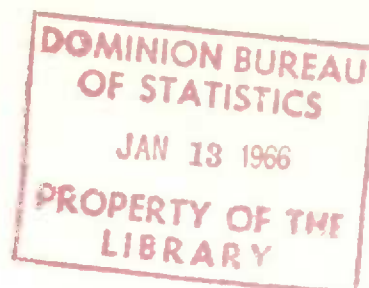


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RAILROAD ROLLING STOCK INDUSTRY 1963

ANNUAL CENSUS OF MANUFACTURES

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RAILROAD ROLLING STOCK INDUSTRY

1963

Data presented in this report under the heading of Railroad Rolling Stock Industry reflect implementation of the revised Standard Industrial Classification (S.I.C.) and the New Establishment Concept which are being used by the Dominion Bureau of Statistics in its compilation of industry statistics - see items "Standard Industrial Classification" and "Establishment " in the Explanatory Notes section of this report.

For statistical purposes the industry titled Railroad Rolling Stock Industry in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in building and rebuilding locomotives of any type or gauge and railroad cars (including frames and parts) for freight and passenger service. This industry includes establishments of railway companies primarily engaged in manufacturing or repairing locomotives and 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 A. Principal Statistics classified by Province, 1962 and 1963

Year and province	Estab-lish-ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961													
Totals	16	2,772	5,677	11,906	2,016	34,653	65,361	28,059	—	—	4,138	20,807	31,204
1962													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	1	1,624	3,474	7,128	1,413	22,974	41,716	16,636	...	...	2,215	10,030	17,232
New Brunswick	—												
Quebec	4	1,497	3,089	7,098	750	27,549	46,362	18,162	...	...	2,104	11,570	20,667
Ontario	8												
Manitoba	1												
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—	—	—	—	—	—	—	—
Yukon and Northwest Terri-tories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	1	x	x	x	x	x	x	x	...	...	x	x	x
New Brunswick	—	—	—	—	—	—	—	—	—	—	—	—	—
Quebec	3	x	x	x	x	x	x	x	...	...	x	x	x
Ontario	8	1,175	2,509	5,721	557	26,532	40,446	13,439	...	...	1,784	10,143	15,947
Manitoba	1	x	x	x	x	x	x	x	...	...	x	x	x
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—	—	—	—	—	—	—	—
Yukon and Northwest Terri-tories	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	13	2,488	5,316	11,751	1,866	56,908	67,722	28,710	—	—	3,449	18,355	31,714

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
100,000 " 199,999.....	3	28	54	114	9	881	1,229	353	—	—	47	222	350
200,000 " 499,999.....													
500,000 " 999,999.....													
1,000,000 " 4,999,999.....	5	631	1,324	2,916	567	6,404	16,476	9,533	...	...	877	4,524	10,031
5,000,000 and over.....	6	2,462	5,184	11,195	1,586	43,238	70,374	24,911	...	...	3,395	16,853	27,517
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
100,000 " 199,999.....	3	26	54	109	6	566	836	204	...	...	45	224	368
200,000 " 499,999.....													
500,000 " 999,999.....													
1,000,000 " 4,999,999.....	5	512	987	2,256	508	6,805	15,002	7,330	...	...	761	3,856	8,061
5,000,000 and over.....	5	1,950	4,275	9,385	1,351	49,537	71,884	21,176	...	...	2,643	14,275	23,286
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	—	—	3,449	18,355	31,914

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	5	474	1,005	2,062	237	6,143	10,354	3,180	...	...	891	3,881	3,186
50,000 " 99,999.....													
100,000 " 199,999.....													
200,000 " 499,999.....	9	2,647	5,558	12,164	1,925	44,380	77,725	31,617	...	...	3,428	17,718	34,712
500,000 " 999,999.....													
1,000,000 " 4,999,999.....	10	2,462	5,261	11,641	1,859	56,342	86,886	28,506	...	...	3,404	18,133	31,540
5,000,000 and over.....													
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	3	26	54	109	8	566	836	204	...	...	45	224	368
50,000 " 99,999.....													
100,000 " 199,999.....													
200,000 " 499,999.....	10	2,462	5,261	11,641	1,859	56,342	86,886	28,506	...	...	3,404	18,133	31,540
500,000 " 999,999.....													
1,000,000 " 4,999,999.....	10	2,462	5,261	11,641	1,859	56,342	86,886	28,506	...	...	3,404	18,133	31,540
5,000,000 and over.....													
Head offices, sales offices and auxiliary units.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	—	—	3,449	18,355	31,714

