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# STEEL PIPE AND TUBE MILLS 1964

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## STEEL PIPE AND TUBE MILLS

### 1964

For statistical purposes the industry titled Steel Pipe and Tube Mills in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing welded and seamless steel pipe and tubing. Establishments primarily engaged in manufacturing rivetted pipe are classified in the Miscellaneous Metal Fabricating Industries and those primarily engaged in manufacturing cast iron pipe are included in Iron Foundries.

Value of shipments and other revenue of the Steel Pipe and Tube Mills industry totalled \$197 million, an increase of \$42 million over 1963. This amount included shipments of steel pipe and tubing and steel fittings valued at \$166 million, shipments of other products (secondary products) valued at \$17 million, and other revenue of \$14 million.

This industry's shipments of steel pipe and tubing and steel fittings represented 91 per cent of its manufacturing revenue. Secondary products shipped by this industry in 1964 included semi-processed pipe, steel plates, steel sheets, automobile parts, etc.

The cost of materials and supplies, etc. used in the production of goods of own manufacture increased by \$31 million. Cost of materials and supplies etc. (inputs) in 1964 represented 68.9 per cent of value of shipments of own manufacture (outputs), compared to 69.0 per cent in 1963.

It should be noted that Table 13 covers the shipments of the establishments classified to this industry whereas Table 14 presents the total value of shipments of specific commodities of Canadian manufacture and includes shipments of those commodities reported by establishments classified to other industries.

#### SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- P preliminary figures.
- r revised figures.
- x confidential to meet secrecy requirements of the Statistics Act.

TABLE 1. Principal Statistics, 1961-64

				Man	ufacturing	activity				Т	otal activ	rity	
Ye <b>ar</b> and	Estab-		duction a		Cost of	Cost of	Value of shipments	Value	Working and p	g owners artners	Emp	loyees	Value
province	ments	Number	Man- hours paid	Wages	fuei and elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawais	Number	Salaries and wages	added
	No.		'000			\$'000				\$'000		\$'0	000
1961													
Totals	18	2, 587	5,784	13,882	2, 123	101,731	154,868	47,808	_	_	3,407	18,793	48,050
							1						
1962													
Totals	19	2,768	6, 130	14,997	2,870	78, 178	117, 248	37,920	_	_	3,676	20, 465	38, 244
1963													
Newfoundland	_	_	_		_	-	_	-	_	***	_	-	-
Prince Edward Island	_	1000	_	_	_	_	_	_	_	_	-	_	_
Nova Scotia	_	_	_	_	_	_	-		_	-	_	-	_
New Brunswick	_	_		_	_	_	_	_	-	_	_	_	_
quebec	4	285	575	1,355	304	14, 344	19, 279	4, 192	_	_	322	1,598	4, 220
tatio	11	2,077	4,592	11,817	1,706	62,493	93,781	28, 230	_	-	2,695	15, 789	28,712
Manitoba	_	-	-	-	-	-		_	_	_	-	-	_
Saskatchewan	i	1											
Alberta	4	640	1,312	3,560	1,110	17,969	29, 505	11,606	-	_	823	4,889	12,051
British Columbia	1												
Yukon and Northwest Territories	_	_	_	-	_	_	_	_	-	-	-	-	-
Totals	21	3,002	6, 479	16,732	3, 120	94,805	142, 565	44,029	-	-	3,840	22, 276	44,984
1964													
Newfoundland	_	_	_	_		_	_		_		_		.031
Prince Edward Island						_		_	_		-	_	
Nova Scotia		_					_	_				_	
New Brunswick					_		-		_	_	_	_	_
Quebec	4	307	626	1,526	321	15,706	21,009	4,828	_		365	1,901	4,988
Ontario	11	2,321	5, 198	14,079	1, 983		113,998	37,831	-	_	2,986	18,383	38,62
Manitoba	_	-	-	-	-,000	_	-	_	_	_		_	_
Saskatchewan	1	1											
Alberta	4	840	1,917	4,437	1,212	35,641	48, 238	14,676	_	_	1,086	6,063	15,040
British Columbia	1		-,				1,230						
Yukon and Northwest Territories	_	_	_	_	_	= _	-	_	_	_	_	_	-
Totals	21	3, 468	7,741	20,042	3, 516	125, 965	183, 246	57, 335			4,437	26, 328	58,654

