

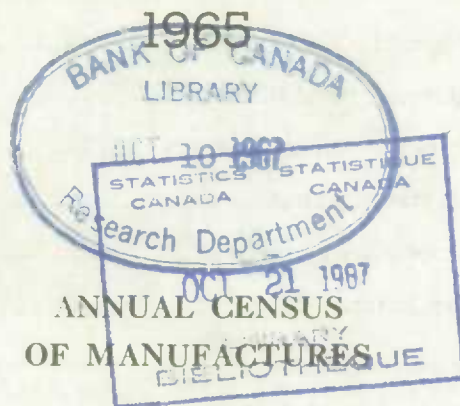
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ANNUAL



FABRICATED STRUCTURAL METAL INDUSTRY



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PUBLICATIONS

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FABRICATED STRUCTURAL METAL INDUSTRY

1965

For statistical purposes the industry titled Fabricated Structural Metal Industry in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in fabrication of heavy steel parts and similar parts of other metals and alloys for structural purposes. Products of this industry include fabricated shapes for bridges, building, large tanks and similar structures. Establishments in this industry may erect buildings, bridges and large tanks as well as fabricate the metal parts but they are primarily engaged in fabrication. Establishments primarily engaged in the erection of buildings, bridges and large tanks from purchased metal parts are included in Industry No. 421 - Special-Trade Contractors.

An analysis of the principal statistics for this industry indicates that the total value of shipments of products of own manufacture for 1965 increased by 33.9 per cent, the value of production increased by 33.8 per cent, the total cost of materials used in production increased by 26 per cent and value added in the manufacturing process increased by 42.7 per cent. The ratio of materials used to production was 49 per cent for 1965 and the ratio of manufacturing wages to production was 20.3 per cent.

Because of the nature of the industry it is difficult to arrive at an accurate figure showing the degree of specialization in the industry but it can be noted that some of the products included in the "all other products" category were fencing, conveyors, grain elevator equipment, sewage equipment, water conditioning equipment, valves and tank cars.

