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# RAILROAD ROLLING STOCK INDUSTRY 1964

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# RAILROAD ROLLING STOCK INDUSTRY

# 1964

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

TABLE 1. Principal Statistics, 1961-64

					ufacturing		s, 1961 - 0			Т	otal activ	ity	
Year and	Estab-		oduction ated work		Cost of	Cost of	Value of shipments			g owners artners	1	loyees	
province	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawais	Number	Salaries and wages	Value added
	No.		'000			\$'000				\$1000		\$10	000
1961													
Totals	16	2,772	5,677	11, 906	2,016	34, 653	65, 361	28,059	****	-	4, 138	20,907	31, 294
1962													
Totals	14	3, 121	6,562	14, 225	2, 163	50,523	88,079	34,798	-	-	4, 319	21,599	37,898
1963													
Newfoundland	_	_	_		_	_	-	_	_	-	100	_	_
Prince Edward Island	****		-	_	-		_	-	_	_	_	-	_
Nova Scotia	1	х	x	x	х	х	x	х	_	_	x	x	х
New Brunswick	_	_	_	_	-	-		_	_	-	dian	_	_
Quebec	3	х	х	x	х	х	x	x	-	-	х	x	х
Ontario	8	1,175	2,509	5,721	557	26,532	40,446	13,439	"_	-	1,784	10, 143	15, 947
Manitoba	1	x	х	х	х	x	х	x	_	_	х	x	х
Saskatchewan	-	-	-	-	-		_		-	_	_	_	_
Alberta	-	-	-	-	_	_	_	*****	_	_	-	_	-
British Columbia		_	-	_	-	êtes	_	_	_	-	_	-	-
Yukon and Northwest Territories	_	-	_	-	_	****	_	_	_	-	_		Atlant
Totals	13	2, 488	5,316	11,751	1,866	56, 908	87,722	28,710	****	****	3,449	18, 355	31, 714
1964													
Newfoundland	_	_	_	_	_	****	_	_	Atau	_		_	-
Prince Edward Island	_	_		_	****	_	_	_	_	_	-	_	_
Nova Scotia	1	х	X	х	х	x	x	х	_	_	x	x	х
New Brunswick	-	_	_	-	-		_	_	_	_	_		_
Quebec	3	х	x	х	x	х	x	x	_	_	х	x	x
Ontario	8	1,890	4,013	9,943	660	44.529	68, 135	22,854	_	_	2,604	15, 150	26,706
Manitoba	1	х	х	I	x	x	x	х		****	ж	х	X
Saskatchewan	-	_	-	_	_	_	_	****	_	_	_	-	_
Alberta	-	_	_	-	_	-	_	_	_	_	_	_	_
British Columbia	1	x	x	x	x	х	x	х	_	_	x	х	x
Yukon and Northwest Territories	-	****	-	-	-	_	-	_	-	_	_	_	
Totals	14	3,660	7,863	18, 415	2, 167	84,632	128,693	42, 162	600	-	4,756	26,098	46,785