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

				Mar	ufacturing	activity				Т	otal activ	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		\$'(	000
1963													
Inder \$10,000	_	-	_	_	_	_	_	_	_	_	_		
10,000 to \$ 24,999	-		_	_	_	-	_	-	-	_	~~	-	_
25,000 '' 49,999 50,000 '' 99,999	_		_	_	-	-	_	-	_	-	-	-	-
100,000 " 199,999 200,000 " 499,999	5	35	71	150	43	888	1,308	344	-	-	61	299	34
500,000 " 999,999	3 7	386	867	1,923	241	14,462	19,802	5,545		_	470	2,574	5, 51'
1,000,000 ' 4,999,999 5,000,000 and over lead offices, sales offices and	9	2,581	5,539	14,659	2,836	79,455	121,454	38,140	-	_	3,309	19, 403	39,12
auxiliary units	4 4 4	* * *			4 1 4							4 4 4	
Totals	21	3,002	6,479	16, 732	3,120	94, 805	142,565	44, 029	-	_	3,840	22, 276	44, 98
1964													
Inder \$10,000	_	_	_	_	_			_		_			-
10,000 to \$ 24,999	_	-	_	-	_	_	-	-	-	-	_	-	_
25,000 ' 49,999 50,000 '' 99,999		-	_	_	_	-	_	-	-	-	-	-	_
50,000 " 99,999 100,000 " 199,999	,				_		_	_	_	-	-		_
200,000 " 499,999 500,000 " 999,999	4	65	152	265	29	1,733	2,732	993	_	-	84	387	98
1,000,000 ' 4,999,999 5,000,000 and overead offices, sales offices and	6 11	358 3,045	754 6,835	1,797	253 3, 234	12,705 111,527	19,117 161,397	6,571 49,772	_	_	3,775	2,326 22,641	6,56 51,10
auxiliary units											157	974	
Totals	21	3,468	7,741	20, 042	3,516	125, 965	183, 246	57, 335	_		4,437	26, 328	58, 65-

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

				Mar	ufacturing	activity				7	otal acti	vity	
Size group	Estab- lish- ments		duction ated work		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		\$10	00
1963													
Under \$10,000	=	_	_	_	_	=	=	_	==	=	= =		_
25,000 '' 49,999 50,000 '' 99,999	} 3	19	42	81	35	390	537	78	-	_	40	206	81
100,000 ' 199,999 200,000 ' 499,999	4	75	174	342	45	2,566	2,997	768	-	-	95	453	764
500,000 999,999 1,000,000 4,999,999 5,000,000 and over lead offices, sales offices and	3 8 3	187 1,091 1,630	429 2, 105 3, 729	997 5,169 10,143	157 583 2,300	7,754 41,540 42,554	10, 285 58, 661 70, 084	2,303 16,270 24,611	=	=	231 1,482 1,992	1,337 7,546 12,733	2, 279 16, 687 25, 173
auxiliary units													* * * *
Totals	21	3, 002	6,479	16, 732	3,120	94, 805	142, 565	44, 029	-	-	3,840	22,276	44, 984
1964													
Inder \$10,000		_	_	_	-	-	_	_	_	_	_		_
10,000 to \$ 24,999	-	-	-	_	_	_	-	-		_	_	-	
	1	11	25	47	1	108	196	91	_	-	-		-
100,000 1 199,999	1	42	90	223	62	1, 794	1,805	109	_	_	15 50	72 266	90
200,000 * 499,999	3	54	126	217	27	1,624	2,536	902			69	314	89
500,000 " 999,999	2	76	162	318	39	2,439	3, 795	1,367	_		97	523	1,383
1,000,000 " 4,999,999	9	811	1,684	4,242	620	49,146	63,396	16,065	_		1.070	5, 903	16,37
5,000,000 and over	5	2,474	5,653	14,994	2,767	70,852	111,518	38,801	-604	_	2,979	18, 275	39,800
Head offices, sales offices and auxiliary units		4 4 4					* * *				157	974	
Totals	21	3,468	7,741	20, 042	3,516	125, 965	183, 246	57,335		_	4,437	26, 328	58, 654