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, 1961-65

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	78	10,124	20,073	47,264	2,017	112,015	209,338	95,307	6	16	14,231	71,287	101,762
1962													
Totals	82	10,767 ^r	22,076 ^r	53,168 ^r	2,161	132,329	255,003	120,421	4	35	14,802 ^r	77,463 ^r	132,027
1963													
Totals	84	10,177 ^r	21,088	52,086	2,178	123,659	245,185	119,239	7	86	14,212 ^r	77,552	130,164
1964													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	2	454	944	2,109	158	5,821	12,457	6,478	x	x	671	3,209	6,733
New Brunswick	2												
Quebec	17	2,777	5,185	13,795	478	39,110	68,124	28,530	—	—	3,751	21,974	30,396
Ontario	39	4,977	10,516	27,341	1,089	65,313	131,394	65,112	x	x	6,643	37,688	72,156
Manitoba	5	579	1,249	3,109	130	5,802	10,585	4,621	—	—	796	4,313	5,008
Saskatchewan	4	143	270	606	32	4,117	6,513	2,382	—	—	249	1,160	2,514
Alberta	11	773	1,520	4,078	115	11,120	22,378	11,143	—	—	1,113	5,807	13,106
British Columbia	9	1,010	1,983	5,710	212	13,491	26,640	12,987	—	—	1,379	7,961	13,284
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	2	551	1,173	2,595	178	8,488	14,661	5,996	x	x	793	3,766	6,637
New Brunswick	2												
Quebec	19	3,221	6,583	15,876	557	46,933	90,470	43,029	—	—	4,644	26,050	45,417
Ontario	43	6,139	13,259	37,270	1,279	82,122	178,107	94,599	—	—	8,104	50,539	105,759
Manitoba	5	611	1,327	3,295	148	8,762	16,305	7,402	—	—	882	4,866	8,878
Saskatchewan	4	196	386	896	41	4,792	7,396	2,593	—	—	326	1,559	2,852
Alberta	12	1,108	2,215	6,293	151	17,328	33,944	16,511	—	—	1,506	8,445	19,538
British Columbia	10	1,367	2,762	8,211	239	13,951	31,408	17,228	—	—	1,817	10,844	18,522
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	8	47	108	221	16	518	1,049	518	—	—	65	317	600
100,000 " 199,999		15	299	620	1,258	53	2,515	5,108	x	x	359	1,569	2,620
200,000 " 499,999		13	316	638	1,581	68	4,911	9,595	—	—	476	2,335	4,630
500,000 " 999,999		34	3,162	6,695	16,247	659	47,352	84,440	x	x	4,216	22,445	39,228
1,000,000 " 4,999,999	19	6,889	13,606	37,441	1,420	89,477	177,901	87,137	—	—	9,401	54,331	96,177
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	85	1,115	(59)
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	4	15	34	78	6	159	322	155	—	—	21	110	158
100,000 " 199,999	8	59	130	316	14	497	1,130	584	—	—	78	400	723
200,000 " 499,999	11	223	481	1,038	73	1,521	3,562	1,975	—	—	258	1,240	2,031
500,000 " 999,999	10	353	730	1,674	70	3,442	7,096	3,577	—	—	438	2,176	3,639
1,000,000 " 4,999,999	39	3,013	6,357	15,604	637	49,667	85,762	35,508	x	x	4,108	22,004	39,913
5,000,000 and over	25	9,530	19,974	55,727	1,793	127,088	274,419	145,564	—	—	13,068	78,886	161,204
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	101	1,253	(65)
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	11	80	183	385	23	1,127	1,918	772	x	x	103	507	885
100,000 " 199,999		9	130	281	569	56	2,492	3,899	x	x	187	873	1,645
200,000 " 499,999		18	592	1,269	2,712	99	7,440	13,009	—	—	782	3,759	6,540
500,000 " 999,999		17	1,090	2,290	5,487	224	19,035	32,307	—	—	1,505	7,934	13,532
1,000,000 " 4,999,999	27	5,222	11,105	28,302	1,140	73,068	136,917	62,777	—	—	7,013	39,174	71,223
5,000,000 and over	7	3,599	6,539	19,293	674	41,612	90,040	47,836	—	—	4,927	28,750	49,430
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	85	1,115	(59)
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	5	21	47	109	8	231	436	196	—	—	29	151	200
50,000 " 99,999	8	62	137	321	14	545	1,221	628	—	—	82	410	766
100,000 " 199,999	5	83	177	375	20	837	1,454	604	—	—	103	487	646
200,000 " 499,999	23	892	1,843	4,307	191	13,743	21,162	7,308	—	—	1,154	5,760	9,799
500,000 " 999,999	18	1,344	2,826	6,765	324	23,886	38,595	14,345	x	x	1,845	9,738	15,796
1,000,000 " 4,999,999	24	3,597	7,880	19,329	682	59,611	111,769	51,678	—	—	4,671	25,931	53,502
5,000,000 and over	14	7,194	14,797	43,230	1,355	83,523	197,655	112,599	—	—	10,087	62,339	126,960
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	101	1,253	(65)
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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		\$'000	
1964													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	10	75	169	357	19	1,089	1,832	727	x	x	97	468	761
100,000 " 199,999	9	132	289	585	39	1,670	2,955	1,245	—	—	175	807	1,337
200,000 " 499,999	17	445	927	1,963	96	6,168	11,336	5,087	x	x	586	2,695	5,380
500,000 " 999,999	17	1,104	2,358	5,559	222	18,209	30,838	12,392	—	—	1,510	7,902	12,974
1,000,000 " 4,999,999	29	5,387	11,529	29,590	1,149	79,680	144,950	64,188	—	—	7,129	40,176	67,767
5,000,000 and over	7	3,570	6,396	18,694	691	37,957	86,180	47,614	—	—	5,020	28,950	55,037
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	85	1,115	(59)
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	5	21	47	109	8	231	436	196	—	—	29	151	200
50,000 " 99,999	8	156	303	747	41	1,845	2,460	631	—	—	207	1,000	1,167
100,000 " 199,999	5	83	177	375	20	837	1,454	604	—	—	103	487	646
200,000 " 499,999	20	578	1,238	2,655	116	8,444	14,634	6,062	—	—	717	3,395	6,328
500,000 " 999,999	18	1,198	2,446	6,098	289	22,559	35,803	12,916	x	x	1,588	8,589	15,039
1,000,000 " 4,999,999	26	3,679	7,973	19,610	715	60,484	110,859	49,770	—	—	4,886	26,792	52,064
5,000,000 and over	15	7,478	15,523	44,843	1,405	87,976	206,646	117,180	—	—	10,441	64,403	132,224
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	101	1,253	(65)
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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		\$'000	
1964													
Under 5 employed	—	—	—	—	—	—	—	—	—	—	—	—	—
5 - 14 employed	13	83	189	382	26	1,757	2,902	1,121	x	x	121	574	1,192
15 - 49 "	24	570	1,214	2,629	123	7,547	14,872	7,216	—	—	744	3,546	7,571
50 - 99 "	11	630	1,324	3,132	153	9,031	16,579	7,394	x	x	882	4,489	7,567
100-199 "	17	1,764	3,666	9,352	317	27,437	46,422	18,705	—	—	2,308	12,623	20,850
200-499 "	19	4,446	9,509	23,855	982	65,309	129,724	63,449	—	—	6,035	33,377	71,604
500 employed and over	5	3,220	5,765	17,398	615	33,692	67,593	33,368	—	—	4,427	26,388	34,471
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	85	1,115	(59)
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Under 5 employed	13	74	166	385	21	876	1,747	848	—	—	101	522	875
5 - 14 employed	27	741	1,567	3,541	194	9,994	18,426	8,222	—	—	921	4,605	8,576
15 - 49 "	13	717	1,557	3,799	132	14,838	25,980	11,018	—	—	999	5,446	11,625
50 - 99 "	18	1,824	3,790	10,053	379	29,898	52,137	21,887	x	x	2,419	13,568	24,842
100-199 "	13	2,790	6,305	15,672	594	45,743	86,577	40,438	—	—	3,588	20,671	42,430
200-499 "	13	7,047	14,321	40,985	1,273	81,026	167,424	104,945	—	—	9,943	60,002	119,320
500 employed and over	13	7,047	14,321	40,985	1,273	81,026	167,424	104,945	—	—	9,943	60,002	119,320
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	101	1,253	(65)
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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

