CATALOGUE No.

34-208

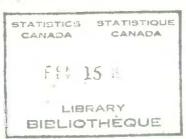
ANNUAL





SYNTHETIC TEXTILE MILLS

1962



ANNUAL CENSUS

OF MANUFACTURES

Published by Authority of The Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS

Industry Division

June 1965 6521-608

Price: 50 cents

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.

SYNTHETIC TEXTILE MILLS 1962

Under the New Establishment Concept, this industry is defined as comprising those "Establishments primarily engaged in manufacturing yarns and broad woven goods of synthetic textile fibres, including glass fibres. This industry includes establishments primarily engaged in manufacturing yarns and broad woven goods of natural silk. It also includes establishments engaged in the extrusion of synthetic textile filaments".

The Synthetic Textile Mills industry has two branches, to the first of which belong the producers of synthetic filament yarns and of staple fibres. These firms are too few and their activities too varied to permit a separate, detailed statistical analysis without divulging particulars of individual establishments. The production of textile filament yarns by the seven firms reporting this commodity in 1962 was 62,104,004 pounds compared to the figure of 52,585,545 pounds in 1961. The second branch of the industry consists of establishments manufacturing spun yarn and fabrics. This report covers the activities of the whole industry, i.e. those of the two branches on a combined basis.

For the 1962 survey year, a change was made to the total activity approach as fully outlined in the Explanatory Notes contained at the end of this report. These total data were also collected in the 1961 survey, but were not published at that time. Many tables in this report reflect this increase in activity coverage, presenting both 1961 and 1962 figures.

Table 1 presents the manufacturing activity principal statistics for the years 1957 to 1961, inclusive, whereas Table 1 A shows most of the same statistics for 1961 and 1962. It will be noted that there is a difference between the 1961 figures in the two tables due to the transfer of one establishment into the industry in 1962 and the working of the 1961 data in Table 1 A to reflect this change in composition.

As can be seen from most tables in this report, the activity within the industry in 1962 was higher than in 1961. Tables 4 and 6 present, respectively, the materials used in manufacturing and the shipments of goods of own manufacture by the industry in 1962. However, the information given in the latter table has been somewhat abridged in order to present in Table 8 the important data covering the shipments of broadwoven synthetic fabrics by all industries for both 1961 and 1962. These all-industry shipments are further broken by type and construction for these two years in Table 10. The new Tables 11 A and 11 B present, respectively, as detailed information as possible covering the yarn spun in 1962 by this industry and by all the important primary textile industries.

A list of the establishments classified to the industry in the 1962 survey will be found at the end of this report.

TABLE 1. Principal Statistics - Manufacturing Activity, 1957-61

Basis: Revised Standard Industrial Classification and New Establishment Concept²

				Emp	loyees						
Year	Estab- lish- ments		tion and workers*		rative and mployees ³	To	otal ⁴	Cost of fuel and elec-	Cost of materials and supplies	Value of shipments of goods of own	Value added
		Number	Wages	Number	Salaries	Number	Salaries and wages	tricity*	used*	manu- facture*	
	No.		\$'000		\$'000				\$'000		
957	44	11,311	33,456	3, 798	17, 323	15, 109	50,778	5, 161	82, 825	168, 309	
958	48	10,574	30,504	3,546	17,408	14, 120	47,913	4,835	81, 121	175,777	86.07
959	46	10,932	33, 346	3,761	19,035	14, 693	52, 382	5,049	96,853	203, 210	104, 11
960	50	11,302	35, 855	3,628	19, 111	14,930	54,966	4,874	100,286	216,530	112,96
961	56	12, 180	39, 674	3,669	19,718	15,849	59, 393	5,047	118, 306	248, 718	123, 4

See footnotes following Table 3 A.

TABLE 1 A. Principal Statistics - Manufacturing Activity and Total Activity, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept²

				Man	ufacturing	activity				T	otal acti	vity	
Year and province	Estab- lish- ments	Preli	oduction ated work	and ers*	Cost of	Cost of	Value of shipments		Working and pa	owners		otal oyees'	Total
		Number	Man- hours paid	Wages	fuel and elec- tricity ^s	and supplies used4	of goods of own manu- facture	Value added*	Number	With- drawals	Number	Salaries and wages	value added*
	No.		'000			\$'000				\$'000		\$'	000
1961													
Quebec	39	8,021	18,065	23,094	2, 255	72,031	135, 451	59,708	1.5	15	10, 212	34, 176	59.427
Ontario	17	1											
Alberta	1	4, 193	8, 994	16, 863	2,801	49,962	115,909	62, 788	-	-	5, 498	24,650	63, 822
Totals	57	12, 214	27, 059	39, 957	5, 056	121, 993	251, 360	122, 496	13	1.3	15, 710	58, 826	123, 249
1962													
Nova Scotia	1	1											
Que bec	39	8,690	18,904	25, 394	2, 405	85,094	154,081	68, 750	_	-	11,020	37, 500	69,480
Ontario	21	4,444	9,603	18,777	2,914	55, 872	130,419	72, 811			F 804	00.00	=0.00
Alberta	1] *****	3,003	10,111	2, 71%	JU, 012	190,419	12,011	_	_	5, 761	26, 525	72,931
Totals	62	13, 134	28, 507	44, 171	5, 318	140, 967	284, 500	141, 561	_	_	10, 781	64, 025	142, 411

See Table 2 and footnotes following Table 3 A.