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
100,000 " 199,999.....	5	474	1,005	2,062	237	6,143	10,354	3,180	...	...	891	3,881	3,180
200,000 " 499,999.....		—	—	—	—	—	—	—	...	...	—	—	—
500,000 " 999,999.....		—	—	—	—	—	—	—	...	...	—	—	—
1,000,000 " 4,999,999.....	6	1,158	2,474	5,435	1,311	15,451	32,623	16,048	...	...	1,521	7,820	17,129
5,000,000 and over.....	3	1,489	3,084	6,729	614	28,929	45,102	15,570	...	...	1,907	9,898	17,584
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Under \$10,000.....	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999.....	—	—	—	—	—	—	—	—	—	—	—	—	—
100,000 " 199,999.....	3	26	54	109	8	566	836	204	—	—	45	224	368
200,000 " 499,999.....		—	—	—	—	—	—	—	—	—	—	—	—
500,000 " 999,999.....		—	—	—	—	—	—	—	—	—	—	—	—
1,000,000 " 4,999,999.....	10	2,462	5,261	11,641	1,859	56,342	86,886	28,505	—	—	3,404	18,132	31,346
5,000,000 and over.....		—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	—	—	3,449	18,355	31,714

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

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Total employees		Total value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1962													
Under 5 employed.....	—	—	—	—	—	—	—	—	—	—	—	—	—
5- 14 ".....	3	26	54	114	9	881	1,229	353	...	...	47	222	350
15- 49 ".....		—	—	—	—	—	—	—	—	—	—	—	—
50- 99 ".....		—	—	—	—	—	—	—	—	—	—	—	—
100-199 ".....	3	275	572	1,219	491	3,815	10,550	6,507	...	...	369	1,775	6,510
200-499 ".....	4	830	1,788	4,067	816	12,302	23,189	9,918	...	...	1,225	6,989	12,463
500 employed and over.....	4	1,988	4,149	8,826	846	33,525	53,110	18,019	...	...	2,678	12,613	18,575
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Under 5 employed.....	—	—	—	—	—	—	—	—	—	—	—	—	—
5- 14 ".....	3	26	54	109	8	566	836	204	...	...	45	224	368
15- 49 ".....		—	—	—	—	—	—	—	—	—	—	—	—
50- 99 ".....		—	—	—	—	—	—	—	—	—	—	—	—
100-199 ".....	4	374	722	1,681	421	4,534	12,048	6,737	...	...	532	2,690	6,925
200-499 ".....	3	740	1,600	3,341	789	9,744	18,485	7,899	...	...	900	4,278	8,472
500 employed and over.....	3	1,348	2,939	6,619	649	42,064	56,353	13,869	...	...	1,972	11,164	15,950
Head offices, sales offices and auxiliary units.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	—	—	3,449	18,355	31,714

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

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		Total employees		Total value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
	No.		'000			\$'000						\$'000	
1962													
Individual ownerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Partnerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Incorporated companies	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	...	...	4,319	21,599	37,898
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	14	3,121	6,562	14,225	2,163	50,523	88,079	34,798	—	—	4,319	21,599	37,898
1963													
Individual ownerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Partnerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Incorporated companies	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	...	...	3,449	18,355	31,714
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	—	—	3,449	18,355	31,714

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

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1962	1963	1962	1963	1962	1963
	\$'000					
Output						
1. Shipments and other revenue	88,079	87,722	20,978	21,611	109,057	109,333
Inventories—Goods of own manufacture:						
Add closing—Goods in process .....	...	...	...	...	...	...
Finished goods	1,441	1,203	...	...	1,441	1,203
Less opening—Goods in process .....	...	...	...	...	...	...
Finished goods	2,036	1,441	...	...	2,036	1,441
2. Net inventory change	(595)	(238)	...	...	(595)	(238)
3. Gross output (1 + 2)	87,484	87,484	20,978	21,611	108,462	109,095
Input						
4. Purchases of goods not of own manufacture .....	...	...	17,081	17,636	17,081	17,636
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	3,282	2,694	3,282	2,694
Less closing .....	...	...	2,694	2,060	2,694	2,060
5. Costs of goods sold (not of own manufacture) .....	...	...	17,669	18,270	17,669	18,270
6. Materials, supplies, components and semi-processed goods	50,523	56,908	209	336	50,732	57,244
7. Fuel and electricity	2,163	1,866	...	...	2,163	1,866
8. Gross input (5 + 6 + 7)	52,886	58,774	17,876	18,606	70,564	77,380
Census value added (3-8)	34,798	28,710	3,100	3,005	37,898	31,714