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	
1964													
Individual ownerships	-	-	-	-	-	-	-	-	-	-	-	-	-
Partnerships	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,517	80,997	143,255
Incorporated companies													
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	85	1,115	(59)
Totals	89	10,713	21,667	56,748	2,216	144,774	278,092	131,253	x	x	14,602	82,112	143,196
1965													
Individual ownerships	-	-	-	-	-	-	-	-	-	-	-	-	-
Partnerships	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	17,971	104,815	207,668
Incorporated companies													
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	101	1,253	(65)
Totals	97	13,193	27,706	74,436	2,593	182,375	372,291	187,359	x	x	18,072	106,068	207,603

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						
Output						
1. Shipments and other revenue	278,092	372,291	28,504	44,481	306,596	416,772
Inventories—Goods of own manufacture:						
Add closing—Goods in process .....	...	...	...	...	...	...
Finished goods	1,242	1,122	...	...	1,242	1,122
Deduct opening—Goods in process .....	...	...	...	...	...	...
Finished goods	1,092	1,086	...	...	1,092	1,086
2. Net inventory change	150	36	...	...	150	36
3. Gross output (1 + 2)	278,242	372,327	28,504	44,481	306,746	416,808
Input						
4. Purchases of goods not of own manufacture .....	...	...	15,722	24,225	15,722	24,225
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	3,852	2,636	3,852	2,636
Deduct closing .....	...	...	4,056	4,134	4,056	4,134
5. Cost of goods sold (not of own manufacture) .....	...	...	15,518	22,727	15,518	22,727
6. Materials, supplies, etc.	144,774	182,375	1,043	1,509	145,817	183,884
7. Fuel and electricity	2,216	2,593	...	...	2,216	2,593
8. Gross input (5 + 6 + 7)	146,990	184,968	16,561	24,236	163,551	209,204
Value added (3 - 8)	131,253	187,359	11,943	20,245	143,196	207,603