TABLE 1B. Principal Statistics classified by Size Groups based on Shipments of Goods of Own Manufacture, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept¹

				Man	ufacturing	activity				Т	otal activ	lty	
Size group	Estab- lish- ments		duction a		Cost of	Cost of materials	Value of shipments of goods	Value	Working and pa	owners rtners		otal oyees ⁷	Total
	11103,140	Number	Man- hours paid	Wages	elec- tricity ⁵	and supplies used ⁴	of own manu- facture ⁴	added ⁴	Number	With- drawals	Number	Salaries and wages	added*
	No.		,000			\$'000				\$'000		\$10	00
1961											lu -		
Jnder \$10,000	-	-		****	_	-	-	_	_	_	_	***	_
5 10,000 to \$ 24,999	} 3	22	55	48	1	79	171	96	1.5	15	25	56	96
50,000 " 99,999 100,000 " 199,999 200,000 " 499,999 500,000 " 999,999	3 5 8	116 106 508	205 243 1,134	239 336 1,271	25 120	169 1,004 3,590	438 1,841 5,883	277 811 2,364	-		120 134 567	260 526 1,518	277 1,343 2,369
1,000,000 ' 4,999,999	28 10	4, 141 7, 321	9,340 16,083	12,020 26,043	961 3,944	46,826 70,325	74, 291 168, 737	27, 431 91, 517	_	_	4, 860 9, 449	15,681 37,180	27, 521 92, 033
auxiliary units10			4.8.4	4 + +		4 4 4	4 4 5		* * *	4 8 8	555	3,605	(390
Totals	57	12, 214	27,059	39,957	5,056	121, 993	251, 360	122,496	15	13	15, 710	58, 826	123, 249
1962													
Jnder \$10,000	7 -	-	_	-	_	-	_	_	_	_	_		_
25,000 '' 49,999 50,000 '' 99,999 100,000 '' 199,999	4	34	81	94	7	192	442	239			41	139	239
200,000 '' 499,999	9	209	436	592	30	1,860	3,431	1,508	_	-	235	757	1,510
500,000 ' 999,999	9	631	1,342	1,549	193	3,812	6,970	3,116	_	-	723	2,043	3, 238
1,000,000 ' 4,999,999 5,000,000 and over	27 13	4,005 8,255	8,93B 17,709	11, 238 30, 698	846 4, 244	44,552 90,551	72, 049 201, 607	27, 118 109, 580	_	_	4,621	14, 281 42, 841	28,440 109,175
Head offices, sales offices and					4 4 4			* * * *	0 0 0		573	3,963	(19
Totals	62	13, 134	28.507	44, 171	5,318	140, 967	284, 500	141, 561	_		16, 781	64, 025	142, 413

See footnotes following Table 3 A.

TABLE 1 C. Principal Statistics classified by Size Groups based on Manufacturing Value Added, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept²

				Man	ufacturing	activity				To	tal activi	ty	
Size group	Estab- llsh- ments		duction sted works		Cost of	Cost of materials	Value of shipments of goods	Value	Working and pa	owners rtners*		otal oyees"	Total value
	щецья	Number	Man- hours paid	Wages	elec- tricity ^s	and supplies used	of own manu- facture	added4	Number	With- drawals	Number	Salaries and wages	added*
	No.		,000			\$1000				\$'000		\$ '(000
1961													
Under \$10,000	5	42	96	97	5	248	418	183	19	13	49	126	182
100,000 '' 199,999	7 9 15 17	265 518 1,432 5,313 4,644	565 1,166 3,268 11,982 9,982	680 1,387 4,176 15,456 18,162	59 151 332 1,402 3,106	1,602 9,406 16,547 50,468 43,723	2, 813 12, 193 27, 174 88, 057 120, 704	1, 151 2, 839 10, 773 35, 795 71, 756			300 604 1,664 6,353 6,185	891 1,837 5,328 20,516 26,522	1,690 3,127 10,817 35,397 72,425
Head offices, sales offices and auxiliary units to						* * *	4 * 8		* * *		555	3, 805	(390
Totals	57	12,214	27, 059	39, 957	5,056	121, 993	251, 360	122,496	1.0	1.8	15, 710	58, 826	123, 249
1962 Under \$10.000													
Jnder \$10,000 \$ 10,000 to \$ 24,999 25,000 ' 49,999 50,000 ' 99,999	4	26	57	69	8	352	512	153	_	-	31	107	15
100,000 " 199,999 200,000 " 499,999 500,000 " 999,999 1,000,000 " 4,999,999 5,000,000 and over	9 10 18 14 7	280 497 1,962 3,799 6,570	629 1,075 4,396 8,212 14,138	780 1, 256 5, 714 11, 200 25, 151	67 164 442 917 3,721	2,422 8,499 22,791 41,382 65,521	4,002 11,720 36,420 69,312 162,534	1,488 3,350 13,436 27,135 96,000			310 593 2, 256 4, 525 8, 493	912 1,834 7,127 14,759 35,322	1, 48' 4, 52 13, 42' 27, 37' 95, 64
Head offices, sales offices and auxiliary units10	4 1 1			4 + 1			***	* * *	4 4 4	4 1 1	573	3,963	(19
Totals	62	13, 134	28, 507	44, 171	5,318	140,967	284,500	141, 561	-	_	16, 781	64, 025	142,41

See footnotes following Table 3 A.