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

	:			Man	ufacturing	activity				T	otal activ	ity	
Size group	Estab- lish- ments		duction a ited work		Cost of fuel and	Cost of materials	Value of shipments of goods	Value	Working and pa		Employees		Value
		Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		,000			\$*000				\$'000		\$10	000
1963													
inder \$10,000	_	_	_	_	_	_	_	_	_			_	
10,000 to \$ 24,999	_	-	-	_	_	-	_	_	-	-	_	_	
25,000 " 49,999 50,000 " 99,999	_	-	-	-	_	_	_	-	_	_	_	_	
100,000 " 199,999	1	_	-	-	_	_	_	_	_	-	-	_	
200,000 ' 499,999 500,000 ' 999,999	3	26	54	109	8	566	836	204	_	_	45	224	3
0,000,000 " 4,999,999 0,000,000 and overead offices and	5 5	512 1,950	987 4,275	2,256 9,385	508 1,351	6,805 49,537	15,002 71,884	7,330 21,176	=	_	761 2,643	3,856 14,275	8,00
auxiliary units	0 4 0	7											
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	_	_	3,449	18,355	31, 71
1964													
nder \$10,000	_	_	_	_	_	_	_	_	_	_			
10,000 to \$ 24,999	_	-	-	-	_	_	-		-	-	_	_	
25,000 ' 49,999 50,000 ' 99,999		-	_		_	_	_	_	-	_	-	-	-
100,000 " 199,999	1 -	~	_	_	-	-	-	_	-	-	-		-
200,000 ' 499,999 500,000 ' 999,999	4	26	51	114	10	842	1, 200	347	-	-	47	248	43
,000,000 ** 4,999,999	4	574	1,385	3,246	406	6,611	13,439	6.618	_	_	824	4.804	7,63
,000,000 and overead offices, sales offices and auxiliary units	6	3,060	6,426	15,055	1,752	77,179	114,054	35, 198	-	-	3,885	21,046	38,71
adamaty diffs	* * *	* * * *			* * *				0.4.0				
Totals	14	3,660	7,863	18,415	2.167	84.632	128.693	42,162			4.756	26.098	46,78

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

				Mar	ufacturing	activity				1	'otal acti	vity	
Size group	Estab- lish- ments		duction a		Cost of	Cost of	Value of shipments of goods	Value		owners	Emp	loyees	Value
		Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$*000				\$'000		\$*0	00
1963	2					1							
nder \$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	36
200,000 " 499,999	_			_	_			_	_	_	_	_	
500,000 '' 999,999	)								_				
1,000,000 '' 4,999,999 5,000,000 and overead offices and	10	2,462	5,261	11,641	1,859	56,342	86,886	28,506	-	-	3,404	18, 132	31,34
auxillary units					4.0.0				0 0 1				
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	_	-	3,449	18,355	31,7
1964													
nder \$10,000	_	_	_	_				_	_	_			
10,000 to \$ 24,999		_	_	_	_	_	_	_	_	_	_	_	
25,000 ' 49,999	_	_	-	_	_	_		_	_	_	_	-	
50,000 ' 99,999 100,000 ' 199,999	} 4	26	51	114	10	842	1,200	347	-	_	47	248	4
200,000 " 499,999	-	_	_	_	-		_	_	_	-	_	_	
500,000 ' 999,999		_	_	_		-	_	_			_	_	
,000,000 ' 4,999,999	6 4	1,227	2,822 4,989	6,622 11,680	869 1,289	26,625 57,165	42,294 85,199	15,124 26,691	_	_	1,723 2,986	9, 832 16, 018	16,8
auxiliary units		* * * *				4 4 1						* * *	
Totals													

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

				Mar	ufacturing	activity				T	otal acti	vity	
Size group	Estab- lish- ments		oduction ated worl		Cost of	Cost of	Value of shipments			owners	Emp	loyees	
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Value added
	No.		'000			\$'000		<u> </u>		\$'000		\$10	000
1963													1
Under \$10,000	-	mb	_	_	_	_	_	_	_	-	_	000	_
25,000 to \$ 24,999	_	stella	-	_	-	_	_	_	_	1040	_	000	_
25,000 " 49,999 50,000 " 99,999	) -	-	_	_	_	_	_	_	_	-	_	-	-
100,000 '' 199,999 200,000 '' 499,999	3	26	54	109	8	566	836	204	-	_	45	224	36
500,000 " 999,999	-	-	-		_	-	_	****	_	_	_	-	
1,000,000 ' 4,999,999 5,000,000 and over	} 10	2.462	5,261	11,641	1,859	56,342	86,886	28,505	_	_	3,404	18, 132	31,34
auxillary units		0 + 4		4 8 8		4 + +				40.		104	
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	-	-	3,449	18,355	31,71
1964													
Inder \$10,000	-	_	_	-	_		_	_	_	-	_		_
10,000 to \$ 24,999 25,000 '' 49,999	-	-	-	_	_	_	-	-	-	may	_		-
50,000 " 99,999	1		gamely.	_	_	-	_		-	rings	_		-
100,000 " 199,999	} 4	26	51	114	10	842	1,200	347	-	-	47	248	43
200,000 " 499,999	-	-	-	-	_	_	_	_		-	_	-	_
500,000 ' 999,999 1,000,000 ' 4,999,999			4 500		_	_	_	_	_		_	_	
5,000,000 and over	5	2,973	1,582 6,229	3.743 14,559	638 1,520	8.712 75,078	18,496 108,997	9.470 32,345	_	_	944 3,765	5,502 20,348	10,48 35,86
auxiliary units						* * *	4 9 8		* * *				
Totals	14	3,660	7,863	18,415	2,167	84,632	128,693	42,162	_	-	4,756	26,098	46,785

