

Canada, Bureau of statistics  
CATALOGUE No.

41-225

ANNUAL



# HEATING EQUIPMENT MANUFACTURERS 1965

## ANNUAL CENSUS OF MANUFACTURES

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



DOMINION BUREAU OF STATISTICS  
Manufacturing and Primary Industries Division

November 1967  
6506-814

Price: 50 cents

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## HEATING EQUIPMENT MANUFACTURERS

1965

For statistical purposes the industry titled Heating Equipment Manufacturers in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing commercial cooking equipment and major heating apparatus and heating equipment, not elsewhere classified. Establishments primarily engaged in manufacturing cast iron sectional heating boilers and convection or cast iron radiators are included in this industry. Establishments primarily engaged in manufacturing domestic cooking equipment, electric and non-electric, are classified in Industry No. 332 - Manufacturers of Major Appliances.

A review of the principal statistics of this industry indicates that during 1965 the value of shipments of products of own manufacture increased by 3 per cent, the cost of materials used increased by 3 per cent, the value of production increased by 2 per cent and value added increased by less than 1 per cent. The ratio of cost of materials used was 51 per cent of the value of production in 1965 whereas in 1964 the ratio was 50 per cent.

The value of heating equipment manufactured by the firms classified to this industry represented 71.4 per cent of their total production in 1965. Other items reported were air conditioning, cast iron soil pipe, aluminum extrusions, travel trailers, truck bodies, fans, machinery, pumps, lawn mowers and valves.

### 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. Principal Statistics, 1961 - 65

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		Employees		Value added
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961													
Totals .....	110	3,443	7,052	13,243	791	34,296	77,407	41,704	21	67	5,137	22,079	43,980
1962													
Totals .....	103	3,651	7,406	14,298	766	40,725	84,611	43,679	17	74	5,349	23,399	46,387
1963													
Totals .....	107	3,704	7,924	15,250	807	46,784	91,748	44,605	14	49	5,586	23,268	47,401
1964													
Newfoundland .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia .....	2	x	x	x	x	x	x	x	x	x	x	x	x
New Brunswick .....	1	x	x	x	x	x	x	x	—	—	x	x	x
Quebec .....	26	1,319	2,894	5,737	200	15,254	29,947	15,109	x	x	1,846	8,854	15,234
Ontario .....	57	1,917	4,079	8,228	500	29,090	57,297	28,520	6	29	3,077	14,866	30,934
Manitoba .....	9	282	603	1,217	53	3,887	6,945	2,914	—	—	370	1,622	3,065
Saskatchewan .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta .....	5	x	x	x	x	x	x	x	x	x	x	x	x
British Columbia .....	10	143	299	609	54	1,810	3,247	1,523	—	—	204	938	1,614
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .....	110	3,795	8,150	16,308	839	51,341	100,571	49,918	11	42	5,673	26,996	52,754
1965													
Newfoundland .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia .....	2	x	x	x	x	x	x	x	—	—	x	x	x
New Brunswick .....	1	x	x	x	x	x	x	x	—	—	x	x	x
Quebec .....	27	1,202	2,589	4,869	187	16,587	31,869	14,897	x	x	1,731	8,183	15,559
Ontario .....	55	1,984	4,197	9,133	532	29,485	58,237	29,139	5	38	3,274	16,292	33,061
Manitoba .....	9	308	611	1,296	57	4,087	7,454	3,235	—	—	402	1,730	3,254
Saskatchewan .....	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta .....	6	x	x	x	x	x	x	x	x	x	x	x	x
British Columbia .....	6	89	195	406	27	1,470	2,779	1,295	—	—	138	685	1,353
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .....	106	3,712	7,844	16,173	833	52,961	103,412	50,305	9	50	5,711	27,536	55,036

TABLE 2. Principal Statistics classified by Size Group based on Value of Shipments of Goods of Own Manufacture, 1964 and 1965

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	
1964													
Under \$10,000 .....	3	2	4	5	1	9	26	17	3	4	2	5	17
\$ 10,000 to \$ 24,999 .....	6	8	16	29	3	43	124	79	4	12	13	50	98
25,000 " 49,999 .....													
50,000 " 99,999 .....	20	89	180	355	22	697	1,560	865	2	11	137	555	921
100,000 " 199,999 .....	12	115	232	451	15	728	1,698	969	—	—	142	577	995
200,000 " 499,999 .....	25	345	722	1,333	85	3,723	7,771	4,098	2	15	490	2,260	4,636
500,000 " 999,999 .....	14	404	890	1,591	114	5,198	10,023	4,974	—	—	621	2,760	5,341
1,000,000 " 4,999,999 .....	30	2,832	6,105	12,543	601	40,943	79,369	38,915	—	—	4,268	20,790	40,745
5,000,000 and over .....													
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals .....	110	3,795	8,150	16,308	839	51,341	100,571	49,918	11	42	5,673	26,996	52,754
1965													
Under \$10,000 .....	8	7	14	25	3	54	146	90	5	15	11	37	102
\$ 10,000 to \$ 24,999 .....													
25,000 " 49,999 .....	17	67	134	272	17	459	1,145	674	2	10	97	399	727
50,000 " 99,999 .....	16	136	279	545	29	944	2,227	1,268	—	—	182	773	1,373
100,000 " 199,999 .....	17	226	462	924	58	2,691	5,205	2,797	—	—	338	1,613	3,260
200,000 " 499,999 .....	17	457	928	1,754	97	6,482	11,943	5,233	2	25	658	2,798	5,564
500,000 " 999,999 .....	27	1,735	3,724	7,418	375	29,283	51,896	22,269	—	—	2,705	12,751	24,168
1,000,000 " 4,999,999 .....	4	1,084	2,303	5,234	252	13,048	30,851	17,975	—	—	1,720	9,166	19,842
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals .....	106	3,712	7,844	16,173	833	52,961	103,412	50,305	9	50	5,711	27,536	55,036