TABLE 1 D. Principal Statistics classified by Size Groups based on Total Value Added, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept²

				Man	ufacturing	activity				T	otal acti	vity	
Size group	Estab- lish-		duction a		Cost of	Cost of materials	Value of shipments		Working and pa	owners rtners		otal oyees'	Total
	ments	Number	Man- hours paid	Wages	elec- tricity ⁵	and supplies used	of goods of own manu- facture ⁴	Value added	Number	With- drawals	Number	Salaries and wages	value added*
	No.		'000			\$'000				\$'000		\$*	000
1961													
Inder \$10,000 10,000 to \$ 24,999 25,000 '' 49,999 50,000 '' 99,999	5	42	96	97	5	248	418	183	13	13	49	126	182
50,000 " 99,999 100,000 " 199,999 200,000 " 499,999 500,000 " 999,999 1,000,000 " 4,999,999 5,000,000 and over lead offices, sales offices and	10 15 17 4	250 599 1, 366 5, 313 4, 644	527 1,325 3,147 11,982 9,982	1,580 4,039 15,456 18,162	49 164 329 1,402 3,106	1, 268 9, 999 16, 287 50, 468 43, 723	2, 337 13, 284 26, 560 88, 057 120, 704	1,018 3,342 10,403 35,795 71,756	=		272 691 1,605 6,353 6,185	733 2,067 5,256 20,516 26,522	3,625 10,983 35,397
auxiliary units10					* * *		4.0.0				555	3,605	(390
Totals	57	12, 214	27, 059	39, 957	5, 056	121, 993	251, 360	122, 496	13	13	15, 710	58, 826	123, 24
1962													
Inder \$10,000	} 4	26	57	69	8	352	512	153	-	_	31	107	152
100,000 " 199,999 200,000 " 499,999 500,000 " 499,999 1,000,000 " 4,999,999 5,000,000 and over ead offices, sales offices and	9 9 18 15 7	280 415 1,962 3,881 6,570	629 886 4,396 8,401 14,138	780 1,017 5,714 11,439 25,151	67 123 442 958 3,721	2, 422 4, 207 22, 791 45, 675 65, 521	4,002 7,115 36,420 73,916 182,534	1, 488 2, 873 13, 436 27, 612 96, 000		-	310 485 2, 256 4, 633 8, 493	912 1, 491 7, 127 15, 102 35, 321	2, 99 13, 42
auxiliary units 10					* * *						573	3, 963	(19
Totals	62	13, 134	28,507	44, 171	5,318	140, 967	284,500	141, 561		_	16, 781		142,41

See footnotes following Table 3 A.

TABLE 1 E. Principal Statistics classified by Size Groups based on Total Employed, 12 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept2

				Man	ufacturing	activity				T	otal activ	rity	
Size group	Estab- lish- ments		oduction ated work		Cost of	Cost of materials	Value of shipments of goods	Value		owners utners		otal oyees'	Total
	litetita	Number	Man- hours pald	Wages	elec- tricity ⁵	and supplies used ⁴	of own manu- facture*	added*	Number	With- drawals	Number	Salaries and wages	value
1000	No.		'000			\$'000				\$1000		\$'	000
1961 Under 5 employees5- 14 employees	} 3	9	20	26	3	140	188	56	18	LS	13	35	56
15- 49 "	10	244	570	698	44	2,500	4,096	1, 687	_	-	282	934	2, 217
50 - 99 ''	16	1,068	2, 426	2,906	264	15, 256	24,008	9, 045	_	_	1, 236	3, 818	9, 117
100 - 199 **	8	1,020	2, 251	2,992	224	15, 366	21,989	6,542	_	-	1, 158	3, 735	6, 865
200 - 499	12	2, 926	6, 640	8,673	749	30, 575	51,067	20, 206	_	_	3, 505	11, 664	19, 873
00 employees and over	8	6,947	15, 152	24, 662	3, 771	56, 156	150,012	84, 960	_	-	8,961	35.033	85. 509
lead offices, sales offices and auxiliary units10			* * 4	4 4 6	3.4.4		* * 4			* * *	555	3,605	390
Totals	57	12,214	27, 059	39, 957	5,056	121, 993	251, 360	122, 496	13	13	15, 710	58, 826	123, 249
1962													
7nder 5 employees	} 4	26	57	69	8	352	512	153	-	-	31	107	152
15 - 49 ''	11	285	603	832	47	2, 623	4, 742	2,071	_	-	317	1,027	2,073
50 - 99 ''	14	859	1,938	2,321	253	12, 404	19,621	7,016	-	_	990	3,051	7, 154
100- 199 ''	12	1,320	2, 969	3, 967	290	20, 153	30, 734	11,061	_		1,550	5, 147	12, 178
200-499 ''	12	2,897	6, 472	8,829	789	34, 641	56,347	20,783	1980	_	3, 446	11, 376	20, 932
00 employees and over	9	9, 747	16, 469	28, 353	3,931	70, 794	172, 543	100, 476	_	_	9,874	39, 353	100, 113
lead offices, sales offices and auxiliary units		4 h b	* 4 *	* * 5	4 * *					* * *	573	3, 963	(192
Totals	62	13, 134	28, 507	44, 171	5, 318	140, 967	284,500	141.561	_ 1	_	16, 781	64 025	142,411

See footnotes following Table 3 A.