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

				Mau	nufacturing	activity				7	Total act	lvity	
Size group	Estab-		oduction ated work		Cost of	Cost of	Value of shipments			owners artners	Emp	loyees	
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Value added
	No.		1000		1	\$'000				\$'000		\$*0	100
1963							1						
Under 5 employed	_												
5 - 14 employed	)		_	-	_	_	_	_	_	_	me	_	state
15 - 49 "	3	26	54	109	8	566	836	204	_	-	45	224	368
50 - 99 "	_	endo.		_	_	_	_		_	_	_	_	_
100 - 199 ''	4	374	722	1,681	421	4,534	12,048	6,737	_	_	532	2,690	8.925
ZDA - 438	3	740	1,600	3,341	789	9,744	18, 485	7,899	_	_	900	4,278	8.473
500 employed and over	3	1,348	2,939	6,619	649	42,064	56,353	13,869	-	-	1,972	11, 164	15,950
auxiliary units													
			4 4 4		4 4 8		* * *	100					
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	-	-	3,449	18, 355	31.714
1964													
Under 5 employed	1												
5- 14 employed	1 4	26	51	1.14	10	842	1 000	0.45					
15 - 49 "	1	20	O.L	1.14	10	042	1,200	347	_		47	248	432
50- 99 "	-	-	_	-	_	_	_	_	_	_			
100-199	3	352	863	1,930	551	5,467	11,728	5,952		_	459	2.598	5,932
200-499	3	579	1,375	3,413	623	6,765	15.943	8,694	_	_	792	4.759	9, 752
500 employed and over	4	2,703	5,573	12,958	984	71,537	99,822	27, 169	_	_	3.458	18.493	30,869
Head offices, sales offices and auxiliary units									0 0 0	996			
Totals	4.0	2 000											
Totals	14	3,680	7,863	18,415	2,167	84,632	128,693	42,162	_	_	4,756	26,098	46.785

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

				Man	ufacturing	activity					Total acti	vity	
Type of organization	Estab-		oduction ated worl		Cost of	Cost of	Value of shipments			owners	Employees		
or Sampon ton	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Value added
	No.		,000			\$'000				\$'000		\$*0	Ю0
1963					1								
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
Co-operatives	_	_	_	-	-	_	_	****			_		_
Head offices, sales offices and auxiliary units		a 4 4		* * *								* * 4	
Totals	13	2,488	5,316	11,751	1,866	56,908	87,722	28,710	******		3,449	18,355	31,714
1984													
Individual ownerships	-	_	_	-	_	_	_	-	-	_	_	-	_
Partnerships	_	_	_	-	_	-	4000	-	_	-	****	-	-
Incorporated companies	14	3,660	7,863	18,415	2,167	84,632	128,693	42, 162			4,756	26,098	46,785
Co-operatives	-	-	_	-	_	-	_	_	2 4 4		-	-	-
Head offices, sales offices and auxiliary units		0 4 4			• 4 1		4 0 4						
Totals	14	3,660	7,863	18.415	2,167	84,632	128,693	42, 162	_	_	4, 756	26,098	46, 785