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												
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other			
	number										\$'000				
1964															
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	454	-	-	-	170	30	17	-	641	30	2,109	-	991	109	3,209
New Brunswick															
Quebec	2,777	-	-	-	742	193	37	2	3,556	195	13,795	-	7,881	298	21,974
Ontario	4,972	5	5	-	1,139	274	225	23	6,341	302	27,341	19	8,615	1,713	37,688
Manitoba	577	2	1	-	145	39	29	3	752	44	3,109	3	1,024	177	4,313
Saskatchewan	143	-	-	-	75	22	9	-	227	22	606	-	501	53	1,160
Alberta	773	-	11	2	223	52	49	3	1,056	57	4,078	63	1,347	319	5,807
British Columbia	1,010	-	-	7	259	53	48	2	1,317	62	5,710	15	1,914	321	7,961
Yukon and Northwest Terri- tories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	10,706	7	17	9	2,753	663	414	33	13,890	712	56,748	100	22,274	2,990	82,112
1965															
Newfoundland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	551	-	1	-	189	36	15	1	756	37	2,595	1	1,078	92	3,768
New Brunswick															
Quebec	3,221	-	-	-	1,146	248	27	2	4,394	250	15,876	-	9,900	274	26,050
Ontario	6,137	2	69	-	1,378	306	183	31	7,765	339	37,270	360	11,234	1,675	50,539
Manitoba	611	-	5	-	220	34	10	2	846	36	3,295	18	1,479	74	4,866
Saskatchewan	196	-	-	-	99	24	6	1	301	25	896	-	628	35	1,559
Alberta	1,108	-	2	1	291	62	41	1	1,442	64	6,293	13	1,841	297	8,445
British Columbia	1,367	-	-	8	335	62	43	2	1,745	72	8,211	15	2,278	340	10,844
Yukon and Northwest Terri- tories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	13,191	2	77	9	3,656	772	325	40	17,249	823	74,436	407	28,438	2,787	106,068

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	9,581	7	11,623	3
February	9,759	7	11,627	3
March	9,970	7	12,041	3
April	10,245	7	12,284	3
May	10,452	7	12,930	3
June	10,853	7	13,227	2
July	10,951	7	13,826	2
August	11,003	7	14,063	2
September	11,396	7	14,310	2
October	11,704	7	14,377	2
November	11,370	7	14,209	2
December	11,056	7	13,633	2
Averages	10,706	7	13,191	2
Establishments reporting annual averages (small establishments only) .....	...	...	...	...
Average for all establishments	10,706	7	13,191	7

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	1,549	842	—	2,391	159	2,550
New Brunswick						
Quebec	10,558	6,909	199	17,667	1,213	18,880
Ontario	19,854	9,806	579	30,239	7	30,245
Manitoba	2,515	1,119	88	3,722	412	4,134
Saskatchewan	1,413	563	76	2,052	—	2,052
Alberta	3,239	4,229	19	7,487	699	8,186
British Columbia	3,711	1,229	124	5,064	146	5,210
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	42,838	24,698	1,086	68,622	2,636	71,259
Closing:						
Newfoundland	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—
Nova Scotia	2,684	599	—	3,282	393	3,675
New Brunswick						
Quebec	15,817	10,797	249	26,863	1,858	28,721
Ontario	24,981	17,692	473	43,146	16	43,162
Manitoba	4,071	2,198	95	6,365	840	7,205
Saskatchewan	2,703	374	106	3,183	—	3,183
Alberta	3,851	5,606	64	9,522	879	10,401
British Columbia	5,364	3,572	134	9,070	149	9,219
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	59,472	40,838	1,122	101,433	4,134	105,566

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

Description	1964		1965	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
I. Large establishments reporting commodity detail:				
Bituminous coal:				
(a) From Canadian mines	ton	4,061	2,187	26
(b) Imported	"	1,771	1,664	20
Sub-bituminous coal (from Alberta mines only)	"	-	-	-
Anthracite coal	"	188	201	4
Lignite coal	"	103	188	3
Coke	"	4	-	-
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	1,180,686	1,252,988	481
Fuel oil including kerosene or coal oil	"	2,468,241	3,370,945	380
Wood	cord	-	-	-
Gas:				
(a) Liquefied petroleum gases	Imp. gal.	54,341	62,709	24
(b) Other manufactured gas	M cu. ft.	-	-	-
(c) Natural gas	"	467,180	600,653	426
Other fuel	-	-	-	-
Electricity purchased	kwh.	72,191,257	94,091,953	1,186
Steam purchased	-	-	-	-
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity	-	61	-	45
3. All establishments:				
Total fuel and electricity used	-	2,216	-	2,593