TABLE 1F. Principal Statistics classified by Type of Organization, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept²

				Mar	ufacturing	activity				To	tai activi	ity	
Type of organization	Estab-		oduction ated work		Cost of	Cost of materials	Value of shipments	XX-1		owners artners		otal oyees'	Total
	ments	Number	Man- hours pald	Wages	fuel and elec- tricity's	and supplies used*	of goods of own manu- facture*	Value added*	Number	With- drawals	Number	Salaries and wages	value added"
	No.		'000			\$'000				\$'000		\$1	000
1961]	ļ)]			J
Individual ownerships)	10.014	DR 0=0	20 055	- 050	101 000	25.4 200	100 400	13	1.9	42 422	54 000	100 000
PartnershipsIncorporated companies	57	12, 214	27, 059	39, 957	5,056	121, 993	251, 360	122, 496			15, 155	55, 220	123, 632
Cooperatives	_	_	-	-	_	-	l serve	-			-	_	-
Head offices, sales offices and auxiliary units 10											555	3, 605	(390
Totals	57	12, 214	27, 059	39, 957	5, 056	121,993	251,360	122, 496	1.9	13	15, 710	58, 826	123, 249
1962									}				
Individual ownerships		_	_	_	_	_	_	_	_	_	_	_	_
Partnerships	-	_	_		_	-		-	_	-	_	-	_
incorporated companies	62	13, 134	28,507	44, 171	5,318	140,967	284,500	141,561			16, 208	60,061	142,602
Cooperatives	_	_	_	_	-	_	-	_			_	-	_
dead offices, sales offices and auxiliary units10				4 * *							573	3,963	(192
Totals	62	13, 134	28, 507	44, 171	5, 318	140, 967	284, 500	141,561	_	_	16, 781	64, 025	142, 411

See footnotes following Table 3 A.

TABLE 2. Industry Outputs, Inputs and Value Added, 1961 and 1962
Basis: Revised Standard Industrial Classification and New Establishment Concept²

It em	1961		1962	
		\$'000		
Manufacturing activity:				
Value of shipments - Goods of own manufacture		251, 360		284,500
Add: Closing inventory - Goods in process	12,923		15.634	
Finished goods	19,174	32, 097	20,100	35,734
Deduct: Opening inventory - Goods in process	13, 332		13.029	
Finished goods	20,581	(33,913)	19, 359	(32, 388)
Gross output - Manufacturing activity		249.544		287,846
Deduct: Cost of materials and supplies used in manufacturing activity	121,993		140, 967	
Cost of fuel and electricity used	5,056	(127, 049)	5, 318	(146, 285)
Value added - Manufacturing activity		122, 496		141.561
Non-manufacturing activities:				
Value of shipments - Goods not of own manufacture				11, 192
Add: All other revenue	* a		462	
Closing inventory - Goods purchased for resale	1,302		2,015	2,477
Deduct: Purchases of goods for resale as such	* a		10,208	
Opening inventory - Goods not of own manufacture	1.258		1,374	
Cost of all other materials and supplies used		()	1, 237	(12, 819
Value added - Non-manufacturing activities		753		850
Total value added	123, 2	49	142, 41	11

See footnote following Table 3 A.

TABLE 3. Employment and Payroll, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept

					Emplo	oyees						Salar	ies and w	ages	
Year and		Producti related w				inis-	a	les,	To		Producti related w		Admin- istra-	Sales,	Total
province	Manufac	turing4	Ot	her ⁹	and of	ffice ^{6,9}	distri	oution ⁹	emproy	ees i	related w	OIREIS	tive	and distri-	salaries
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	and office	bution	wages
					num	ber							\$'000		
1961															
Guebec	6, 207	1,814							7,765	2, 447	23,094				34, 176
Ontario	3, 355	838			* 1		4 4		4,376	1, 122	16, 863				24, 650
Totals	9, 562	2,652						• B	12, 141	3, 569	39, 957			* =	58, 626
1962															
Nova Scotia	} 6,832	1,658	1	3	1,527	680	101	18	8,461	2, 559	25,394	6	10, 886	1, 214	37,500
Ontario	} 3,521	723	30	-	9 23	266	74	24	4, 548	1, 213	18,777	159	6,972	617	26, 525
Totals	10,353	2,781	31	3	2,450	946	175	42	13,009	3, 772	44, 171	165	17, 858	1,830	64, 025

See footnotes following Table 3 A.

TABLE 3 A. Production and Related Workers, 4 - Manufacturing Activity, by Months, 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept²

Month	Establishments reporting monthly detail				
NECTION	Male	Female			
	num	ber			
January	10,068	2,706			
February	10,225	2,745			
March	10, 188	2, 770			
April	10.212	2, 768			
May	10, 281	2,757			
June	10, 232	2, 694			
uly	10, 275	2, 691			
August	10, 405	2, 800			
Septem ber	10, 481	2,885			
October	10.531	2,889			
Vovembet	10.551	2, 858			
December	10,528	2, 805			
Monthly averages 11	10, 353	2,781			

See Table 2 and Explanatory Notes concerning manufacturing and non-manufacturing activities.

See Table 2 and Explanatory Notes.

See Explanatory Notes.

See Explanatory Notes.

This category, in this table only, includes working owners and partners. Since administrative and office employees are engaged in a variety of activities they have been excluded from manufacturing activity beginning with the revised 1961 series shown in the following tables. They are included here for purposes of comparison with the tabulations of previous years.

Conceptually identical to previous years. See Explanatory Notes.

Cannot be reported separately for manufacturing and non-manufacturing activities but related substantially to manufacturing activity. Identical concept

to previous years.

6 Working owners and partners were included with administrative and office employees in the "Manufacturing series" published in former years, See Ex-

planatory Notes.