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

				Man	ufacturing	activity				T	otal activ	rity	
Size group	Estab- lish-		duction a sted work		Cost of	Cost of	Value of shipments			owners	Empi	oyees	
	ments	Number	Man- hours pald	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		l	\$'000			1	\$'000		\$10	00
1963													
Inder \$10,000	_	_	_	_	_	_	=	_	-	-		-	=
25,000 ' 49,999 50,000 ' 99,999	} 3	19	42	81	35	390	537	78	_	-	40	206	8
100,000 '' 199,999 200,000 '' 499,999 500,000 '' 999,999	} 4	75 187	174 429	342 997	45 157	2,566 7,754	2,997 10,285	768 2,303	_	_	95 231	453 1, 337	76- 2, 279
1,000,000 ' 4,999,999	3	1,091	2,105 3,729	5,169 10,143	583 2,300	41,540 42,554	58,661 70,084	16, 269 24, 611	-	_	1,482	7,546 12,733	16.68 25,17
auxiliary units					* * 4	4 0 0			414	***		1	
Totals	21	3,002	6,479	16,732	3, 120	94, 805	142, 565	44, 029	-		3, 840	22,276	44, 98
Inder \$10,000	-		_	-		-	_	_	_	_	_	_	-
10,000 to \$ 24,999 25,000 " 49,999	-	_	_	_	_	_	_	_					-
50,000 " 99,999	1	11	25	47	1	108	196	91	_	-	15	72	90
100,000 " 199,999	1	42	90	223	62	1,794	1,805	109	-		50	266	10
200,000 '' 499,999 500,000 '' 999,999	3 2	54 76	126 162	217 318	27 39	1,625	2,536	902	-	-	69 97	314	89
1,000,000 4 4,999,999	9	811	1,684	4.242	620	49, 146	3.795 63.396	16,065	_	_	1.070	523 5,903	1,38
5,000,000 and over	5	2,474	5,653	14,994	2,767	70, 852	111,518	38, 801	_	-	2,979	18,275	37, 80
halliary units		* * * *	* * *			9 0 4	* * *		4 4 4		157	974	
Totals	21	3,468	7,741	20,042	3,516	125, 965	183, 246	57, 335	_	-	4,437	26,328	5 8, 654

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

				Mai	ufacturing	activity				7	Total acti	vity	
Size group	Estab-		oduction ated work		Cost of	Cost of				owners	Employees		
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	materials and supplies	of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Value added
	No.		'000			\$*000				\$1000		\$10	00
1963													
10der 5 employed	4 4 5 5	27 105 296 454 2,120	56 238 624 944 4,617	113 457 1,437 2,370 12,355	33 64 308 307 2,408	583 3,697 12,219 28,756 49,550	950 4,535 17,344 38,271 81,466	293 1,197 4,746 8,785 29,008	-		139 340 618 2,699	226 700 1,784 3,497 16,069	289 1, 198 4, 736 8, 781 29, 980
auxiliary units	9 9 6							* * *	* * *				
Totals	21	3,002	6, 479	16,732	3,120	94, 805	142,565	44,029	-	-	3,840	22,276	44, 984
1964													
Inder 5 employed	_	-	_	_	_	_	_	_	-	_	_		_
5 - 14 employed	} 5	94	215	392	46	2,543	4,298	1,754	_	_	123	586	1,785
50 - 99	4 7	239 661	488 1,384	1,179 3,476	140 563	8,354 44,215	12,595 54,835	4,289 12,491		Ξ	282 896	1,572 4,920	4,279 12,810
00 employed and over	} 5	2,474	5,653	14,994	2,767	70, 852	111,518	38, 801	-	_	2,979	18, 275	39, 800
auxillary units	***		4 0 9	***		***				4 + 4	157	974	
Totals	21	3, 468	7,741	20,042	3,516	125, 965	183, 246	57,335	_	_	4,437	26, 328	58, 654