TABLE 3. Principal Statistics classified by Size Group based on Manufacturing Value Added, 1964 and 1965

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		
1964														
Under \$10,000 .....	}	9	10	20	30	4	80	178	95	7	15	13	41	102
\$ 10,000 to \$ 24,999 .....		15	54	110	211	14	498	1,066	565	2	11	86	334	583
25,000 " 49,999 .....		18	161	326	637	24	1,026	2,368	1,346	—	—	211	878	1,420
50,000 " 99,999 .....		21	271	556	1,023	78	3,328	6,467	3,223	2	15	390	1,768	3,702
100,000 " 199,999 .....		22	659	1,447	2,615	151	10,911	18,160	7,281	—	—	980	4,327	7,663
200,000 " 499,999 .....		12	569	1,183	2,284	127	10,589	18,638	8,321	—	—	852	3,791	8,815
500,000 " 999,999 .....		}	13	2,071	4,508	9,507	442	24,910	53,694	29,087	—	—	3,141	15,857
1,000,000 " 4,999,999 .....														
5,000,000 and over .....														
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals .....	110	3,795	8,150	16,308	839	51,341	100,571	49,918	11	42	5,673	26,996	52,754	
1965														
Under \$10,000 .....	5	2	4	6	1	26	61	33	5	15	2	6	33	
\$ 10,000 to \$ 24,999 .....	3	5	10	19	2	28	86	56	—	—	9	31	69	
25,000 " 49,999 .....	17	65	130	258	16	518	1,165	631	2	10	93	363	684	
50,000 " 99,999 .....	14	102	214	443	23	761	1,850	1,076	—	—	143	664	1,181	
100,000 " 199,999 .....	16	201	418	840	58	2,714	5,030	2,302	—	—	301	1,451	2,714	
200,000 " 499,999 .....	26	670	1,378	2,552	150	12,016	20,088	7,974	2	25	1,056	4,676	8,701	
500,000 " 999,999 .....	16	896	1,853	3,764	190	17,186	28,601	11,031	—	—	1,317	6,364	12,267	
1,000,000 " 4,999,999 .....	}	9	1,771	3,837	8,291	392	19,711	46,532	27,201	—	—	2,790	13,981	29,395
5,000,000 and over .....														
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals .....	106	3,712	7,844	16,173	833	52,961	103,412	50,305	9	50	5,711	27,536	55,036	



TABLE 4. Principal Statistics classified by Size Group based on Total Value Added, 1964 and 1965

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
1964													
Under \$10,000	9	10	20	30	4	80	178	95	7	15	13	41	102
\$ 10,000 to \$ 24,999	15	54	110	211	14	498	1,066	565	2	11	86	334	583
25,000 " 49,999	17	148	300	585	21	987	2,278	1,293	—	—	192	800	1,317
50,000 " 99,999	20	264	538	975	73	2,946	5,818	2,927	2	15	365	1,577	3,118
100,000 " 199,999	23	656	1,435	2,612	147	10,727	17,976	7,166	—	—	967	4,303	7,780
200,000 " 499,999	13	592	1,239	2,388	138	11,193	19,560	8,785	—	—	909	4,085	9,385
500,000 " 999,999	13	2,071	4,508	9,507	442	24,910	53,694	29,087	—	—	3,141	15,857	30,468
1,000,000 " 4,999,999	13	2,071	4,508	9,507	442	24,910	53,694	29,087	—	—	3,141	15,857	30,468
5,000,000 and over	13	2,071	4,508	9,507	442	24,910	53,694	29,087	—	—	3,141	15,857	30,468
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	110	3,795	8,150	16,308	839	51,341	100,571	49,918	11	42	5,673	26,996	52,754
1965													
Under \$10,000	5	2	4	6	1	26	61	33	5	15	2	6	33
\$ 10,000 to \$ 24,999	3	5	10	19	2	28	86	56	—	—	9	31	69
25,000 " 49,999	15	51	102	201	14	463	1,014	538	2	10	72	286	537
50,000 " 99,999	15	102	214	440	22	767	1,868	1,090	—	—	144	653	1,190
100,000 " 199,999	16	200	414	824	57	2,622	4,899	2,245	—	—	288	1,336	2,318
200,000 " 499,999	25	644	1,322	2,443	135	11,279	18,919	7,510	2	25	995	4,326	8,161
500,000 " 999,999	16	826	1,702	3,353	178	14,617	24,933	10,194	—	—	1,181	5,583	11,054
1,000,000 " 4,999,999	16	826	1,702	3,353	178	14,617	24,933	10,194	—	—	1,181	5,583	11,054
5,000,000 and over	11	1,882	4,076	8,888	423	23,160	51,633	28,639	—	—	3,020	15,315	31,673
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	106	3,712	7,844	16,173	833	52,961	103,412	50,305	9	50	5,711	27,536	55,036