7 Includes production and related workers, administrative and office employees, sales distribution and other employees. See Explanatory Notes for the

treatment of head office employees and those employed in auxiliary units.

*Value of total shipments and other operational revenue less total cost of materials, supplies, fueis used and purchases of products and materials for resale in the same condition; all adjusted for inventory changes where required. See Table 2 and Explanatory Notes.

*Sales and distribution workers and production workers (non-manufacturing) are included for the first time as a result of the full implementation of the new

Sales and distribution workers and production workers (non-manufacturing) are included for the first time as a result of the full implementation of the new definition of the establishment. The figures for production workers (non-manufacturing), administrative and office employees and sales and distribution workers are not yet available for 1961 but form part of total employees. Sales and distribution workers may include some employees that are reported as part of a manufacturing establishment but are not working at the establishment's location. Head offices, sales offices, etc., which report separately are included in the figures for the province in which they are located.

10 These data cover the activities reported by separately located units such as head offices, sales offices, administrative offices, laboratories, warehouses, etc. Such units do not usually constitute separate "establishments" as they do not normally generate all the necessary elements of input and output statistics. However, they are treated as extensions of manufacturing establishments and, in the case of individual industries, may be located in provinces where no processing plants are situated. For the most part, these units contribute only to costs of operations (mainly salaries and wages) and they are included here to provide completeness and consistency of the statistics. See Explanatory Notes which deal with Single and Multi establishments for a complete explanation of procedures.

11 The monthly detail of production workers was not collected from small establishments. Annual averages reported by these establishments were included in each month's total.

12 Includes paid employees and working owners but excludes unpaid family workers.

¹² Includes paid employees and working owners but excludes unpaid family workers.
¹³ Confidential data.

Note: Figures may not add due to rounding,

TABLE 4, Materials and Supplies Used in Manufacturing Activity, 1962
Escala Revised Standard Industrial Classification and New Establishment Concept

Description		Quantity	Cost
			\$'000
. Materials used:			
Wool tops and broken tops (clean weight)	lb.	1, 245, 462	1, 248
Raw cotton		4,634,490	1, 271
Rayon staple fibre, tow and tops	41	21, 557, 871	6,888
Nylon staple fibre, tow and tops	41	969, 304	1, 056
Acrylic staple fibre, tow and tops	# # # # # # # # # # # # # # # # # # #	3, 893, 869	3, 875
Polyester staple fibre, tow and tops		1,046,533	1,246
Other raw stock			8,910
Yarns:			
Filament yarns:			
Real silk	lb.	44, 211	229
Acetate rayon	4.0	13, 498, 762	9, 855
Other rayon	41	2,908,064	3, 168
Nylon		9,769,076	18, 091
Polyester		1,027,661	1,686
Glass	44	2, 153, 647	1, 360
Other filament yarns	**	1, 234, 136	1, 730
Spun yarns:		2,200,000	
Cotton:			
Natural or grey	8.4	4, 854, 010	4, 185
Bleached or coloured		675, 908	601
Reyon		4, 292, 339	2, 992
Spun yarn wholly of man-made fibre, n.e.s.		2, 888, 318	2, 188
Spun yarn containing wool		1, 183, 840	1, 575
Spun yarn containing cotton and no wool	***************************************	91, 819	98
Other spun yarn			
Rubber and spander varn		608, 558	469
	***************************************	223, 772	662
Broadwoven fabrics purchased for further processing:			
Fabrics, Canadian (not made by reporting plant):			
Man-made containing filament yarns		528, 450	284
Other man-made fabrics	200000000000000000000000000000000000000	27, 500	30
Fabrics, imported:			
Man-made containing filament yarns		972, 601	520
Other man-made fabrics	£ &	62,576	33
Silk, wool and cotton fabrics (Canadian and imported)		353, 888	164
Oils	8481*4.2232.4*4.4	6 6 6	265
Chemicals and dyestuffs	***************************************	* * *	33, 048
All other materials and components used ¹			18, 118
Containers and other packaging materials and supplies used		***************************************	2, 726
Operating, maintenance and repair supplies used (excluding fuel)		***************************************	8,989
. Amount paid out to others for work done on materials owned by establishments		***************************************	3, 424

¹ See Explanatory Notes.

² No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. In 1962 these estimated costs were \$900,380.

TABLE 5. Fuel and Electricity Used1 in Manufacturing Activity,2 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept³

Description	Quantity	Cost	
		\$'000	
. Large establishments which reported commodity detail:			
Bituminous coal: (a) From Canadian mines ton (b) Imported	10, 383 8, 232	117 112	
Sub-bituminous coal (from Alberta mines only)	_	_	
Anthracite coal ton	• 590	8	
Lignite coal	-	****	
Coke	-	_	
Gasoline (including gasoline used in cars and trucks)	49, 565	19	
Fuel oil including kerosene or coal oil	36, 260, 999	2,749	
Wood	_	_	
Gas: (a) Liquefied petroleum gases Imp. ga (b) Other manufactured gas (c) Natural gas M.cu. ft		38 _ 222	
Other fuel	_	Affine	
Electricity purchased kwh.	292,795,748	2,005	
Steam purchased	p = 4	29	
Estimate for small establishments for which no data were collected:			
Fuel and electricity	***	19	
All establishments:			
Total fuel and electricity used		5,318	

Does not include fuel and electricity produced for own use.
Includes only fuel and electricity purchased. Conceptually identical to previous years in that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.
See Explanatory Notes.