TABLE 3. Employment and Payroll, 1962 and 1963

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total employees		Production and related workers		Admin- istra- tive and office	Sales and distrib- ution	Total salaries and wages
	Manufacturing		Other												
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other			
number										\$'000					
1962															
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
New Brunswick	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quebec	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ontario	1,395	16	—	—	373	89	81	29	1,849	134	6,692	—	3,574	692	10,957
Manitoba	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	3,103	18	—	—	839	170	149	40	4,091	228	14,225	—	6,365	1,009	21,599
1963															
Newfoundland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nova Scotia	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
New Brunswick	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quebec	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ontario	1,164	11	1	—	390	104	88	26	1,643	141	5,721	3	3,676	742	10,143
Manitoba	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Saskatchewan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alberta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yukon and Northwest Territories	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	2,475	13	1	—	693	146	93	28	3,262	187	11,751	3	5,796	806	18,355

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

Month	Establishments reporting monthly detail			
	1962		1963	
	Male	Female	Male	Female
	number			
January	2,657	14	2,377	5
February	2,765	17	2,071	5
March	2,971	22	1,916	5
April	2,942	31	1,926	5
May	3,114	29	2,064	5
June	3,448	23	2,211	5
July	2,928	20	2,108	8
August	3,152	17	2,977	5
September	3,680	15	3,206	15
October	3,143	8	3,317	31
November	3,515	8	2,986	36
December	2,921	8	2,557	31
Average for establishments reporting monthly detail (collected only for large establishments)	3,103	18	2,475	13
Average for small establishments (only annual averages collected)	—	—	—	—
Average for all establishments	3,103	18	2,475	13

TABLE 4. Industry Inventories, 1963

Province	Manufacturing				Non-manufacturing	Total inventories
	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	
book value \$'000						
Opening:						
Newfoundland	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—
Nova Scotia	x	x	x	x	x	x
New Brunswick	—	—	—	—	—	—
Quebec	x	x	x	x	x	x
Ontario	3,341	5,025	900	9,266	1,491	10,757
Manitoba	x	x	x	x	x	x
Saskatchewan	—	—	—	—	—	—
Alberta	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	7,228	9,151	1,441	17,820	2,894	20,514
Closing:						
Newfoundland	—	—	—	—	—	—
Prince Edward Island	—	—	—	—	—	—
Nova Scotia	x	x	x	x	x	x
New Brunswick	—	—	—	—	—	—
Quebec	x	x	x	x	x	x
Ontario	5,476	7,285	982	13,743	968	14,711
Manitoba	x	x	x	x	x	x
Saskatchewan	—	—	—	—	—	—
Alberta	—	—	—	—	—	—
British Columbia	—	—	—	—	—	—
Yukon and Northwest Territories	—	—	—	—	—	—
Totals	11,205	11,858	1,203	24,266	2,060	26,325

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

Description	1962		1963	
	Quantity	Cost \$'000	Quantity	Cost \$'000
1. Large establishments which reported commodity detail:				
Bituminous coal:				
(a) From Canadian mines	ton	12,217	154	11,883
(b) Imported	"	4,288	51	4,299
Sub-bituminous coal (from Alberta mines only)	"	—	—	—
Anthracite coal	"	9,193	94	11,221
Lignite coal	"	—	—	—
Coke	"	156	4	43
Gasoline (including gasoline used in cars and trucks) ..	Imp. gal.	72,372	24	54,217
Fuel oil including kerosene or coal oil	"	6,343,606	657	5,283,796
Wood	cord	—	—	—
Gas:				
(a) Liquefied petroleum gases	Imp. gal.	175,992	19	—
(b) Other manufactured gas	M cu. ft.	—	—	—
(c) Natural gas	"	149,591	102	195,236
Other fuel .....	...	—	—	—
Electricity purchased	kwh.	106,539,373	1,058	107,712,272
Steam purchased .....	...	—	—	3
2. Estimate for small establishments:				
Fuel and electricity .....	...	—	...	—
3. All establishments:				
Total fuel and electricity used .....	...	2,163	...	1,804