TABLE 5. Principal Statistics classified by Size Group based on Total Employed, 1964 and 1965

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
1964													
Under 5 employed	12	11	22	39	7	222	471	241	8	19	20	75	247
5 - 14 employed	32	192	389	776	44	2,013	4,324	2,366	1	7	278	1,204	2,535
15 - 49	35	652	1,389	2,566	140	10,844	19,274	8,497	2	15	958	4,465	9,048
50 - 99	17	733	1,556	2,881	178	11,681	20,712	9,331	—	—	1,119	4,853	10,085
100-199	6	483	1,017	2,210	97	9,067	15,719	6,647	—	—	746	3,676	7,146
200-499	8	1,724	3,776	7,837	374	17,514	40,071	22,836	—	—	2,552	12,723	23,692
500 employed and over	8	1,724	3,776	7,837	374	17,514	40,071	22,836	—	—	2,552	12,723	23,692
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	110	3,795	8,150	16,308	839	51,341	100,571	49,918	11	42	5,673	26,996	52,754
1965													
Under 5 employed	15	21	42	79	10	261	628	362	6	19	35	133	375
5 - 14 employed	28	175	359	730	42	1,916	3,905	2,164	1	7	251	1,117	2,262
15 - 49	34	642	1,347	2,639	146	11,659	20,348	8,425	2	25	966	4,628	9,356
50 - 99	16	679	1,424	2,957	175	13,063	23,799	10,281	—	—	1,099	5,339	11,303
100-199	6	572	1,180	2,251	108	7,260	12,582	4,984	—	—	812	3,585	5,531
200-499	7	1,623	3,491	7,517	352	18,802	42,151	24,090	—	—	2,548	12,734	26,209
500 employed and over	7	1,623	3,491	7,517	352	18,802	42,151	24,090	—	—	2,548	12,734	26,209
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	106	3,712	7,844	16,173	833	52,961	103,412	50,305	9	50	5,711	27,536	55,036

TABLE 6. Principal Statistics classified by Type of Organization, 1964 and 1965

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		Employees		Value added
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
<b>1964</b>													
Individual ownerships .....	8	23	50	72	7	262	545	279	11	42	28	96	279
Partnerships .....													
Incorporated companies .....	102	3,772	8,100	16,236	832	51,079	100,026	49,639	...	...	5,645	26,900	52,474
Co-operatives .....	—	—	—	—	—	—	—	—	...	...	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>110</b>	<b>3,795</b>	<b>8,150</b>	<b>16,308</b>	<b>839</b>	<b>51,341</b>	<b>100,571</b>	<b>49,918</b>	<b>11</b>	<b>42</b>	<b>5,673</b>	<b>26,996</b>	<b>52,754</b>
<b>1965</b>													
Individual ownerships .....	7	24	55	104	7	767	1,140	353	9	50	34	145	482
Partnerships .....													
Incorporated companies .....	99	3,688	7,790	16,069	825	52,185	102,273	49,952	...	...	5,677	27,391	54,554
Co-operatives .....	—	—	—	—	—	—	—	—	...	...	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>106</b>	<b>3,712</b>	<b>7,844</b>	<b>16,173</b>	<b>833</b>	<b>52,961</b>	<b>103,412</b>	<b>50,305</b>	<b>9</b>	<b>50</b>	<b>5,711</b>	<b>27,536</b>	<b>55,036</b>

TABLE 7. Calculation of Output, Input and Value Added, 1964 and 1965

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1964	1965	1964	1965	1964	1965
\$'000						
<b>Output</b>						
1. Shipments and other revenue .....	100,571	103,412	13,123	16,744	113,694	120,156
Inventories— Goods of own manufacture:						
Add closing— Goods in process .....	4,097	4,357	...	...	4,097	4,357
Finished goods .....	7,733	7,906	...	...	7,733	7,906
Deduct opening— Goods in process .....	3,360	4,001	...	...	3,360	4,001
Finished goods .....	6,943	7,575	...	...	6,943	7,575
2. Net inventory change .....	1,527	687	...	...	1,527	687
3. Gross output (1 + 2) .....	102,098	104,099	13,123	16,744	115,221	120,843
<b>Input</b>						
4. Purchases of goods not of own manufacture .....	...	...	9,900	11,577	9,900	11,577
Inventories— Goods not of own manufacture:						
Add opening .....	...	...	1,316	1,695	1,316	1,695
Deduct closing .....	...	...	1,656	1,900	1,656	1,900
5. Cost of goods sold (not of own manufacture) .....	...	...	9,560	11,372	9,560	11,372
6. Materials, supplies, etc. ....	51,341	52,961	728	641	52,069	53,602
7. Fuel and electricity .....	839	833	...	...	839	833
8. Gross input (5 + 6 + 7) .....	52,180	53,794	10,288	12,013	62,468	65,807
<b>Value added (3 - 8) .....</b>	<b>49,918</b>	<b>50,305</b>	<b>2,835</b>	<b>4,731</b>	<b>52,754</b>	<b>55,036</b>