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

Description	1964		1965	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Materials used:				
Steel (except alloy steel):				
Castings (rough and semi-finished received from foundry):				
Iron (gray and malleable).....	ton 543	217	746	295
Steel.....	" 2,100	838	5,295	1,399
Bars.....	" 87,105	12,347	161,400	21,239
Plates ($\frac{3}{16}$ in. and thicker).....	" 132,079	20,761	214,119	34,641
Sheets (under $\frac{3}{16}$ in.):				
Plain.....	" 16,956	2,392	30,406	4,303
Galvanized.....	" 3,853	618	7,802	1,412
Strips.....	" 16,742	2,634	19,801	2,539
Structural shapes.....	" 437,764	65,795	469,578	69,287
Wire.....	" ...	1,201	...	2,034
Alloy steel in all forms:				
Alloy steel (other than stainless and tool steel):				
Billets, bars and rods.....	...	201	...	134
Stainless:				
Billets, bars and rods.....	...	4	...	3
Other shapes.....	...	496	...	284
Tool steel (all types including high speed):				
Billets, bars and rods.....	...	177	...	257
Other shapes.....	...	143	...	—
Other iron and steel.....	...	5,366	...	6,806
Non-ferrous metals in all forms:				
Aluminum.....	lb. 30,810	25	99,327	76
Brass and bronze.....	" 24,273	19	103,521	50
Lead.....	" 2,500	1	—	—
Zinc.....	" 2,466,573	302	2,217,556	306
Other non-ferrous metals.....	...	3	...	6
Other materials and supplies:				
Paints, oils and varnishes.....	...	979	...	1,159
Lumber.....	M bd. ft. 2,041	155	2,089	233
All other materials and components used ¹.....	...	20,515	...	23,529
2. Containers and other packaging materials and supplies used.....	...	52	...	134
3. Operating, maintenance and repair supplies used (excluding fuel).....	...	4,524	...	6,458
4. Amount paid out to others for work done on materials owned by establishments.....	...	4,992	...	5,793
Totals.....	...	144,774	...	182,375

¹No detailed information on materials used was collected from small establishments the estimated cost for which is included here. This estimated cost was \$2,927,754 in 1964 and \$1,832,916 in 1965.

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

Description	1964		1965	
	Quantity	Value	Quantity	Value
		\$'000		\$'000
1. Products:				
Structural work:				
Bridges.....	67,592	32,199	48,735	24,734
Buildings.....	383,175	125,505	434,421	157,171
Transmission towers.....	23,434	9,774	20,213	7,615
Other structural steel.....	50,041	18,255	74,171	24,746
Metal tanks and vessels, custom fabricated and field erected:				
Bulk storage tanks.....	3,537	1,839	9,780	5,154
Pressure vessels and tanks including process vessels, tanks and kettles for refineries, etc.	13,260	5,989	2,515	2,905
Fabricated steel plate (factory assembled or formed and prepared for field erection).....	...	5,895	...	6,882
Tanks (complete at factory) and cylinders:				
Tanks and vessels, pressure and vacuum (excluding hot water tanks):				
Liquefied petroleum gas tanks.....	...	693	...	1,512
Other pressure and vacuum tanks and vessels.....	...	13,981	...	18,182
Storage and processing tanks.....	...	2,132	...	2,976
Boilers and parts.....	...	407	...	1,885
Heat exchangers.....	...	5,238	...	3,872
Hoisting machinery and parts (except mine hoists).....	...	...	...	...
Miscellaneous products:				
Fabricated bar joists.....	28,742	8,767	30,184	10,306
Fabricated concrete reinforcing bar.....	53,334	10,354	111,006	22,498
Work done during year on products not completed at year-end.....	...	60,681	...	87,592
Less value of work done in previous years on products completed in current year.....	...	(54,110)	...	(53,030)
All other products.....	...	31,700	...	47,425
2. Amount received in payment for work done on materials and products owned by others.....	...	1,208	...	1,566
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above.....	...	(2,415)	...	(3,671)
Net adjustment for establishments receiving process payments.....	...	—	...	(29)
Total adjusted value of shipments and work done.....	...	278,092	...	372,291