TABLE 6. Shipments of Goods of Own Manufacture, 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept's

Description	Quantity	Value
		\$'000
Products:		
Broadwoven synthetic fabrics:		
Pile fabrics sq. yds.	30,968,803	29,623
Apparel fabrics (except pile fabrics)	119,420,083	64,663
All other fabrics ²		10,389
Filament yarns (not thrown)lb.	72,602,175	78, 940
Filament yarns thrown:		
Stretch yarns	4,087,679	11,669
Textured yarns "	1,667,982	4,943
Other thrown yarns	3, 572, 544	4,474
Spun yarns:		/
Machine knitting	7, 202, 666	11,512
Weaving yams and other yams (except for knitting)	11,495,127	8,760
Staple fibre and tow (except cigarette tow)	44, 464, 481	21,762
Waste	5, 431, 449	1,075
All other products		35,723
Amount received in payment for work done on materials and products owned by others		1.314
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not		-,
dividual commodity items described above		(347)
Total adjusted value of shipments and work done		284,500

See Explanatory Notes.
 Includes broadwoven silk fabrics, broad elastic fabrics, all types; and knitted fabrics.

TABLE 7. Industry Inventories, 19621

Basia: Revised Standard Industrial Classification and New Establishment Concept²

		Manufa	Non- manufacturing					
Province	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	Total inventories		
	book value \$1000							
Opening: ³ Nova Scotia Quebec	9,402	10,063	12, 226	31,691	797	32,489		
Ontario Alberta	5, 228	2,967	7,422	15,616	577	16, 193		
Totals ⁴	14, 630	13, 029	19, 359	47, 018	1, 374	48, 393		
Closing:								
Nova Scotia	11,000	12,083	12,086	35, 168	1, 226	36,394		
Ontario	5,681	3,551	8, 015	17,247	789	18,036		
Totals ⁴	16,681	15,634	20, 100	52, 415	2, 015	54, 430		

TABLE 8. Shipments of Broadwoven Synthetic Fabrics in All Industries, 1961 and 1962

Description	1961		1962 ^p		
Description	Quantity	Value	Quantity	Value	
	sq. yds.	\$'000	aq. yds.	\$'000	
ile fabrics, furnishing and industrial fabrics and all non-apparel fabrics	29, 127, 409	28,013	32, 019, 213	31,466	
Apparel fabrics (except pile fabrics): Wholly of filament yarns: Fabrics over 85% viscose and/or acetate rayon Fabrics over 85% nyion Fabrics over 85% polyester fibre Other fabrics wholly of filament yarns	63, 228, 695 8, 134, 837 4, 387, 267 2, 169, 102	23,416 4,811 3,915 1,280	61,820,761 7,758,237 3,445,687 1,819,359	24,517 6,346 2,466 1,033	
Wholly of spun yarns (may contain cotton): Fabrics over 85% viscose and/or acetate rayon Other spun yarn fabrics containing 40% or more polyester fibre Other spun yarn fabrics	11,020,379 3,279,011 2,513,150	7,638 3,022 1,723	13,741,957 2,915,846 3,601,369	8,565 2,563 2,078	
Mixtures of filament and spun yarns: Fabrics over 85% viscose and/or acetate rayon Filament yarn and cotton mixture fabrics Other mixtures of filament and spun yarn fabrics	8,538,052 8,056,374 5,204,677	4,520 5,354 3,329	7,177,527 12,076,149 8,202,690	4,367 8,228 8,402	
Total shipments	145, 658, 973	87, 021	154, 578, 795	98, 051	

¹ Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed above.

TABLE 9, Capital and Repair Expenditures, 1960-62

	Capital expenditures		Repair expenditures			Total capital and repair expenditures			
Year	Construction	Machinery and equipment	Sub- total	Construction	Machinery and equipment	Sub- totai	Construction	Machinery and equipment	Total
					\$'000				
1960	718	7, 234	7, 952	865	6,470	7, 335	1,583	13,704	15, 287
1961	892	6,931	7,823	824	6,280	7, 104	1,716	13, 211	14,927
1962	3, 154	11, 164	14,318	1,467	7,900	9,367	4,621	19,064	23,685

Source: Business Finance Division. - DBS.

¹ Values represent book values of inventories owned in Canada.

² See Explanatory Notes.

³ The opening inventories may differ from the closing inventories for the previous survey 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.

⁴ Figures may not add due to rounding.

TABLE 10. Shipments of Broadwoven Synthetic Fabrics by Type and Construction, in All Industries, 1961 and 1962