TABLE 8. Employment and Payroll, 1964 and 1965

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total		Production and related workers		Adminis- trative and office	Sales and distri- bution	Total
	Manufacturing		Other								Manufacturing	Other			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female					
	number										\$'000				
1964															
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	x
New Brunswick .....	x	-	-	-	x	-	-	-	x	-	x	-	x	-	x
Quebec .....	1,305	14	1	-	287	89	139	11	1,732	114	5,737	5	2,029	1,084	8,854
Ontario .....	1,847	70	6	-	557	241	298	58	2,708	369	8,228	32	4,437	2,168	14,866
Manitoba .....	282	-	-	-	58	15	15	-	355	15	1,217	-	327	78	1,622
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	x
British Columbia .....	133	10	-	-	33	12	16	-	182	22	609	-	246	82	938
Yukon and Northwest Terri- tories .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals .....	3,701	94	7	-	956	365	481	69	5,145	528	16,308	37	7,155	3,496	26,996
1965															
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	x	-	-	-	x	x	-	-	x	x	x	-	x	-	x
New Brunswick .....	x	-	-	-	x	-	-	-	x	-	x	-	x	-	x
Quebec .....	1,187	15	9	-	282	90	144	4	1,622	109	4,869	40	2,051	1,224	8,183
Ontario .....	1,906	78	9	-	666	277	283	55	2,864	410	9,133	46	4,954	2,158	16,292
Manitoba .....	308	-	-	-	60	17	17	-	385	17	1,296	-	345	89	1,730
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	x
British Columbia .....	81	8	-	-	18	15	16	-	115	23	406	-	203	76	685
Yukon and Northwest Terri- tories .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals .....	3,611	101	18	-	1,047	404	471	59	5,147	564	16,173	86	7,663	3,614	27,536

TABLE 9. Production and Related Workers, - Manufacturing Activity, 1964 and 1965

Month	1964		1965	
	Male	Female	Male	Female
	number			
Establishments reporting monthly detail (large establishments only):				
January .....	3,501	87	3,351	88
February .....	3,529	86	3,277	88
March .....	3,557	88	3,250	91
April .....	3,484	72	3,279	90
May .....	3,466	85	3,287	89
June .....	3,616	100	3,451	97
July .....	3,627	92	3,401	87
August .....	3,244	94	3,535	100
September .....	3,341	91	3,573	98
October .....	3,443	93	3,549	102
November .....	3,424	93	3,550	103
December .....	3,382	97	3,439	90
Averages .....	3,473	90	3,413	96
Establishments reporting annual averages (small establishments only) .....	228	4	198	5
Average for all establishments .....	3,701	94	3,611	101

TABLE 10. Inventories, 1965

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 .....	x	x	x	x	—	x
New Brunswick .....	x	x	x	x	—	x
Quebec .....	2,729	1,070	1,336	5,136	428	5,564
Ontario .....	4,364	2,525	5,064	11,953	1,000	12,953
Manitoba .....	851	283	604	1,738	121	1,860
Saskatchewan .....	—	—	—	—	—	—
Alberta .....	x	x	x	x	—	x
British Columbia .....	121	48	220	389	145	535
Yukon and Northwest Territories .....	—	—	—	—	—	—
Totals .....	8,493	4,001	7,575	20,069	1,695	21,764
Closing:						
Newfoundland .....	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	x	x	x	x	—	x
New Brunswick .....	x	x	x	x	—	x
Quebec .....	3,367	859	1,348	5,575	400	5,975
Ontario .....	6,505	3,099	5,408	15,012	1,100	16,112
Manitoba .....	939	269	542	1,750	136	1,886
Saskatchewan .....	—	—	—	—	—	—
Alberta .....	x	x	x	x	—	x
British Columbia .....	145	57	224	426	264	690
Yukon and Northwest Territories .....	—	—	—	—	—	—
Totals .....	11,427	4,357	7,906	23,690	1,900	25,590

TABLE 11. Purchased Fuel and Electricity Used, 1964 and 1965

Description	1964		1965	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Large establishments reporting commodity detail:				
Bituminous coal:				
(a) From Canadian mines .....	ton	—	—	—
(b) Imported .....	"	417	430	6
Sub-bituminous coal (from Alberta mines only) .....	"	95	100	1
Anthracite coal .....	"	279	334	4
Lignite coal .....	"	—	—	—
Coke .....	"	—	—	—
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	104,525	115,103	47
Fuel oil including kerosene or coal oil .....	"	1,202,083	1,272,261	146
Wood .....	cord	—	—	—
Gas:				
(a) Liquefied petroleum gases .....	Imp. gal.	243,603	238,082	39
(b) Other manufactured gas .....	M cu. ft.	—	—	—
(c) Natural gas .....	"	191,440	180,210	165
Other fuel .....	...	1	...	1
Electricity purchased .....	kwh.	31,977,706	29,236,136	373
Steam purchased .....	...	—	...	—
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity .....	...	53	...	50
3. All establishments:				
<b>Total fuel and electricity used .....</b>	...	<b>839</b>	...	<b>833</b>