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

Description	1962		1963		
	Quantity	Cost	Quantity	Cost	
		\$'000		\$'000	
1. Materials used:					
Iron and steel:					
Pig Iron	ton	6,366	295	5,660	224
Bars and rods, steel	"	5,906	861	3,083	480
Wire, steel	"	453	96	465	128
Plates, steel	"	20,269	2,628	14,979	2,042
Sheets:					
Plain	"	6,920	1,123	6,247	876
Galvanized	"	3,307	542	1,618	267
Strip, steel	"	7	1	352	65
Structural shapes, steel	"	18,279	2,478	9,868	1,352
Alloy steel	"	...	112	...	52
Scrap iron and steel	ton	118	3,154	128	3,405
Castings (rough and semi-finished received from foundry):					
Iron (grey and malleable)	"	1,670	603	1,414	451
Steel	"	2,637	1,230	2,257	1,524
Other iron and steel	"	...	693	...	142
Non-ferrous metals:					
Aluminum:					
Castings	lb.	234,811	189	384,639	313
Sheet	"	940,992	487	509,557	341
Other forms	"	598,231	388	299,193	173
Brass and bronze	"	529,062	230	522,901	280
Copper:					
Sheet	"	25,214	17	40,851	20
Wire	"	90	--	153,700	100
Other forms	"	98,978	51	83,989	67
Lead	"	2,053	--	16,398	3
Nickel	"	3,701	3	3,520	3
Tin	"	200	--	--	--
Zinc	"	54,729	19	16,182	9
Babbitt metal and solder	"	10,360	7	8,046	6
Other non-ferrous metals	"	...	1	--	--
Ferro-alloys	"	...	364	...	386
Other materials and supplies:					
Iron and steel pipe, tubes and fittings	"	..	1,161	...	1,891
Paints, oil and varnishes	"	...	345	...	254
Wheels	"	...	1,679	...	1,046
Springs	"	...	229	...	194
Other car and locomotive parts	"	...	14,782	...	14,926
Foundry coke	ton	4,715	141	2,688	95
Foundry sands (including core and moulding sands)	"	3,540	42	3,705	46
Plumbago and graphite	lb.	22,268	3	8,000	1
Lumber	M bd. ft.	10,747	1,086	4,405	489
Firebrick and cupola blocks	"	...	150	...	131
Fireclay	ton	81	2	81	2
Core oil	Imp. gal.	1,023	1	675	1
All other materials and components used	"	...	12,660	...	22,464
2. Containers and other packaging materials and supplies used					
...	"	...	15	...	26
3. Operating, maintenance and repair supplies used (excluding fuel)					
...	"	...	2,639	...	2,622
4. Amount paid out to others for work done on materials owned by establishments					
...	"	...	34	...	22
Totals					
...	"	...	50,523	...	56,908

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

Description	1962		1963	
	Quantity	Value	Quantity	Value
		\$'000		\$'000
Products:				
Railways cars (standard gauge only): ¹				
Passenger	—	—	—	—
Freight:				
Automobile	—	—	—	—
Ballast	—	—	—	—
Box	No. 1,851	18,203	x	x
Flat	" 207	1,885	x	x
Gondola	" 100	1,254	x	x
Hopper	" 230	3,063	x	x
Ore	" 65	1,299	x	x
Refrigerator	—	—	—	—
Stock	No. 120	2,275	x	x
Tank	" 78	1,009	x	x
Other	" 104	1,131	x	x
Cars, trucks and trailers, narrow gauge (for mines, quarries, etc.)	" 100	145	x	x
Locomotives, small size, for mines, etc., new	" 2	182	x	x
Locomotives, diesel-electric, standard gauge, new	" 27	5,337	x	x
Railway car and locomotive parts:				
Brakes, brake beams, brake shoes and parts .....	...	2,475	...	x
All other car and locomotive parts (wheels, springs, etc.) .....	...	20,650	...	17,968
Miscellaneous products:				
Castings, grey iron	ton 1,380	411	x	x
Machinery .....	...	531	...	2,205
Railway track equipment .....	...	558	...	505
Repairs on freight cars (value of work done) .....	...	60	...	x
Repairs on passenger cars (value of work done) .....	...	—	...	—
Repairs on locomotives (value of work done) .....	...	40	...	—
Amount received for other repair work .....	...	957	...	733
All other products .....	...	24,825	...	63,137
Amount received in payment for work done on materials owned by others .....	...	530	...	750
Total value of above items .....	...	86,620	...	88,206
Add value of work done during year on locomotives, cars, etc. which were not completed at year end .....	...	7,241	...	11,142
Deduct value of work done in previous years on locomotives, cars, etc. which were completed during year under review .....	...	(5,782)	...	(8,718)
Total net value .....	...	88,079	...	87,722

¹ See Table 8 B for "All Industry" totals.

