canada	Granby
Perranti-Packard Electric Ltd.	Trois-Rivières
J. & R. Electric Co.	2520 Chariand St., Montreal 12
Klockner-Moeller Canada Ltd.	110 Peacock St., Pointe-Claire
Klockner-Moeller Canada Ltd.	Granby
Mackey Automation and Controls Ltd.	8594-10th Ave., Ville St-Michel
Marcus Transformers of Canada Ltd.	999 College St., Montreal 30
Klockner - Moeller Canada Ltd.	915 Boul. Pierre Bertrand, Québec
Miller Welders Canada Ltd.	8451 Parkway Blvd., Ville d'Anjou
Power Survey Equipment Ltd.	2216 Ave. de l'Eglise, Verdun
Reliance Electric & Engineering (Canada) Ltd., (Les Transformateurs de Québec Div.)	280 St-Dominique St., Quebec
Société Industrielle d'appareillage Technique Inc.	Lauzon
Sangamo Co. Ltd.	Trois-Rivières
<b>Ontario:</b>	
Acme Electric Corp. Ltd.	50 Northline Rd., Toronto 16
Al-Ma Equipment Co. Ltd.	430 Comstock Rd., Scarborough
Allanson Manufacturing Corp. Ltd.	33 Cranfield Rd., Toronto 16
Allen-Bradley Canada Ltd.	Galt
Bach-Simpson Ltd.	1255 Brydges St., London
Berlet Ltd.	Brantford
Brevel Products Ltd.	1370 Birchmount, Scarborough
Bogue Electric of Canada Ltd.	Box 900, Station "B", Ottawa
Canadian Controllers Ltd.	Birchmount Rd., Scarborough
Canadian General Electric Co. Ltd.	Guelph
Canadian General Electric Co. Ltd.	940 Lansdowne Ave., Toronto 4
Canadian General Electric Co. Ltd.	Peterborough
Canadian Sterling Electric Ltd.	799 Rennie St., Hamilton
Canadian Westinghouse Co. Ltd.	286 Sanford Ave. N., Hamilton
Canadian Westinghouse Co. Ltd.	Clarke Sideroad & Huron St., London
Canadian Westinghouse Co. Ltd.	1475 The Queensway, Toronto 18
Cansfield Electrical Works Ltd.	260 Geary St., Toronto 4
Clare Canada Ltd., C.P.	840 Caledonia Rd., Toronto
Clark Coil Company	938 Walker Rd., Windsor
Controls Company Canada Limited	St. Thomas
Crompton Parkinson Electrical Ltd.	Cainsville
Cutler-Hammer Can. Ltd.	45 Progress Rd., Scarborough
Dominion Cutout Ltd.	155 Nantucket Blvd., Scarboro
Dresser Electric Ltd.	877 Walker Rd., Windsor
Electric Control & Engineering Co. Ltd.	1199 Finch Ave. West, Downsview
Electronic Controls Ltd.	11 Water St., Belleville
Fanner Electrical Products Ltd. The	50 Frid St., Hamilton
Perranti-Packard Electric Ltd.	Dieppe Rd., St. Catharines
Perranti-Packard Electric Ltd.	Industry St., Toronto 15
P.H. Welding Machines Ltd.	92 North Queen St., Toronto 18
Franklin Electric of Canada Ltd.	Strathroy
Industrial & Machine Control Co.	1720 Langlois Ave., Windsor
Industrial Transformer Product	767 Warden Ave, Scarborough
Industrial Wire and Cable Ltd.	Newmarket