TABLE 12. Materials and Supplies - Manufacturing Activity, 1964 and 1965

Description		1964		1965	
		Quantity	Cost	Quantity	Cost
			\$'000		\$'000
1. Materials used:					
Iron:					
Pig iron, all .....	ton	6,066	367	4,689	285
Castings:					
Iron .....	"	2,891	1,038	3,377	1,131
Steel .....	"	2,677	863	1,494	688
Steel, hot or cold-rolled:					
Bars .....	"	697	145	431	114
Plates .....	"	3,191 <sup>r</sup>	546	2,784	489
Sheets:					
Plain .....	"	31,598	5,237	26,610	5,188
Galvanized .....	"	3,821	841	5,018	1,086
Tin plate .....	"	532	109	529	115
Strip .....	"	2,804	454	3,230	539
Structural shapes (channels, angles, etc.) .....	"	707	152	464	103
Wire .....	"	74 <sup>r</sup>	33	80	39
Pipe and fittings, iron and steel .....		...	502	...	534
Alloy steel:					
Stainless:					
Billets, bars and rods .....		...	51	...	191
Other .....		...	757	...	588
Other alloy steel .....		...	59	...	50
Ferro-alloys .....		...	115	...	64
Scrap iron and steel .....	ton	22,246	842	24,769	1,114
Other iron and steel (except finished parts) .....		...	712	...	1,406
Non-ferrous metals (including scrap):					
Aluminum:					
Castings .....	pound	659,745	433	506,807	315
Sheet .....	"	1,498,743	681	1,750,576	737
Other forms .....	"	2,046,297	956	1,479,417	1,338
Brass and bronze .....	"	813,211	354	1,005,213	559
Copper:					
Sheet .....	"	122,359	79	126,407	85
Wire .....	"	7,328	5	4,797	3
Other forms .....	"	1,672,182	1,099	1,542,875	1,447
Lead .....	"	877	--	--	--
Babbitt metals and solders .....	"	11,785	10	13,677	13
Other non-ferrous metals .....		...	151	...	164
Other materials and supplies:					
Paints and varnishes .....		...	580	...	587
Foundry coke (used in cupola, not for heat or power) .....	ton	6,291	238	4,027	155
Foundry sands .....	"	9,514	93	7,920	74
Firebrick and cupola blocks .....		...	161	...	129
Plumbago and graphite .....	pound	306	--	45,000	3
Lumber .....	M ft. b.m.	3,169	304	1,991	284
Fireclay .....	ton	594	19	576	22
Core oil .....	Imp. gal.	17,079	25	8,682	12
All other materials and components used <sup>1</sup> .....		...	30,076	...	29,818
2. Containers and other packaging materials and supplies used .....		...	844	...	849
3. Operating, maintenance and repair supplies used (excluding fuel) .....		...	1,888	...	2,420
4. Amount paid out to others for work done on materials owned by establishments .....		...	524	...	220
Totals .....		...	51,341	...	52,961

<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 \$1,915,615 in 1964 and \$1,725,450 in 1965.

TABLE 13. Shipments of Goods of Own Manufacture, 1964 and 1965

Description		1964		1965	
		Quantity	Value	Quantity	Value
			\$'000		\$'000
1. Products:					
Heating equipment:					
Cast iron sectional heating boilers .....	No.	4,731	1,709	4,177	1,495
Steel heating boilers .....	"	2,548	944	2,466	789
Furnaces, warm air:					
Designed for coal or wood burning .....	"	1,681	637	1,119	456
Designed exclusively for gas burning .....	"	73,157	9,768	64,222	8,877
Designed exclusively for oil burning .....	"	66,750	13,250	54,053	10,637
Floor and wall furnace:					
Gas .....	"	273	31	...	1
Oil .....	"	2,543	343	2,067	267
Furnace parts .....		...	246	...	1,032
Burners for furnaces and boilers:					
Gas:					
Residential .....	No.	8,765	528	8,106	519
Commercial and industrial .....	"	2,375	871	1,304	790
Oil (power type):					
Residential .....	"	33,488	2,334	32,500	2,232
Commercial and industrial .....	"	5,969	1,380	5,866	1,310
Oil burners, range type .....	"	6,569	216	5,728	303
Oil burner parts .....		...	627	...	824
Radiators for heating .....	Sq. ft. E.D.R.	15,520,951	9,438	19,091,337	9,935
Stokers, mechanical:					
Domestic or residential .....	No.	488	234	362	172
Commercial and industrial .....	"	55	153	41	84
Stoker parts .....		...	148	...	148
Commercial cooking and food warming equipment:					
Electric .....		...	872	...	910
Gas .....		...	885	...	1,023
Unit heaters .....	No.	31,921	5,482	35,034	6,312
Stoves and ranges (all types, all fuels) .....	"	20,254	1,210	18,646	1,288
Stove parts .....		...	18	...	19
Industrial furnaces, kilns and ovens .....	No.	312	3,180	163	2,687
Water tank heaters:					
Domestic .....	"	20,701	719	12,483	423
Parts and attachments for industrial furnaces and ovens .....		...	1	...	303
Steam traps for heating systems .....		...	1,701	...	2,655
Incinerators .....		...	446	...	507
Registers and grills for hot air heating systems .....		...	3,593	...	3,728
Humidifiers (for warm air systems) .....		...	1,121	...	1,589
Other heating equipment .....		...	9,842	...	8,044
Miscellaneous products (air conditioning and refrigeration equipment, agricultural implements and parts, hardware, machinery, etc.) .....		...	15,802	...	9,255
Amount received for repairs .....		...	588	...	435
All other products .....		...	11,889	...	24,476
2. Amount received in payment for work done on materials and products owned by others .....		...	269	...	200
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above. ....		...	(351)	...	(403)
Net adjustment for establishments receiving progress payments .....		...	450	...	292
<b>Total adjusted value of shipments and work done .....</b>		...	<b>100,571</b>	...	<b>103,412</b>