TABLE 8. Shipments of Selected Goods of Own Manufacture — All Industries, 1954-63
(Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)
A. Railway Spikes

Year	Tonnage	Value
		\$'000
1954	11,393	1,685
1955	14,380	2,159
1956	18,817	3,235
1957	12,358	2,293
1958	13,200	2,625
1959	13,019	2,526
1960	7,072	1,426
1961	8,092	1,590
1962	7,574	1,477
1963	8,177	1,595

TABLE 8. Shipments of Selected Goods of Own Manufacture - All Industries, 1954-63 - Concluded
B. Railway Cars and Locomotives

Year	Standard railway cars		Locomotives	
	Number	Gross value of production	Number	Gross value of production
		\$'000		\$'000
1954	8,287	88,394	244	41,105
1955	3,736	27,821	362	59,692
1956	9,221	70,980	488	78,220
1957	10,475	98,665	521	94,417
1958	5,313	64,126	417	75,229
1959	3,585	40,370	375	66,573
1960	2,510	25,396	172	29,189
1961	1,762	19,754	43	4,352
1962	3,449	36,669	29	5,518
1963	2,156	30,135	159	28,668

C. Finished Rail Fastenings

Year	Tie plates			Fish plates or splice bars		
	Quantity made	Factory shipments		Quantity made	Factory shipments	
		Quantity	Value		Quantity	Value
		tons	\$'000		tons	\$'000
1954	39,386	38,027	4,152	13,175	12,786	1,545
1955	66,856	67,683	7,272	15,582	16,812	1,986
1956	88,590	86,592	10,103	18,487	18,675	2,465
1957	78,555	80,575	10,148	17,022	16,793	2,502
1958	56,118	56,189	7,338	14,078	14,088	2,066
1959	70,376	70,351	8,970	14,853	14,818	2,212
1960	36,028	36,108	4,787	11,256	11,133	1,684
1961	44,401	43,022	5,683	7,493	7,736	1,150
1962	53,765	54,554	7,238	10,613	10,624	1,588
1963	50,050	51,781	6,883	13,553	13,476	2,009

List of Establishments classified to This Industry, 1963

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

Name	Location
Nova Scotia:	
Dominion Steel & Coal Corporation Ltd.	Trenton
Quebec:	
Canadian Steel Wheel Ltd.	Hochelaga
Griffin Steel Foundries Ltd.	St-Hyacinthe
Montreal Locomotive Works Ltd.	1505 Dickson St., Montréal
Ontario:	
Buffalo Brake Beam Company	21 Dunbar Ave., Hamilton
Canada Iron Foundries Limited	St. Thomas
Canadian Locomotive Co. Limited	Kingston
Canadian Westinghouse Co. Ltd.	286 Sanford Ave., North, Hamilton
Fairmont Railway Motors Limited	Montfair Ave., Islington
General Motors Diesel Limited	Box 2160, Terminal A, London
National Steel Car Corporation Limited	Kennelworth Ave., North Hamilton
The Sylvester Steel Products Company Limited	Lindsay
Manitoba:	
Griffin Steel Foundries Ltd.	Transcona

CONCEPTS AND DEFINITIONS

Census of Manufactures

General

The Census of Manufactures is an annual mail survey covering Canada's Manufacturing Industries. It is based on the Standard Classification of Industries and full details concerning the system may be found in the Standard Industrial Classification manual, Catalogue No. 12-501 which is available from the Queen's Printer or the Dominion Bureau of Statistics. In summary, the Classification as it relates to the manufacturing industries provides for a breakdown into 140 industries arranged in 20 major industry groups. Of the 140 (3 digit) industries, 18 are further broken down into 58 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 178 separate industries. They cannot all be published separately by province, however, because of the confidential nature of the data in certain provinces.