	1961					
Description	Viscose and/or rayon acetate over 85%	Nylon and nylon mixtures	Polyester and polyester mixtures	All other	Total	
			square yards			
Dress fabrics	20, 526, 421	638, 477	1, 281, 462	5, 459, 263	27, 905, 623	
Lingerie fabrics	3,050,930	1,077,363	2,949,242	1, 122, 995	8, 200, 530	
Lining fabrics	31,646,862	182, 457	1, 371	1, 236, 895	33, 067, 585	
Neckwear fabrics	1,563,000	500,000	7, 713	-	2,070,713	
Other apparel fabrics	25, 999, 913	5, 917, 578	4, 101, 791	9, 143, 213	45, 162, 495	
Pile fabrics	1,548,827	1, 739, 763	-	3, 191, 774	6,480,364	
Upholstery, drapery and slip cover fabrics; except pile	5,923,086	2, 407, 138	1, 577, 596	5,084,508	14, 992, 328	
Other furnishing and industrial fabrics	1, 416, 414	1, 215, 115	345, 331	4, 802, 475	7,779,335	
Totals	91, 675, 453	13, 677, 891	10, 264, 506	30, 041, 123	145, 658, 973	
			1962 ^p			
			square yards			
Dress fabrics	19,771,039	828,637	608, 711	7, 506, 989	28, 715, 376	
Lingerie fabrics	2, 063, 477	297, 121	1, 459, 444	1,077,280	4,897,322	
Lining fabrics	35, 407, 456	93,635	31, 199	10,021	35, 542, 311	
Neckwear fabrics	1, 141, 000	_	-	-	1, 141, 000	
Other apparel fabrics	24, 357, 273	10, 735, 153	4, 262, 179	12, 908, 968	52, 263, 573	
Pile fabrics	612,847	504, 248	-	2, 280, 876	3,397,971	
Upholstery, drapery and slip cover fabrics; except pile	10, 911, 890	347, 393	684,754	6, 722, 186	18, 666, 223	
Other furnishing and industrial fabrics	3, 407, 664	1, 129, 462	270, 690	5, 147, 203	9, 955, 019	
Totals	97, 672, 646	13, 935, 649	7, 316, 977	35 653, 523	154, 578, 795	

TABLE 11 A. Total Yarns Spun, Whether Produced for Own Use, for Sale or on Commission, 1962

Description	Quantity
	lb,
arn spun:	
Wholly of cotton	2
Cotton blends	707, 161
Woo! mixtures	1, 280, 495
Wholly of one man-made fibre	14,708,495
Man-made fibre blends	4,020,105
All other yarns	11,874,546
Total	32, 590, 802

 $^{^{\}rm I}$ Includes total yarn spun by the Synthetic Textile Mills industry only. $^{\rm 2}$ Included in "Ali other yarns".

TABLE 11B, Total Yarns Spun, in All Industries, Wether Produced for Own Use, for Sale or on Commission, 1962

Description		
	lb.	
arn spun:		
Wholly of cotton	168, 100, 270	
Cotton blends	707, 161	
Wholly of wool	9,530,676	
Wool mixtures	21,753,079	
Wholly of one man-made fibre	15, 448, 637	
Man-made fibre hiends	7, 644, 704	
All other yarns (including mohair mixtures, aipaca, etc.)	16,506,332	
Total	239, 690, 859	

¹ Includes total yarm spun by the Cotton Yarn and Cloth Mills, the Wool Mills, the Synthetic Textile Mills, and the Hosiery and Knitting Mills industries.

List of Establishments, 1962

Name	Address		
Nova Scotia:			
Formex Co, of Canada	Kentville		
Quebec:			
Associated Textiles of Canada, Limited Associated Textiles of Canada, Limited Bruck Mills Limited Bruck Mills Limited Bruck Mills Limited Canadian Celanese Limited Consolidate Canada Ltd. Collins & Aikman of Canada Ltd. Collins & Aikman of Canada Ltd. Consolidated Textiles Limited Dionne Spinning Mills Company Domil Ltd. Domil Ltd. Doric Textile Mills Ltd. Doric Textile Mills Ltd. Dufterse Yarns Limited Duplan of Canada Ltd. Hafner Fabrics of Canada Ltd. Hafner Fabrics of Canada Ltd. Matibu Fabrics of Canada Ltd. Malibu Fabrics of Canada Ltd. Malibu Fabrics of Canada Ltd. Malibu Fabrics of Canada Ltd. Mantex Ltd. Martin Co, Ltd., J.B. Montreal Throwing Co, Ltd. Moose River Mills Ltd. Rayonese Textile Co. Ltd. Richmond Plastics Ltd. Rayonese Textile Co. Ltd. Richmond Plastics Ltd. Sauquoit Ltd. Sauquoit Ltd. Smith Textiles Ltd. Templon Spinning Mills (Canada) Ltd. Thor Mills Limited Walnut Products Corp. Yarntex Corporation Ltd. Zephyr Textiles Limited	St. Martin St., Louisevilie Depot St., Cowansville 100 Woodward Ave., Sherbrooke 130 Grégoire St., St. Johns Coaticook Drummondville 7260 St. Urban St., Montreal Sorel 2162 Ave., St. Laurent, Plessisville 550 Normandie Blvd., StJean Farnham 142 St. Peter St., St. John's Joliette St. Hyacinthe St. George, West Sherbrooke St., Ambroise St., Montreal 300 St. Louis, St. Johns 7080 Hutchison St., Montreal 33 - 4th St., Montmagny Racine St., Granby 64 - 4th Avenue, Iberville Cap St.Ignace 353 Richmond St., Montreal 201 St. Louis, StJean 445 St. James St., St. Johns Jacqueline St., Rigaud Acton Vale 680 Mgr. Dubois, St-Jerôme Valley Road, Richmond 416 St. Luc, Magog 185 St. Hubert. Granby 2850 Nelson, St. Hyacinthe St. Henri & Laferté Sts., Drummondville 110 Robinson St., Granby 38 Royal St., Farnham Sutton		
Barrday Ltd. Barryglas Industries Ltd. Bay Mills, Ltd. Canadian Celanese Ltd. Canadian Industries Limited Canadian Synthetic Fibres Ltd. Collins & Alkman of Canada Ltd. Courtaulds (Canada) Limited Dawbarn (Canada) Ltd. Dominion Silk Mills Limited Du Pont Co. of Canada Ltd. Fiberglas Canada Limited Galtex Co, Ltd. Granatstein & Sons Ltd., M. La France Textiles Canada Ltd. Lancaster Weaving Mills Ltd. Lincoin Fabrics Ltd. Newlands-Dobble Limited. North American Worsted Ltd. Resin-Tex Limited Riverside Yarns, Limited	1179 King St. W., Toronto Fourth St., Midland 268 Grand River Ave., Brantford Millhaven 395 Franklin Blvd., Galt 500 Ontario St., Stratford Montreal Rd., Cornwall Prince Charles Rd., Brantford 2 Mark St., Toronto 2 Kingston 247 York Rd., Guelph St. Andrews St., Galt 488 Wellington St. W., Toronto Dundas St., Woodstock 130 Birch St., Kitchener 63 Lakeport Rd., Port Dalhousie 104 Water St., Galt 89 Tycos Drive, Toronto 100 Riordan St. St. Catharines		
Alberta:			
Canadian Chemical Co. Ltd.	Edmonton		