<sup>1</sup> Confidential data, included under "Other heating equipment".

**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. Power-type Oil Burners,<sup>1</sup> 1956-65**

Year	Number	Value	Year	Number	Value
		\$'000			\$'000
1956 .....	122,675	10,626	1961 .....	96,462	6,467
1957 .....	93,794	7,656	1962 .....	90,551	6,538
1958 .....	99,745	7,726	1963 .....	90,171	6,068
1959 .....	105,097	7,729	1964 .....	94,240	6,704
1960 .....	95,464	6,696	1965 .....	94,014	6,074

**B. Furnace Blowers, 1956-65**

Year	Number	Value	Year	Number	Value
		\$'000			\$'000
1956 .....	120,846	1,907	1961 .....	192,755	2,364
1957 .....	152,723	2,029	1962 .....	170,543	2,090
1958 .....	180,026	2,305	1963 .....	190,164	2,099
1959 .....	212,813	2,555	1964 .....	191,986	2,117
1960 .....	151,834	1,922	1965 .....	x	x

**C. Mechanical Stokers, 1956-65**

Year	Domestic or residential		Commercial or industrial		Total		Value of stoker parts
	Number	Value	Number	Value	Number	Value	
		\$'000		\$'000		\$'000	\$'000
1956 .....	660	156	670	1,217	1,330	1,374	708
1957 .....	754	226	485	877	1,239	1,104	992
1958 .....	691	191	408	885	1,099	1,076	861
1959 .....	1,190	263	430	870	1,620	1,134	530
1960 .....	626	248	330	786	956	1,035	465
1961 .....	509	238	252	600	761	838	266
1962 .....	445	203	221	491	666	694	234
1963 .....	540	255	140	292	680	547	203
1964 .....	494	236	158	627	652	863	320
1965 .....	362	173	51	111	413	284	301

**D. Unit Heaters, 1956-65**

Year	Number	Value	Year	Number	Value
		\$'000			\$'000
1956 .....	31,387	5,451	1961 .....	22,397	4,341
1957 .....	25,717	6,561	1962 .....	25,564	5,380
1958 .....	17,478	4,120	1963 .....	27,766	5,670
1959 .....	21,686	4,522	1964 .....	34,164	6,620
1960 .....	25,843	5,829	1965 .....	37,615	7,396

**E. Air Registers and Grills, 1956-65**

Year	Value	Year	Value
	\$'000		\$'000
1956 .....	2,461	1961 .....	2,698
1957 .....	2,838	1962 .....	3,318
1958 .....	2,807	1963 .....	4,262
1959 .....	2,971	1964 .....	3,884
1960 .....	2,930	1965 .....	4,004

See footnote at end of table.



**TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries - Continued**  
**F. Heating Radiators, 1964 and 1965**

Kind	1964		1965	
	Sq. ft. E.D.R. <sup>2</sup>	Value	Sq. ft. E.D.R. <sup>2</sup>	Value
		\$'000		\$'000
Standing type, cast iron and pressed steel (excluding tube and fin types) .....	1,754,533	1,071	1,566,360	1,037
Baseboard type, cast iron, pressed steel and other fabricated metal .....	12,721,833	7,370	16,469,929	9,135
Concealed type, cast iron pressed steel and other fabricated metal .....	...	3,299	...	2,644
<b>Totals</b> .....	...	<b>11,740</b>	...	<b>12,816</b>

**G. Warm Air Furnaces, 1956-65**

Year	Designed for coal or wood burning		Designed exclusively for oil burning		Designed exclusively for gas burning		Total all types	
	Number	Value	Number	Value	Number	Value	Number	Value
		\$'000		\$'000		\$'000		\$'000
1956 .....	15,018	2,072	97,644	18,564	29,662	5,214	142,324	25,850
1957 .....	12,034	1,961	86,177	18,006	45,627	7,669	143,838	27,638
1958 .....	7,289	1,074	88,978	18,019	75,619	12,384	171,886	31,478
1959 .....	6,238	968	95,814	19,151	80,986	12,207	183,038	32,327
1960 .....	5,693	1,205	91,724	18,413	70,423	10,193	167,840	29,812
1961 .....	3,167	792	101,847	20,063	82,563	11,396	187,577	32,251
1962 .....	6,823	1,245	94,771	16,933	83,069	11,204	184,663	29,382
1963 .....	2,659	822	98,137	19,716	92,888	11,846	193,684	32,384
1964 .....	2,205	746	107,195	22,450	102,417	14,115	211,817	37,311
1965 .....	1,425	540	87,309	17,717	81,836	11,943	170,570	30,200