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

				Man	ufacturing	activity					Fotal acti	ivity	
Type of organization	Estab- lish-		duction ated worl		Cost of	Cost of	Value of shipments			owners	Empl	oyees	
	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		\$'(	000
1963					170								
Individual ownerships	-	-	_	_		_	_	_	-	_	_	_	_
Partnerships	1	0.000											
incorporated companies	} 21	3,002	6,479	16,732	3, 120	94,605	142,565	44,029	_		3,840	22, 276	44,984
Co-operatives	_	-	_	_	_	_	_				_		-
Head offices, sales offices and auxiliary units		,,,	100							0.4.4			.,.
Totals	21	3,002	6,479	16, 732	3, 120	94, 805	142,565	44,029		-	3, 840	22, 276	44,984
1964													
ndividual ownerships	_	_	_	_	_	_	_	_	_		_	_	
Partnerships	-	-	-	_	-	-	-		-		_	_	_
incorporated companies	21	3,468	7,741	20,042	3,516	125, 965	183, 246	57, 335			4,437	26,328	58,654
Co-operatives	_	_	_	-	_		-	-			_		_
Head offices, sales offices and auxiliary units		,						9 6 9			157	974	
Totals	21	3,468	7,741	20,042	3, 516	125, 965	183, 246	57,335	_		4, 437	26,328	58, 654

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

	Manufacti activit		Non-manufa activiti		Tota activi	
	1963	1964	1963	1964	1963	1964
			\$'00	)		
Output					1	
1. Shipments and other revenue	142, 565	183, 246	12, 134	13,383	154,699	196,629
Inventories - Goods of own manufacture:						
Add closing - Goods in process	5, 546	4,691			5,546	4,891
Finished goods	17, 171	21,372			17, 171	21,372
Deduct opening - Goods in process	5, 228	5,581			5, 228	5,581
Finished goods	18, 100	17,112			18, 100	17.112
P. Net inventory change	(611)	3,570			(611)	3,570
3. Gross output (1+2)	141,954	186,816	12, 134	13,383	154,088	200, 199
Input						
. Purchases of goods not of own manufacture	***		10, 344	11,791	10.344	11,791
Inventories - Goods not of own manufacture:						
Add opening	***		1,793	1,241	1,793	1,241
Deduct closing			1, 239	1, 261	1,239	1,261
. Cost of goods sold (not of own manufacture)	* * *		10,898	11,771	10,898	11,771
Materials, supplies, etc.	94,805	125,965	281	293	95, 086	126,258
7. Fuel and electricity	3,120	3,516			3,120	3,516
3. Gross input (5 + 6 + 7)	97, 925	129,481	11, 179	12,064	109, 104	141,545
Value added (3 - 8)	44,029	57, 335	955	1, 319	44,984	58, 654