The reporting unit for the Census is designated as the **establishment** (see definition of "Establishment" in following section) and a return is requested from every establishment classified to a manufacturing industry. Although respondents are required to submit reports covering the calendar year, financial year reports other than the calendar year are accepted in instances where respondents find it impossible to supply calendar year data from accounting records. When an establishment is operated for only part of a year a report is required covering the period of operation.

There are four different questionnaires used in the Census of Manufactures; (a) short form (b) long form (c) head office questionnaire and (d) commodity questionnaire. The short and long forms are used to obtain principal statistics and commodities shipped from establishments classified to manufacturing industries and differ only in the amount of detail requested. The short form is a single-sheet questionnaire sent to small manufacturers generally reporting shipments of less than \$100,000; this cut-off, however, varies somewhat between industries. The head office questionnaire is generally used for company head offices and/or auxiliary units separately located from the manufacturing establishment(s), (see following notes on Head offices and auxiliary units). The Commodity questionnaire is used to survey certain establishments which are coded (on the basis of their principal activity) to industries other than manufacturing in the Standard Industrial Classification system, but which undertake some manufacturing as a subsidiary activity. This single-sheet questionnaire is designed to collect information on the quantity and value of goods of own manufacture shipped by such establishments in order to achieve full coverage of domestically manufactured commodities (see the following note under Shipments).

The results of the Census are presented in some 140 publications. In addition to these annual industry publications there are annual summary reports for Canada and the provinces and special reports giving principal statistics by detailed geographic areas, by type of ownership and size of establishment. A special annual report covering the shipments of all manufactured commodities arranged in alphabetical order is also published.

Since 1960 the following major changes have been implemented in the Census of Manufactures: (a) a revised Standard Industrial Classification (b) a new establishment definition and (c) an extension of the establishment definition to cover the non-manufacturing activities of manufacturing establishments. The statistics presented in the various 1963 reports reflect the complete implementation of these changes and enable comparisons to be made with the years 1961 and 1962. For a complete description of the procedures followed in establishing the revised series, reference should be made to the Explanatory Notes included in the 1960, 1961 and 1962 industry publications. The statistical framework within which the Census of Manufactures is now carried out is based on the following concepts and definitions which have been developed as part of a general programme to achieve a fully integrated system of economic statistics.

Establishment

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. The majority of such establishments are firms but many firms have more than one establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements embodied in the following definition of the "establishment":

"The smallest unit which is a separate operating entity capable of reporting the following principal statistics:

- Materials and supplies used
- Goods purchased for resale as such
- Fuel and power consumed
- Number of employees and salaries and wages
- Man-hours worked and paid
- Inventories
- Shipments or sales."

Each establishment is required to report on all the activities carried out within its accounting boundaries (except income from investments such as rent, interest and dividends) and data on the different activities (manufacturing, trading in goods not of own manufacture, construction by own labour

force, revenue from services, etc.) are requested to be reported separately. It should be noted that the statistics for separate activities are not completely consistent since some respondents cannot distinguish, in their records, materials, shipments and inventories relating solely to their own manufacturing activities. For example, inventory of goods purchased for re-sale may not be distinguishable from inventory of own manufactured goods. Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level and for studies or statistical measures requiring accurate coordinated data, the "total" statistics should be used.

The number of establishments represents the number of operating units that are principally engaged in the activities of the manufacturing industries to which they have been classified. These units do not necessarily represent the total number engaged in the production of a commodity mainly produced in a certain industry. Some commodities are produced as secondary products in other manufacturing and non-manufacturing industries. It should be noted that head offices and auxiliary units which are surveyed separately are not included in the establishment count, (see following notes on head offices and auxiliary units).

Head Offices and Auxiliary Units

All head offices and auxiliary units of companies classified to the manufacturing industries such as sales offices, administrative offices, warehouses, laboratories, etc. are now surveyed as part of the Census of Manufactures.