**H. Heating and Power Boilers, 1964 and 1965**

Type	1964		1965	
	Number	Value	Number	Value
		\$'000		\$'000
Heating boilers:				
Cast iron sectional heating boilers:				
(a) Under 175,000 b.t.u. ....	4,198	1,159	5,897	1,547
(b) 175,000 to 325,000 b.t.u. ....	1,509	622	1,686	739
(c) Over 325,000 b.t.u. ....	1,464	1,408	1,709	1,966
Steel heating boilers:				
(a) Under 112 sq. ft. ....	7,081	2,256	7,104	2,317
(b) 112-522 sq. ft. ....	516	962	573	1,308
(c) 523-1,245 sq. ft. ....	420	797	602	1,194
(d) 1,246 sq. ft. and over ....	92	472	55	421
Power boilers:				
Marine type .....	157	1,335	164	1,488
Water tube package boiler units .....	...	5,375	105	4,796
Fire tube package boiler units .....	2,154	9,186	2,098	9,604
Fire tube boilers .....	3	1	3	3
Boilers, other, type not specified .....	...	25,998	...	32,614
<b>Totals</b> .....	...	<b>49,570</b>	...	<b>57,994</b>

<sup>1</sup> Not including industrial oil burners.

<sup>2</sup> Equivalent direct radiation.

<sup>3</sup> Confidential, included with "Boilers, other".

**List of Establishments classified to this Industry, 1965**

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

Name	Location
<b>Nova Scotia:</b>	
Angel Mfg. & Supply Co. Ltd.	King St., North Sydney
Enamel & Heating Products Ltd.	Amherst
<b>New Brunswick:</b>	
Bourque, Rulard Ltd.	225 Main St., Shediac
<b>Quebec:</b>	
Atlas Webster Industries Ltd.	2760 Laurentian Blvd., St-Laurent
Chaput & Frères, J.B.C.	Boucherville
Combustion & Power Equipment Ltd.	2655 Bates Road, Montreal
Decarie Incinerator Ltd.	5656, boul Industriel, Montreal-Nord
Freco Limitée	Charny
General Marine Co. Ltd.	12392 Lachapelle Blvd., Montreal
Howard Furnace Ltd. (Warden-King Div.)	5790 Côte-de-Liesse Rd., Montreal
Hunt & Moscrop (Canada) Ltd.	Granby
I.C. Burners Ltd.	2454, rue des Carrières, Montréal
Industrial Supplies Inc.	Rougemont
Kres-Kno (Montreal) Ltd.	8255 Durocher St., Montreal
Lemelin Products Inc.	Montmagny
Les Industries Geyser Inc.	2260, rue des Carrières, Montréal
Locker G. R. Co. (The)	5870 Andover Ave., Montreal
Mark Hot Inc.	3250, boul. Métropolitain Ville St-Michel
Modern Kitchen Equipment Co.	183 Montcalm Blvd. N., Candiac
National-Shipley Ltd.	262 Scott St., St-Jérôme
Produits de chauffage J & L. Ltée	Daveluyville
Quebec Metal Pressing Inc.	80, rue Dorchester-Sud, Québec
Reliable Industries Ltd.	4601 Iberville St., Montreal
Rock Utilities (1963) Ltd.	655 Beaumont Ave., Montreal
Serv-All Company Inc.	390 Laurendeau Ave., Montreal
Stoker Limited	8165 St. Hubert St., Montreal
Terry Burners Inc.	5015 Buchan St., Montreal
Turnbull & Sons Ltd.	Waterloo
Vapor Heating (Canada) Ltd.	3955 Courtral Ave., Montreal 26
Velan Engineering Ltd.	2125 Ward Ave., Montreal 9
<b>Ontario:</b>	
Aero Tool Works Limited	37 Hanna Ave., Toronto
Aga of Canada Ltd.	Ajax
Ajax Magnethermic Canada Ltd.	Ajax
Allied Metal Ltd.	49 Laing St., Toronto
Anthes-Imperial Co. Ltd.	Berryman Ave., St. Catharines
Auto-Flo Corp. of Canada Inc.	4240 Ambassador Drive, Windsor
B-L Furnaces Ltd.	15 Pelham Ave., Toronto
Barlin Scott Mfg. Co. Ltd.	32 Lincoln St., Hamilton
Blackwell Burner Co. of Canada Ltd.	2580 Cawthra Rd., Cooksville
Canadian Infra-Red Co. Ltd.	26 Belvia Road, Toronto
Clare Bros. Ltd.	223 King St., Preston
Clawsey Short Mfg. Co. Ltd.	360 Eagle St. N., Preston
Commercial Kitchen Equipment Mfg. Co.	781 Queen St. E., Toronto
Douglas Metal Industries Ltd.	Richmond Hill
Dunham-Bush (Canada) Limited	140 Wendell Ave., Weston
Duo-Heat Ltd.	Waterford
Eliphe Fuel Eng., of Canada Ltd.	20 Upjohn Rd., Don Mills
Garland Commercial Ranges Ltd.	41 Medulla Ave., Toronto
Grimsby Stove and Furnace Limited	Grimsby
Hallmac Limited	Hespeler
Hamilton Incinerator & Firebrick Co.	21 Garfield Ave. S., Hamilton
Hart and Cooley Mfg. Co. of Canada Limited	Fort Erie