TABLE 8. Employment and Payroll, 1963 and 1964

					Emplo	yees						Salari	es and wa	ges	
Year and		Product related v			Adm	inis-		les	To	otal	Producti		Admin-	Sales	
province	Manufa	cturing	Ot	her		office		bution		7, 101	related w	rorkers	istra- tive and	and distri-	Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	office	bution	
					numb	per				-			\$'000		
1963		]			1										
Newfoundland	_	-	_	-	-	-	-	_	_	_	-	_	-	-	-
Prince Edward Island	_	_	_	_	-	-	-	-	-	_	-	-	_	_	-
Nova Scotia	-	-	_	_	_	-	_	-	-	_	_	_	_	_	-
New Brunswick	_	-	-	_	-	_	-	-	_	_	-	_	-	_	-
Quebec	285	_	1	-	34	2	_	-	320	2	1,355	2	241	_	1,59
Ontario	2,064	13	12	1	387	95	99	24	2,562	133	11,817	50	3, 262	660	15,78
Manitoba	-	_	-	-	_	-	_	-	_	_	_	_	-	_	-
Saskatchewan	1														
Alberta	640	_	-	_	129	27	21	6	790	33	3,560	_	1,120	209	4,88
British Columbia	J														
Yukon and Northwest Terri-															
tories	_	_	_	_	_	-	_	-	_	-	-	_	_	_	-
Totals	2,989	13	13	1	550	124	120	30	3,672	168	16,732	52	4,623	869	22, 27
1964															
Newfoundland	_	_	_	-	_	-	-	-	-	-	-	_	_	-	-
Prince Edward Island	_	-	_	_	-	_	_	~	-	-	-	_	-	_	-
Nova Scotia	_	_	_	~	_	-	-	_	_	_	_	-	-	-	-
New Brunswick	-	-	-	_	-	_	-	-	-	-	-	-	-	_	-
Quebec	307		17	_	35	2	4	-	363	2	1,526	85	260	30	1, 90
Ontario	2,305	16	10	-	401	135	91	28	2,807	179	14,079	45	3, 558	682	18, 36
Manitobs	_	_	_	_	_	-	-	-	_	~	_	_	_	_	-
Saskatchewan	)							100							
Alberta	840	_	_	_	185	32	24	5	1,049	37	4,437	_	1,366	261	6,06
British Columbia	J														
Yukon and Northwest Terri- tories	_	_	-	-	_	_	_	_	_	_	_	_	-	-	-
Totals	3,452	16	27		621	169	119	33	4, 219	218	20,042	131	5, 183	972	26, 32

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

	196	3	196	4
Month	Male	Female	Male	Female
		numbe	19	
Establishments reporting monthly detail (large establishments only):				
January	2,636	12	3, 286	13
February	2,946	12	3,274	15
March	3,025	12	3, 458	15
April	3,116	14	3,571	17
May	3,030	15	3,673	17
June	3,302	14	3,679	17
July	2,909	14	3,386	17
August	3,024	12	3,547	17
September	3, 109	12	3,588	17
October	2,978	15	3, 333	15
November	2,942	15	3, 362	15
December	2,838	14	3,284	17
Averages	2,989	13	3, 452	18
stablishments reporting annual averages (small establishments only)	* * *		***	
Average for all establishments	2,989	13	3,452	16

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
Opening:			book value	\$'000		
Newfoundland	-	_	-		-	
Prince Edward Island			-	_	-	-
Nova Scotia	-	_	-	_	-	-
New Brunswick	-	-	-	_	000	-
Quebec	2, 135	93	2,321	4,548	26	4,575
Ontario	9, 199	3, 265	9, 932	22, 396	1, 139	23,536
Manitoba	-	***	-	9000		-
Saskatchewan	)					
Alberta	3, 183	2, 223	4,858	10, 265	75	10.340
British Columbia						
Yukon and Northwest Territories	_	-	-		-	-
Totals	14, 517	5, 581	17, 112	37, 210	1, 241	38, 450
Closing:						
Newfoundland		_			_	
Prince Edward Island					_	
Nova Scotia		***		_	_	_
New Brunswick		_			-	_
Quebec	1,139	231	2, 029	3,399	106	3,505
Ontario	8,629	3,006	10,624	22, 259	1, 133	23, 393
Manitoba	0,020	-, 000		-		_
Saskatchewan	,					
Alberta	6, 285	1.654	8,719	16,658	21	16,680
British Columbia		1,00%	0, 125	20,000	51	20,000
Yukon and Northwest Territories			_	-	_	-
Totals	16, 054	4, 891	21, 372	42, 317	1, 261	43, 578