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
Nova Scotia:	
Canada Iron Foundries Limited	565 Windmill Rd., Dartmouth
Robb Engineering Works Limited	51 La Planche St., Amherst
New Brunswick:	
Ocean Steel & Construction Ltd.	406 Chesley St., Saint John
York Structural Steel Co.	Wilsey Rd., Fredericton
Quebec:	
Acier Ste-Rose Ltée	Vimount
Canadian Structural Steel Works Co. Ltd.	3700, boul. St-Joseph, Rosemont, Montréal
Canam Steel Works Inc.	St-Gédéon
Central Quebec Steel Ltd.	1005 Père Daniel, Trois-Rivières
Dominion Bridge Co. Ltd.	555 Notre Dame St., Lachine
Dynamic Industries Inc.	45, rue Dorchester S., Quebec 2
Eastern Canada Steel & Iron Works Ltd.	Lesage Ave., Quebec
Eastern Equipment Ltd.	300 Canal Rd., Ville St-Pierre
J.L.C. Structure Inc.	700, rue Notre Dame, St-Lambert
Leeds Bridge and Iron Works Ltd.	175 Wanklyn St., Ville La Salle
Lord & Compagnie Ltée	4700 Iberville St., Montreal
MacKinnon Structural Steel Company Limited	575 DesForges St., Sherbrooke
Marshall Steel Company Limited	Chomedey
Pickard, Louis & Co. Inc.	5585 de la Roche, Montreal
Quebec Reinforcing Steel Inc.	10790 Salk St., Montreal
Quebec Structure & Metal Inc.	150, boul. Central Sud, Ville Duberger, Quebec
Seaway Plate & Structural Steel Ltd.	220 Elizabeth St., Sorel
Standard Structural Steel Ltd.	5330 Paré St., Montreal
Verco Structural Steel Inc.	11924 Pigeon St., Montreal N.
Ontario:	
A.B.C. Steel Building Ltd.	Bolton
Ajax Engineers Ltd.	Acton
Anthes Steel Products Ltd.	3430 Dundas St. West, Toronto 9
Basic Structure Steel Fabricators Ltd.	Welland
Bomac Steel Co. Ltd.	3595 Station Rd., Erindale
Brayshaws Steel Limited	670 Fort William Rd., Port Arthur
Bridge & Tank Co. of Canada Ltd.	390 Gage Ave. N., Hamilton
Canada Iron Foundries Ltd. (Eastern Structural Steel Div.)	1630 Star Top Road, Ottawa
Canada Iron Foundries Ltd. (Dominion Structural Steel Div.)	100 Disco Road, Rexdale
Cooksville Steel Limited	502 Dundas Hwy. E., Cooksville
Dominion Bridge Company Limited	665 Trethewey Drive, Toronto 15
Dominion Bridge Company Limited	Charlevoix St., Eastview
Dominion Bridge Co. Ltd.	177 Comnee Ave., Sault Ste. Marie
Dosco Industries Ltd. (Canadian Bridge Div.)	1219 Walker Rd., Windsor
Frankel Structural Steel Ltd.	1139 Shaw St., Toronto 4
Great Lakes Fabricating (Div. of Glasco Ltd.)	1408 Churchill Rd., Sarnia
Great Lakes Steel Products Ltd.	506-16th Ave., Port Arthur
Halych Steel Construction Co. Ltd.	45 Observation Lane, Richmond
Hepburn, John T. Limited	914-948 Dupont St., Toronto 4
Horton Steel Works, Limited	40 Jenet St., Fort Erie
Huron Steel Fabricators (London) Ltd.	Hwy # 135, London
James United Steel Ltd. (Standard Steel Div.)	Port Robinson
Leeds Bridge and Iron Works Limited	Crosby Road, Gananoque
London Steel Industries (Div. of York Steel Construction Ltd.)	48 Burslem St., London
McDonald Welding Limited	235 Speers Road, Oakville
Millard Electric Limited	Highway No. 7, Perth
Newman Structural Steel Ltd.	130 Denistoun St., Welland
Niagara Structural Steel Co. Ltd.	Smith & Petrie Sts., St. Catharines
Noront Steel Construction Co. Limited	510 Whissell St., Sudbury
Northwestern Structural Steel Ltd.	Port Arthur