These head offices and auxiliary units are either included in an establishment report or are surveyed by means of the head office questionnaire. The former is the most common case where a single establishment firm has its executive personnel, sales office, etc. located at the site of the manufacturing plant (establishment). The special head office questionnaire is generally used where a firm, regardless of the number of establishments, has separately located offices or auxiliary units. Such offices or units do not constitute establishments within the Census of Manufactures as they do not normally generate operational revenues, but give rise only to costs of operations (mainly salaries and wages) which are automatically included in the value of shipments or sales. Although not considered as establishments, and hence, not included in the "establishment" count for an industry, the operational costs are reflected in either the "Industry" statistics (3 or 4 digit level) or the "Major group" statistics (2 digit level) according to the following rules:

(a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;

(b) In the case of multi-establishment firms, the statistics for such offices and units are coded to the same industry as the establishments of the

firm, when all establishments are in the same industry (3 or 4 digit). When establishments of such firms are coded (1) to different industries within a major group, (2) to industries in different major groups or (3) to industries in different divisions of the Standard Industrial Classification, then the statistics are included in the major group totals (2 digit level) in which the major part of the company's operations are classified. Although this may result in some distortion of major group statistics in the case of (2) and (3) the statistics at the industry (3 or 4 digit) level in all cases will be left free of these company-wide data.

Employees

(a) Production and related workers—Manufacturing activity

In addition to those engaged in production and assembling activities, they include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. Production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual full-time employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

(b) Production and related workers—Non-manufacturing activities

Such employees include those on manufacturing establishments' payrolls engaged in activities such as construction undertaken for the use of these establishments, some outside piece-workers employed in certain industries, logging employees who are reported as part of a sawmilling establishment and any other production workers who are not engaged in manufacturing-type operations.

(c) Administrative and office employees

This category includes all executive and supervisory officials such as presidents, vice-presidents, comptrollers, secretaries, treasurers,

etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the line supervisor or working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical, etc. It should be noted that prior to 1961 this category also included working owners and partners. Also included in this category are employees located at head offices or auxiliary units separately located from the establishment; these are generally included in the figures for the province in which they are located according to the rules outlined under "Head offices and auxiliary units" above.

(d) Sales and distribution workers

This category includes office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truckdrivers and their helpers, etc. It may also include some sales employees who are reported as part of a manufacturing establishment but are not working at the establishment's location. These are generally broken down by province in cases where more than 15 employees are involved in any one province. The figures exclude persons working on a commission basis who are not considered regular employees of the establishment.

(e) Total Employees

This total comprises the foregoing categories including employees located at separately located head offices and auxiliary units. The numbers of employees included under categories (b), (c) and (d) are reported in the form of annual averages and represent as closely as possible full time employment; adjustments are made when reported figures indicate the existence of part time or seasonal employment. In all the above categories, figures on employment refer to the calendar year whether or not other establishment statistics can only be reported on a fiscal year other than the calendar year.

Working Owners or Partners

These are not now included in the statistics of employees and salaries and wages. There is some duplication in numbers when a person owns more than one establishment and is reported as a working owner on each Census return. Withdrawals of working owners defined as amounts withdrawn by owners or partners for normal living expenses excluding withdrawals for payment of income tax.

Salaries and Wages

Salaries and wages refer to gross earnings of employees before deductions for income tax and employees contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages, bonuses, profits shared with employees, the value of room and board where provided, commissions (paid to regular employees only) as well as any

other allowance forming part of the worker's earnings. Payments for over-time are included. Figures on salaries and wages refer to the calendar year.

Fuel and Electricity

Figures for fuel refer to amounts actually used (including fuel used in cars, trucks, locomotives, etc.), not to purchases unless the quantities are substantially the same. **Any fuel and electricity produced by establishments for internal consumption are not included in the total cost.** Values represent laid down cost at the establishment including freight, duty, etc. Although fuel and electricity used is considered part of manufacturing activity it should be noted that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.

Materials and Supplies

(a) Manufacturing activities

Figures represent quantities and laid down cost values, at the establishment, of materials, supplies and purchased components owned and used during the year in manufacturing activities and related processes. These statistics represent only commodity items or physical goods (cost of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Included are maintenance and repair supplies not chargeable to fixed assets accounts and any amounts charged by other establishments for work done on materials owned by the reporting establishment. Cost of repairs or maintenance done by outside contractors and cost of returnable containers are not included.

(b) Non-manufacturing activities

1. Purchases for re-sale as such

Figures represent cost of materials or products purchased from others by the reporting establishment (or received as transfers from other establishments of the reporting company) for re-sale as such in the same condition as purchased. Included are any finished products received on consignment from other countries.