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

Description	1963		1964	
Description	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
1. Large establishments reporting commodity detail:				
Bituminous coal:				
(a) From Canadian mines ton		_		-
(b) Imported	1,070	13	554	8
Sub-bituminous coal (from Alberta mines only)		_	-	_
Anthracite coal		_	-	
Lignite coal	-	-	-	_
Coke	299	8	91	3
Gasoline (including gasoline used in cars and trucks) Imp. gal.	84,594	32	124,851	41
Fuel oil including kerosene or coal oil	4, 585, 635	384	5,080,949	453
Woodcord		-	_	
Gas:				
(a) Liquefied petroleum gases Imp. gal.	2,885,853	215	3, 865, 261	291
(b) Other manufactured gas M cu. ft.	237, 439	70	490, 242	146
(c) Natural gas	1, 354, 931	587	1, 361, 251	641
Other fuel	_	-		-
Electricity purchased	186, 244, 517	1,811	158, 016, 290	1,933
Steam purchased		_	_	_
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity			-	
3. All establishments:				
Total fuel and electricity used		3, 120		3, 516

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

Description	1963		1964	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
. Materials used:				
Steel (carbon and alioy): Plates, sheets and strip, hot or cold rolled	447,008	56, 389 18, 963	607,422	80, 216 24, 865
Other materials:  Firebrick and cupola blocks Paints and varnishes Sulphurle acid, 100% lb. Welding rod and wire ton Zine ib.	3.469,813 743 3,605,205	644 150 41 209 428	5.040,778 763 4.959,259	459 185 60 230 639
All other materials and components used	* * *	13.324	- 1 1	13.269
2. Containers and other packaging materials and supplies used		597		1.004
3. Operating, maintenance and repair supplies used (excluding fuel)	n w 0	3, 738	* * d	4,732
Amount paid out to others for work done on materials owned by establishments	* * *	324		305
Totals		94,805		125, 965

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

Paradation 1	1963		1964	
Description	Quantity	Value	Quantity	Value
	tons	\$'000	tons	\$'000
Products:				
Steel pipe and tubing (carbon and alloy) Steel pipe fittings	590, 974 3, 044	126.335 1.523	763, 178 3, 167	164.760 1.589
Ali other products		14,819		16,948
2. Amount received in payment for work done on materials and products owned by others		15		130
Less adjustment for value of sales taxes, exclse duties and outward transportation charges which could not be deducted from individual commodity items described above		(127)		(180
Net adjustment for establishments receiving progress payments	-	-	_	-
Total adjusted value of shipments and work done		142,565		183,246

TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries

(Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed)

Steel Pipe, Tubing and Fittings, 1958-64

Item	Quantity	Selling value of factory shipments
	tons	\$'000
teel pipe and tubing:  1958 1959 1960 1961 1962 1963	537, 860 488, 887 518, 422 678, 000 498, 000 610, 000 776, 000	117,805 106,004 110,196 142,446 107,282 132,308 170,697
1958	13.277 12.433 13.276 10.900 10.100 10.500 9,000	8.924 8,314 8,787 7.918 8,540 8,651 10,115

#### 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		
Quebec:		
Dosco Steel Ltd.	P.Q. Box 67, Montreal	
Standard Tubes and T.I. Ltd.		
Steel Co. of Canada Ltd.		
Steel Co. of Canada Ltd.		
Ontario:		
Associated Tube Industries Limited		
Barton Tubes Limited	2170 Queensway Drive, Burlington	
Bundy Tubing Co. of Canada Ltd.		
Central Metal Fabricators Ltd.	46 Taber Rd., Rexdale	
Driam Pipe (Canada) Limited	629 Eastern Ave., Toronto 8	
Mannesmann Tube Co. Ltd.	Wallace Terrace, Sault Ste Marie	
Page-Hersey Tubes Ltd.	Dain Ave., Welland	
Sonco Steel Products	14 Haltby Ave., Brampton	
Standard Tube and T.I. Limited	Drew and Givens St., Woodstock	
Tubular Steel Products Ltd.	97 Manville Rd., Scarborough	
Welland Tubes Ltd.	Dain Ave., Welland	
Saskatchewan:		
Interprovincial Steel and Pipe Corp. Ltd.	P.O. Box 1670, Regina	
Alberta:		
Alberta Phoenix Tube and Pipe Ltd.	27 Street and 74 Ave., Calgary	
Alberta Phoenix Tube and Pipe Ltd.		
Camrose Tubes Ltd.		
Page-Hersey Tubes Western Ltd.		
British Columbia:		
Canadian Western Pipe Mills Ltd.	Murray St., Port Moody	
	months and the second	