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

	Manufacti activit		Non-manufa activiti		Total activit	
	1963	1964	1963	1964	1963	1964
			\$'00			
Output	1					
, Shipments and other revenue	87,722	128,693	21,611	25,539	109,333	154,232
Inventories - Goods of own manufacture:						
Add closing - Goods in process		* * 4	***	4 4 4	0 4 4	
Finished goods	1,203	1,472	4 4 4		1,203	1,472
Deduct opening - Goods in process				4 9 4		4 + 4
Finished goods	1,441	1,203		***	1,441	1,203
. Net inventory change	(238)	268		0 to 0	(238)	268
. Gross output (1+2)	87,484	128,961	21,611	25,539	109, 095	154,500
Input						
Purchases of goods not of own manufacture	• • •	0 6 u	17,636	21,432	17,636	21,432
Inventories - Goods not of own manufacture:						
Add opening	9 9 9		2,694	2,060	2,694	2,060
Deduct closing	* * *	4 4 4	2,060	2,883	2,060	2,883
. Cost of goods sold (not of own manufacture)		0 = 4	18,270	20,609	18,270	20,609
. Materials, supplies, etc.	56,908	84.632	336	307	57,244	84,939
Fuel and electricity	1,866	2,167	4 + 4		1,866	2,167
Gross input (5 + 6 + 7)	58,774	86,799	18,606	20,916	77,380	107,715
Value added (3 - 8)	28,710	42,162	3,005	4, 623	31,714	46,785

TABLE 8. Employment and Payroll, 1963 and 1964

					Emplo	yees						Salari	es and wu	iges	
Year and		Product related v			Adm	inis•		les nd	To	tal	Producti		Admin-	Sales	
province	Manufa	cturing	0	ther		office		bution	10	rai	related v	vorkers	istra- tive and	and distri-	Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	office	butlon	
					num	ner				-			\$'000		
1963				)				)					1		
Newfoundland	-	-	_	-	_	-	_	-	-	-	-	-	-	-	-
Prince Edward Island	-	- 1	_	-	_	_		_	-	-	-		-	_	-
Nova Scotia	х	x	X	х	х	х	х	Х	Х	x	х	Х	Х	х	Х
New Brunswick	-	_	_	-	_		-	-	-	-	-	_	_	-	_
Quebec	х	х	X	x	х	x	x	х	x	x	Х	х	Х	х	х
Ontario	1,164	11	1	-	390	104	88	26	1,643	141	5,721	3	3,676	742	10, 14
Manitoba	х	х	х	Х	x	х	х	х	х	х	х	х	x	х	X
Saskatchewan	_	_	_	-	_	-	-	-	_	_	-	-	-	_	
Alberta	_	_	_	_	_	_	_	-	_	_	_	-	_	-	_
British Columbia		_	_	_	_	_	_	_	_	_	_	_	_		
Yukon and Northwest Terri-															
tories	_	_	_	-	_	_	_	_	-	-	_	_	_	-	-
Totals	2, 475	13	1	-	693	146	93	28	3, 262	187	11,751	3	5,796	806	18, 35
1964															
Newfoundland	_	_	_	_	-		-	_	-	_	_	_	-	***	-
Prince Edward Island	_	-	_	_	-	_	_	-	_	_	****	_	-	_	_
Nova Scotia	x	x	_	_	x	x	_	_	x	x	x	_	x	_	x
New Brunswick	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_
Quebec	x	-	_	_	x	x	x	x	x	X	x	-	X	x	x
Ontario	1,862	28		_	450	125	107	32	2,419	185	9,943	_	4,322	685	15, 15
Manitoba	X	_	~-	_	X	x	_	_	x	X	x	_	x	_	x
Saskatchewan	_	_	_	_	_	_			_	-		-	_	_	_
Alberta	_	-	_	_		_	_	_	_	_	_	_	_	_	_
British Columbia	x	x	_	_	x	_	x	x	x	x	x	_	X	x	x
Yukon and Northwest Terri- tories	_	_	_	_	_	_	_	_	_	_	~~	-	_	_	_
Totals	3, 631	29	-	_	781	170	111	34	4,523	233	18,415	-	6, 733	950	26,09