List of Establishments classified to this Industry, 1965 - Concluded

Name	Location
Ontario - Concluded:	
Page Manufacturing Co. Ltd.	40 Page St., St. Catharines
Procor Limited	Oakville
Samson Towers Ltd.	1285 Caledonia Road, Toronto
Sass Manufacturing Co. Ltd.	114 Sass Rd., Chatham
Scarboro Steel Works Limited	102 Manville Rd., Scarboro
Seaway Plate & Structural Steel Ltd.	65 Bruce St., Welland
Skyline Steel Co.	535 Wilson Ave., Downsview
Star Steel Limited	Milton
Toronto Iron Works Limited, The	629 Eastern Ave., Toronto 8
Toronto Iron Works Limited, The	Trenton
Wentworth Industries Ltd.	Stoney Creek
Wind Turbine Co. of Canada Ltd., The	145 Lucan St., Waterloo
York Steel Construction Ltd.	75 Ingram Drive, Toronto 9
Manitoba:	
Bridge & Tank Western Limited	105 Maple, Winnipeg 2
Canada Iron Foundries Limited (Prairie Structural Div.)	560 Messier St., St. Boniface 6
Dominion Bridge Company Limited	Dublin Ave., Winnipeg
Prasco Ltd.	1477 Erin St., Winnipeg 3
Sutherland Steel Ltd.	175 Sutherland Ave., Winnipeg 4
Saskatchewan:	
A.I.M. Steel Limited	Cory
Dominion Bridge Co. Ltd.	Twelfth & Francis, Regina
Mid-West Steel Products Ltd.	726 Fairford W., Moose Jaw
Saskatchewan Steel Fabricators Ltd.	1050 St. John St., Regina
Alberta:	
A.I.M. Steel Limited	Strathcona
Britain Steel Ltd.	75th St. & 68th Ave., Edmonton
Canada Iron Foundries Limited (Prairie Structural Div.)	223-53rd Ave. S.E., Calgary
Canada Iron Foundries Limited (Western Bridge Div.)	10530-103 St., Edmonton
Dominion Bridge Company Limited	803-24th Ave. S.E., Calgary
Dominion Bridge Company Limited	120th St. & 107th Ave., Edmonton
Guardian Steel Fabricators Ltd.	505-50th Ave., S.E., Calgary
Horton Steel Works Limited	2902 Fourth Ave., Lethbridge
Mahoney Steel Crafts Ltd.	4202 McLeod Trail, Calgary
Steel-Weld Machine Co. Limited	9915-65th Ave., Edmonton
Western Metal Fabricators (1962) Ltd.	1501-2nd Ave. S., Lethbridge
Western Structural Steel Ltd.	4119-17th St. S.E., Calgary
British Columbia:	
A.I.M. Steel Ltd.	801 Belgrave Way, Annacis Island
Allied Steel Fabricators Limited	700 Derivent Way, Annacis Industrial Estate, New Westminster
Arrowsmith Engineering Ltd.	138 Beaver Creek Rd., Alberni
Beales, J.H. Steel Fabricators Ltd.	Langley
Canada Iron Foundries Limited (Western Bridge Div.)	145 West 1st Ave., Vancouver 10
Coast Steel Fabricators Ltd.	7950 Venture St., Burnaby 2
Columbia Steel Fabricating & Engineering Ltd.	8961 Shaughnessy St., Vancouver 13
Dominion Bridge Co. Ltd.	2450 Boundary Road, Burnaby
North Coast Welding Co. Ltd.	7520 Conrad St., Burnaby
Tryson & Son Iron Works	6010 Trapp Rd., Burnaby

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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