2. Other materials and supplies used

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of purchased machinery and equipment. Also included is the cost of office supplies not chargeable to

fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

Shipments

(a) General

The figures represent revenue from all production, sales, services and related activities of reporting establishments with shipments valued in Canadian dollars at the point at which the establishment relinquishes control. The unsold portion at year end of consignment shipments in Canada is treated as inventory and not as shipments but all shipments to foreign countries for which the form B13 "Customs Canada Export Entry" has been completed, are treated as shipments.

In those industries where work on principal products extends over a relatively long period, (Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair Industry) the value of production rather than the value of shipments is recorded. There are certain establishments in other industries which also operate on a basis of progress payments. For these establishments, shipments are also adjusted to work put in place on the basis of the net change in progress payments over the year.

(b) Shipments of goods of own manufacture

These figures represent shipments of goods made from own materials either in the reporting establishments or by other manufacturers on the basis of a charge to the reporting establishments for work done. Included are revenue from repair and custom work, amounts received in payment for work done on materials owned by other establishments and the cost (book value) of any goods shipped on a rental basis.

All products and by-products of own manufacture shipped from the establishment are covered, including transfer shipments to sales outlets, distributing warehouses or to other manufacturing plants of the reporting firm, when such units are treated as separate establishments. The value of shipments are net of returned goods, discounts, returns, allowances, sales tax and excise taxes and duties, returnable containers and charges for outward transportation by common or contract carriers. Transportation or delivery expense incurred by the reporting establishment's own carriers are included.

Shipments of goods of own manufacture of establishments which are coded to some other division of the Standard Industrial Classification (on the basis of principal activity) but which are engaged in manufacturing as a subsidiary activity are collected by means of the Commodity questionnaire referred to earlier. Such shipments together

with shipments of goods of own manufacture of establishments forming the universe of manufacturing industries are compiled and recorded in the various industry publications.

(c) Shipments of goods not of own manufacture

These figures represent the net selling value at establishment (net of discounts, returns, allowances, sales taxes and excise duties and taxes and transportation charges by common or contract carriers) of all products or materials (including products transferred from other establishments of the reporting firm) sold as such in the same condition as purchased or received as transfers. For those industries which ship such goods on a rental basis, the value of shipments represents the book value of these goods. All sales of consignment goods from other countries are included.

(d) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees, such as revenue from goods produced or purchased for rental (the book value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for company-operated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishment's own products, sale of used materials (excluding sale of used fixed assets) research and development work, etc. As mentioned previously the figures do not include non-operating revenue such as rent, dividends, interest, etc.

Inventories

(a) Manufacturing activities

Values represent the book values of manufacturing inventory owned in Canada. Inventories held for which progress payments have been received are not included. Where progress payment accounts are maintained, the change in these accounts is treated as a net adjustment to shipments. Figures consist of inventory owned at the plant and at warehouses or selling outlets which are treated as extensions of establishments for the purpose of reporting shipments. Inventory owned in transit in Canada or on consignment in Canada is included. Goods shipped abroad and held in inventory are included in shipments. Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the

receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

(b) Non-manufacturing activities

Figures represent the book value of inventory of goods purchased for re-sale as such without further processing, owned by the reporting establishments and held at plants and at any warehouses or selling outlets which are treated as extensions of establishments. Other characteristics are the same as in (a) above.

Value Added

(a) By manufacturing activities

Figures are compiled by deducting the cost of materials and fuel and electricity consumed from the value of production (value of shipments adjusted for changes in the value of inventories of finished goods and goods in process).

(b) By non-manufacturing activities

The figures are compiled by deducting the cost of goods purchased for re-sale (adjusted for changes in the value of inventories of goods

purchased for re-sale) and the cost of other materials and supplies used from the value of shipments of goods not of own manufacture, plus other revenue.

(c) By Total activities

The figures consist of value added by manufacturing activities plus value added by non-manufacturing activities. This total value added figure may, in some cases, be less than value added by manufacturing activities as a result of expenditures associated with non-manufacturing exceeding revenues from such activities or because of a decrease in inventory of goods not of own manufacture exceeding the mark-up on the sale of such goods. "Value added" is sometimes referred to as net production. However, to arrive at the National Accounts concept of net production, or Gross Domestic Product at "Factor cost" it would be necessary to subtract also the cost of advertising, insurance and other business expenses which are not collected as part of the annual Census of Manufactures. "Value added" figures for the primary industries, manufacturing and construction are published in DRS publication Catalogue No. 61-202, "Survey of Production".

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