List of Establishments classified to This Industry, 1964 - Concluded

Name	Location
<b>Ontario - Con.</b>	
Inglis Company Limited, John .....	Eglinton & Pharmacy, Toronto
Insul-&Corp. (Canada) Ltd. ....	24 Ronson Dr., Rexdale
I.T.E. Circuit Breaker (Canada) Ltd. ....	Port Credit
Johnston Soper Ltd. ....	230 Weber St., N., Waterloo
Jones & Moore Electric Co. Ltd. ....	296 Adelaide St. W., Toronto 2 B.
Kearney Corp. of Canada Ltd., James R. ....	Guelph
Kirkwood Commutators (Canada) Ltd. ....	Spalding Drive, Brantford
Klockner-Moeller Canada Ltd. ....	19 Hass Rd., Rexdale
Klockner-Moeller Canada Ltd. ....	380 Saskatoon St., London
Leece Neville of Canada Ltd. ....	359 Frankcom St., Ajax
Lincoln Electric Co. of Canada Ltd. ....	179 Wicksteed Ave., Leaside
Lorain Products (Canada) Ltd. ....	St. Thomas
Lovatt Engineering Ltd. ....	Chesley
Marquette Equipment (Canada) Ltd. ....	296 Rexdale Blvd., Rexdale
Mechron Engineering Products Ltd. ....	2437 Kaladar Ave., Ottawa
McGraw-Edison (Canada) Ltd. ....	3595 St. Clair Ave. East, Scarborough
Moloney Electric Co. of Canada Ltd. ....	213 Sterling Rd., Toronto 3
Murray-Jensen Mfg. Ltd. ....	216 Norseman St., Toronto 18
Nichols Co. Limited, R.H. ....	4544 Dufferin St., Toronto
Osborne Electric Company Ltd. ....	95 Wesley St., Toronto 18
Penzer Products Ltd. ....	72 Vine St., St. Catharines
Pierce Fuse Limited .....	18 Dorchester Ave., Toronto 18
Pioneer Electric Ontario Ltd. ....	445 Horner Ave., Toronto
Powertronic Equipment Ltd. ....	50 Bermondsey Rd., Toronto
Precision Welder & Flexopress (Canada) Ltd. ....	72 Carnforth Rd., Toronto
Progressive Welder (Canada) Ltd. ....	Chatham
Reliance Electric & Engineering (Canada) Ltd. ....	Welland
Reliance-Reeves-Master Ltd. ....	Stratford
Robbins & Myers Co. of Canada Ltd., The .....	Brantford
Robotron of Canada Ltd. ....	Sandwich
Sangamo Co., Ltd. ....	215 Laird Dr., Leaside
Sangamo Co. Ltd. ....	Guelph
S.&C. Electric Canada Ltd. ....	90 Belfield Rd., Rexdale
Sherley Controls Ltd. ....	30 Fifth Ave., Ottawa 1
Shoe Machine Parts Ltd. ....	60 Tecumseh St., Toronto
Slater Steel Industries Ltd. ....	681 King St., Hamilton
Sola-Basic Products Ltd. ....	377 Evans Ave., Toronto 18
Square D. Company Canada Ltd. ....	Mount Dennis
Stegg Electric Ltd. ....	34 Bertram Blvd., Belleville
Syntron (Canada) Ltd. ....	Stoney Creek
T. & H. Controls Limited .....	Chatham
Toledo Commutator of Canada .....	Barrie
Trench Electric Ltd. ....	15 Prince Andrew Place Dan Mills
Trigon Associates Ltd. ....	32 B.C.D. Howden Rd., Scarborough
Volta Welders Ltd. ....	673 Wellington Ave., Windsor
Vulcan Electric Products Limited .....	3160 Dundas St., West, Toronto
Ward Leonard of Canada Ltd. ....	1070 Birchmount Rd., Scarborough
Weld-O-Matic Machines Ltd. ....	144 Barland Crescent, Hamilton
Weltronic Co. - Canadian Division .....	3201 Marentette Ave., Windsor
Western Controls Ltd. ....	342 Munster Ave., Toronto
<b>Manitoba:</b>	
Pioneer Electric Limited .....	1 Rockwood Place, Winnipeg 19
Pioneer Electric Brandon Ltd. ....	11 th Street & Richmond Ave., Brandon
<b>Saskatchewan:</b>	
Pioneer Electric (Sask) Limited .....	1600 First Ave., Regina
Smith-Roles Ltd. ....	34th St. & Alberta Ave., Saskatoon
<b>Alberta:</b>	
Lefebvre Eng. Ltd., Y.H. ....	514 A-5th Ave., St. W., Calgary
Nemco Electric Mfg. Ltd. ....	344-39th Ave., S.E., Calgary
Pioneer Electric (Alberta) Ltd. ....	Red Deer
<b>British Columbia:</b>	
British Columbia Transformer Co. Ltd. ....	4336 Lougheed Hwy., North Burnaby
Canadian Westinghouse Co. Ltd. ....	281 Industrial Ave., Vancouver
Federal Pacific Electric of Can. ....	22 E., 5th Ave., Vancouver
I.T.E. Circuit Breaker (Can.) Ltd. ....	8650 Barnard St., Vancouver 14
Klockner-Moeller Canada Ltd. ....	1350 East 4th Ave., Vancouver 12
Research Industries Ltd. ....	2971 Lake City Way, Burnaby 2
Transco Mfg. Ltd. ....	1430 River Rd., RR 2, Richmond
Vancouver Electric Boxes Ltd. ....	176 Salisbury Dr., Vancouver 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 56 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 176 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 activities**

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. For those establishments reporting on the "long" form, 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. In the case of those establishments reporting on the "short" form, respondents are requested to report average annual figures. 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.). Data on man-hours are not collected from establishments reporting on the short form. Man-hours for these establishments are estimated on the basis of ratios derived from the 1958 census. During this census all establishments reported on the long form. 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 are 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 manufacturing materials, supplies, etc. and fuel and electricity consumed from the (value of shipments of goods of own manufacture 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 pur-

chased for re-sale) and the cost of non-manufacturing 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 output or 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".



STATISTICS CANADA LIBRARY  
BIBLIOTHÈQUE STATISTIQUE CANADA



1010646188

MANUFACTURERS OF ELECTRICAL INSTRUMENTS