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

	196	3	196	34
Month	Male	Female	Male	Female
	-	numb	er	
Establishments reporting monthly detail (large establishments only):			1	
January	2,377	5	2, 678	3
February	2,071	5	2,951	3
March	1,916	5	2,838	3
April	1,926	5	3,033	3
May	2,064	5	3,346	2
June	2,211	5	3,588	3
July	2,108	8	3,981	3
August	2,977	5	4,003	2
September	3,206	15	3,833	3
October	3,317	31	4,611	3
November	0.000	36	4,365	2
December	2,557	31	4,376	2
Averages	2,475	13	3, 63 1	2
Establishments reporting annual averages (small establishments only)			71-0	114-
Average for all establishments		13	3,631	2

TABLE 10. Inventories, 1964

		Manufa	cturing		Non- manufacturing	
Province	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale	Total inventories
			book value	\$'000		
Opening:						
Newfoundland	-	_	-	_	_	_
Prince Edward Island	_	_	-		_	_
Nova Scotia	х	X	-	Х	_	x
New Brunswick	- 1	_	-	_	-	_
Quebec	х	X	х	x	x	X
Ontario	5,476	7, 285	982	13,743	968	14,711
Manitoba	х	Х	Х	х	_	X
Saskatchewan	_	_	-	_	_	-
Alberta	-	_	- !	_	_	_
British Columbia	х	_	-	X	_	x
Yukon and Northwest Territories	_	_	-	_	_	
Totals	11, 245	11,858	1, 203	24, 306	2,060	26, 366
Closing:						
Newfoundland	_	_	_	_	_	eme
Prince Edward Island	_	_	_	_	_	_
Nova Scotia	x	x	_	x	_	x
New Brunswick	-	_		-	_	_
Quebec	x	х	x	x	x	x
Ontario	5,563	8, 162	890	14,615	1,469	16,085
Manitoba	x	X	x	x	_	x
Saskatchewan	_	_	_		_	_
Alberta	_	_	_	_	_	-
British Columbia	x	_	_	x	_	X
Yukon and Northwest Territories	_	_	_	_	_	_
Totals	11,571	18,736	1,472	31,780	2,883	34,662

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

	1963		1964	
Description	Quantity	Cost	Quantity	Cost
Large establishments reporting commodity detail:     Bituminous coal:		\$'000		\$'000
(a) From Canadian mines ton	11,883	150	18,024	216
(b) Imported	4, 299	51	524	6
Sub-bituminous coal (from Alberta mines only)	-	-	-	-
Anthracite coal	11,221	114	11, 229	117
Lignite coal	_	-	-	_
Coke	43	I	-	_
Gasoline (Including gasoline used in cars and trucks) lmp. ga	1. 54,217	18	88,019	29
Fuel oil including kerosene or coal oil "	5, 283, 796	439	5,578,911	478
Woodcord	_	_	_	_
Gas:				
(a) Liquefied petroleum gases Imp. ga	1	-	-	-
(b) Other manufactured gas M cu. f	t. –	_	-	4000
(c) Natural gas	195, 236	102	261,569	143
Other fuel		_		-
Electricity purchased kwh.	107,712,272	988	144,969,184	1,155
Steam purchased	0 0 4	3	* n 4	24
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity	* 4 *	-	* * *	
3. All establishments:				
Total fuel and electricity used		1,866	0.4.4	2, 167