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

- (a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;
- (b) In the case of multi-establishment firms, the statistics for such offices and units are coded to the same industry as the establishments of the firm, when all establishments are in the same industry (3 or 4 digit). When establishments of

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

#### **Employees**

## (a) Production and related workers — Manufacturing activities

In addition to those engaged in production and assembling activities, they include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. For those establishments reporting on the "long" form, production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual full-time employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. In the case of those establishments reporting on the "short" form, respondents are requested to report average annual figures. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). Data on man-hours are not collected from establishments reporting on the short form. Man-hours for these establishments are estimated on the basis of ratios derived from the 1958 census. During this census all establishments reported on the long form. In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

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

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

#### (c) Administrative and office employees

This category includes all executive and supervisory officials such as presidents, 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" ahove.

#### (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 amployees 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).

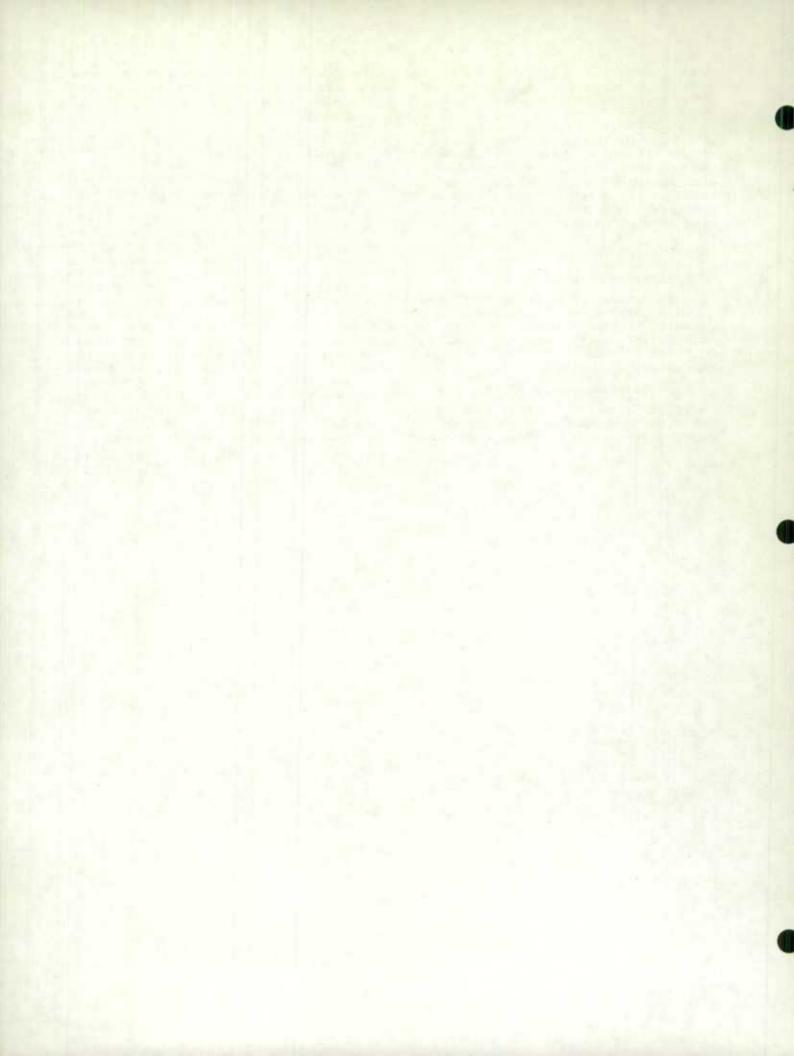
#### (b) By non-manufacturing activities

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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