List of Establishments classified to this Industry, 1965 - Concluded

Name	Location
<b>Ontario - Concluded:</b>	
Ideal Stoker Company Ltd. ....	500 Wellington St., Toronto
Itiniant, M. ....	1124 Pierre Ave., Windsor
Kemp Manufacturing Co. Ltd. ....	19 Petrolia St., Guelph
Lennox Industries (Canada) Ltd. ....	400 Paxman Rd., Toronto
Livingston Stoker Company Limited.....	33 Sanford Ave. S., Hamilton
Lloyd Register & Grilles Co. Ltd. ....	30 Six Point Rd., Toronto
Niagara Heating Products Ltd. ....	120 Dunkirk Rd., St. Catharines
Oldheiser, Murray, Co. ....	3 Hoffman St., Kitchener
Olsen W. H. Mfg. Co. ....	Tilbury
Peabody Engineering Corp. of Canada Ltd. ....	3240 Wharton Way, Cooksville
Penberthy Injectors Ltd. ....	St-Catharines
Pepper's Automatic Stokers Limited .....	240 Adelaide St. W., Toronto
Pettigrew Sav-oil Burners Ltd. ....	Otterville
Ray Pre-Heater Ltd. ....	96 Herman St., Toronto
Roberts-Gordon Appliance Corp. Ltd. ....	Grimsby
Sana Equipment Limited.....	122 Rivalda Road, Weston
Sarco Canada Ltd. ....	R.R. 1, Agincourt
Slant Fin Ltd. ....	3356 Elmbank Rd., Malton
Smart, James Mfg. Co. Ltd. ....	Water St., Brockville
Smith A. O. International S. A. ....	768 Erie St., Stratford
Space Conditioning of Canada Ltd. ....	80 Ward St., Toronto
Swindell Dressler Corp. of Canada .....	1000 Yonge St., Toronto
Summers Manufacturing Ltd. ....	2450 Finch Ave. W., Weston
Synchro Combustion Equip. Ltd. ....	Seaforth
Tempo Tool & Mfg. Co. Ltd. ....	Cooksville
Temprite Industries Ltd. ....	Hillside Dr. & Dawson Rd., Orangeville
Tobac Curing System Limited .....	Simcoe
Trane Company of Canada, Limited .....	401 Horner Ave., Toronto
Wait-Skuttle Company .....	51 Davis Rd., Oakville
Wayne Forge Ltd. ....	126 Judge St., Toronto
Western Foundry Company Limited .....	Wingham
Weston Metal Fabricators Ltd. ....	17 Belfield Rd., Rexdale
York Machine Co. Ltd. ....	3417 Dundas St. W., Toronto
<b>Manitoba:</b>	
Atom-Jet Humidifiers Ltd. ....	2110 Park Ave., Brandon
Bullock's Limited .....	Sargent Ave. & Berry St., St. James
Furnasman Metal Ltd. ....	635 Pembina Highway, Fort Garry
Greensteel Industries Ltd. ....	975 Logan Ave., Winnipeg
Hudson Heating & Ventilation Ltd. ....	1130 Sanford St., Winnipeg
Price Acme of Canada Ltd. ....	639 Golspie St., Winnipeg
Progressive Manufacturing Co. ....	1960 Main St., Old Kildonan
Quest Metal Products .....	949 Erin St., Winnipeg
Silver Line Manufacturing Co. Ltd. ....	1995 Logan Ave., Winnipeg
<b>Alberta:</b>	
Air Heaters Canada Ltd. ....	7727-77th St., Edmonton
Flame Master Ltd. ....	6130-97th St., South Edmonton
Kirk's Heating Limited.....	Three Hills
Marvel Stoker Products .....	5735-97th St., Edmonton
Shannon Bros. ....	1 Dunmore Rd., Medicine Hat
Sure Flame Tank Heater.....	Granum
<b>British Columbia:</b>	
Airco Products Ltd. ....	1331 Clark Dr., Vancouver
Evans Perry Incinerators Ltd. ....	5669 Tyne St., Vancouver
Industrial Process Heat Engineering Ltd. ....	16 E. Hastings St., Vancouver
Kumfort Furnace Co. Ltd. ....	5669 Tyne St., Vancouver
Rees Burners Ltd. ....	1331 West 6th Ave., Vancouver
Taggart Manufacturing Co. Ltd. ....	1166 W. 14th St., North 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 55 (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 135 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 reports reflect the complete implementation of these changes and enable comparisons to be made back to and including 1961. 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".







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