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

Description		1963		1964	
		Quantity	Cost	Quantity	Cost
. Materials used:			\$'000		\$'000
Iron and steel;					
Pig iron					
Bars and rods, steel	ton	5,680	224	15, 911	69
Wire, steel		3, 083	480	6, 082	86
Plates, steel	0.4	465	128	197	11
Sheets:		14, 979	2, 042	33, 480	4, 63
Plain	14	C 047	000.0		
Galvanized	14	6, 247 i, 618	876	13, 115	1,72
Strlp, steel	4.4	352	267 65	4, 627	76
Structural shapes, steel	4.4	9, 868		771	13
Alioy steel			1,352	28, 764	4, 00
Scrap iron and steel	ton	128	3, 405	136	2 20
Castings (rough and semi-finished received from foundry):	4022	120	3, 403	130	3, 72
Iron (grey and malleable)	4.0	1,414	451	2, 631	1, 18
Steel	4.4	2, 257	1,524	3, 439	2, 28
Other iron and steel		2,201	142	,	1, 0
Non-ferrous metals:		• • • •	136	P 4 8	1, 0
Aluminum:					
Castings	lb.	384,639	313	231, 082	19
Sheet		509, 557	341	1,781,282	84
Other forms	4.	299, 193	173	339, 874	14
Brass and bronze	.,	522, 901	280	560, 593	3:
	1.1				
Sheet	44	40, 851	30	37, 185	1
Wire	*4	153, 700	100	345, 974	21
Other forms	11	83, 989	67	92, 445	8
Nickel	14	16,398	3	38,027	
Tin		3, 520	3	19,349	1
Zine	lb.	10 100	_		
Babbitt metal and solder	10.	16, 182 8, 046	9	55, 275	2
Other non-ferrous metals		0, 040	0	9,813	
		_	_	-	•
Ferro-alloys		* * *	366		41
Other materials and supplies:					
Iron and steel pipe, tubes and fittings			1,891	111	1, 48
Paints, oil and varnishes			254		4:
Wheels			1,046	D = 0	2, 4'
Springs		* * *	194		44
Other car and locomotive parts		* * *	14, 926		36, 2
Foundry coke	ton.	2, 688	95	4, 137	18
Foundry sands (including core and moulding sands)	4.6	3, 705	46	9, 311	1:
Plumbago and graphite	lb.	8, 000	1	6, 209	
Lumber	M bd. ft.	4, 405	489	9, 975	1, 0
Firebrick and cupola blocks		• • •	131		ii
Fireclay	ton	81	2	113	
Core oll	Imp. gai.	675	1	1,971	
All other materials and components used		* * *	22, 464	* * *	13, 96
Containers and other packaging materials and supplies used			26	• • •	3
Operation, maintenance and repair supplies used (excluding fuel)			2, 622		4, 0
Amount pald out to others for work done on materials owned by establishments		V 4 9	22		5
Totals			56, 908		84, 63

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

Providente	1963	1964			
Description	Quantity	Value	Quantity		Value
		\$'000		-	\$'000
roducts:		ψ 000			Ų 000
Railways cars (standard gauge only):					
Passenger	-	-		-	-
Freight: Automobile.		_	2		2
Ballast	_	_			
Box	2	2	3		3
Flat	2	2	3		2
Gondola Hopper		3	2		2
Ore	1	2	2		3
Refrigerator	-			-	_
Stock	2 2	3		-	
Tank	2	2	2		2
Other Cars, trucks and trailers, narrow gauge (for mines, quarries, etc.)	2	a		_	
Locomotives, small size, for mines, etc., new	2	2	3		2
Locomotives, diesel-electric, standard gauge, new	2	2	2	l	3
Railway car and locomotive parts:  Brakes, brake beams, brake shoes and parts	• • • •	17, 968			22,611
Miscellaneous products: Castings, grey iron	2	2	2		2
Machinery	44.1	2, 205			3
Railway track equipment		505			716
Repairs on freight cars (value of work done)		2			2
Repairs on passenger cars (value of work done)					_
Repairs on locomotives (value of work done)		_			2
Amount received for other repair work		733			1,733
All other products		63, 137			96,839
Amount received in payment for work done on materials owned by others		750			747
Total value of above items		85, 298			122,646
				-	
Add value of work done during year on locomotives, cars, etc. which were not completed at year end.		11,142			14,619
Deduct value of work done in previous years on locomotives, cars, etc. which were completed during year under review	• • •	(8,718)			(8,572
Total net value	4 6 6	87,722			128,693

<sup>&</sup>lt;sup>1</sup> See Table 14 B for "All industry" totals.
<sup>2</sup> Included with "All other products".

TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries, 1955 - 64 (Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)

# A. Railway Spikes

and a second opened		
Year	Tonnage	Value
		\$ 000
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
1964	8,510	1,675

FABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries, 1955-64 - Concluded

B. Railway Cars and Locomotives

Line I		Standard railway cars		Locomotives		
2,000	Number	Gross value of production	Number	Gross value of production		
		\$'000		\$1000		
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		
963	1, 4 5 4 2, 156	21,14530,136	159	28,668		
1964		48,075	169	31,964		

# C. Finished Rail Fastenings

	Year	Tie plates			Fish plates or splice bars			
		Year	Quantity	Factory sh	ipments	Quantity	Factory shi	pments
	made	Quantity	Value	made	Quantity	Value		
		tons		\$,000	tons		\$'000	
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	
	***************************************	56, 118	56,189	7,338	14,078	14,088	2,066	
989	022244000000000000000000000000000000000	70, 376	70,351	8,970	14,853	14,818	2,212	
(1.11)		36,028	36, 108	4.787	11,256	11,133	1,684	
961		44,401	43,022	5,683	7, 493	7,736	1,150	
962		53,765	54,554	7,238	10,613	10,624	1,586	
963	***************************************	50,050	51,781	6, 883	13,553	13,476	2,009	
1964	***************************************	1	1	1	2	1.	l.	

<sup>1</sup> Confidential

# List of Establishments classified to This Industry, 1964

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

Name	Location		
Nova Scotia:			
Dominion Steel & Coal Corporation Ltd.	Trenton		
Quebec:			
Canadian Steel Wheel Ltd. Griffin Steel Foundries Ltd. Montreal Locomotive Works Ltd.	1900 Dickson St., Montreal St. Hyacinthe 1505 Dickson St., Montreal		
Ontario:			
Buffalo Brake Beam Company Canada Iron Foundries Limited Canadian Locomotive Co. Limited Canadian Westinghouse Co. Ltd Fairmont Railway Motors Limited General Motors Diesel Limited National Steel Car Corporation Limited Sylvester Steel Products Company Limited	21 Dunbar Ave., Hamilton St. Thomas 141 Ontario St., Kingston 286 Sanford Ave. North, Hamilton Montfair Ave., Islington 2021 Oxford St.E., London Kennelworth Ave., North, Hamilton Lindsay		
Manitoba:			
Griffin Steel Foundries Ltd.	Transcona		
British Columbia:			
Airchime Mfg. Ltd.	14 Powell St., Vancouver		

# CONCEPTS AND DEFINITIONS

Census of Manufactures

### General

The Census of Manufactures is an annual mail survey covering Canada's Manufacturing Industries. It is based on the Standard Classification of Industries and full details concerning the system may be found in the Standard Industrial Classification manual, Catalogue No. 12-501 which is available from the Queen's Printer or the Dominion Bureau of Statistics. In summary, the Classification as it relates to the manufacturing industries provides for a breakdown into 140 industries arranged in 20 major industry groups. Of the 140 (3 digit) industries, 18 are further broken down into 56 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 176 separate industries. They cannot all be published separately by province, however, because of the confidential nature of the data in certain provinces.

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

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

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

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

### Establishment

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

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

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

Each establishment is required to report on all the activities carried out within it's 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 wither 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, vicepresidents, 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"

# (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 companyoperated 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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