EXPLANATORY NOTES

This report is one in a series of about 140 publications which present the results of the 1962 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and special reports on geographical distribution and on type of ownership and size of establishments.

With the publication of the results of the 1962 Census of Manufactures, the Bureau has completed a major revision in the classification and concept of its annual census of manufacturing establishments. Because of its size and complexity, this project had to be carried out in three stages. The first stage was the change in classification and the results of the 1960 Census, together with the re-compilation of the 1957, 1958 and 1959 Censuses were published in the 1960 reports on the basis of the revised Standard Industrial Classification. This part of the project was confined entirely to a re-coding of existing reporting units. The second stage consisted of the implementation of the new definition of the reporting unit i.e. "establishment" as it applied to manufacturing activities of manufacturing establishments (See following note on "Establishment"). Results of the 1961 Census reflected this change in concept and, in order to provide comparability of data for recent years, the 1961 reports contained principal statistics on the basis of the new establishment definition for years back to 1957.

The third stage which was the extension of the definition of the establishment to cover total activities of manufacturing establishments is reflected in the statistics for 1961 and 1962 contained in this report. This full implementation of the new definition of the establishment has resulted in an extension of the data to non-manufacturing activities of manufacturing establishments and in additional changes in the 1961 statistics of manufacturing activities. Statistics on manufacturing activities will continue to be shown separately as in the past but, beginning with 1961, data on all operations (total activity) of manufacturing establishments will also be given. By definition "total activity" relates to all operational data and excludes such non-operational items as rent, interest and dividends. In addition, statistics on man-hours paid will be included as part of the regular series of industry statistics. For many industries, adjustments and revisions were made to the 1961 data on manufacturing activities which were published during the second stage to bring them in line with reporting procedures followed in the 1962 Census and to reflect the final application of the new concept. The 1961 statistics on manufacturing activities contained in this report are thus not entirely comparable with those published in the 1961 reports. However, the 1961 statistics are shown in this publication in both their original and revised forms in order to provide a link with the immediate past. A more complete account of recent changes and additions and brief descriptions of the principal industry statistics are given in following sections of these notes.

Standard Industrial Classification

The revised Standard Industrial Classification which was introduced with the 1960 Census of Manufactures and applied to the results of the 1957, 1958 and 1959 censuses provides for a breakdown of the manufacturing universe into 140 industries arranged in 20 major groups. Custom Tailoring Shops is the only industry class in the Manufacturing Industries Division of the classification which is not covered in the annual Census of Manufactures. It is surveyed as part of the Decennial Census of Merchandising and Service Establishments. Of the 140 "three-digit" industry classes in the Manufacturing Industries Division, 21 are further broken down into 67 "four-digit" sub-classes. With the exception of the Wood Preservation and Sound Recording industries, the figures for which are at present confidential and have to be included with those of related industries, the statistics for all of the "four-digit" sub-classes are published regularly. Thus, at the Canada level, principal statistics are compiled for 183 industries. These cannot all be published separately by province because of the confidential nature of the data in certain provinces.

Reporting establishments are classified or allotted to specific industries in the classification system on the basis of the value of principal products made or shipped. In general, establishments primarily engaged in repair work (Shoe Repair Shops, Motor Vehicle Repair Shops etc.) are not included in manufacturing industries. Exceptions are establishments primarily engaged in furniture, ship, boat, aircraft and railroad rolling stock repairs which are classified to the manufacturing industries producing the products involved. Establishments primarily engaged in assembling parts into complete units have always been included in manufacturing industries.

Full details concerning the revised classification system are contained in the Standard Industrial Classification Manual, Catalogue No. 12-501, which is available from either the Queen's Printer or the Dominion Bureau of Statistics.

It should be noted that two new industries (Poultry Processors and Dental Laboratories) and three new groups of establishments (book publishers in the Publishing Industry, electro-plating establishments in the Metal Stamping, Pressing and Coating Industry and prescription branches in the Ophthalmic Goods Manufacturers Industry) have been included in the 1961 (revised) and 1962 Census statistics and will continue to be included thereafter. They were surveyed for the first time in the 1960 Census (1961 Census in the case of prescription branches) in line with the revised classification but, since they did not represent new production, they were removed from the 1960 and 1961 compilations published in the 1961 Census reports in order to provide complete comparability of data over the period 1957-61. Statistics for this period are repeated in the 1962 reports to supply a link with the revised 1961 data and the new 1962 statistics.

Establishment

The reporting unit in the Census of Manufactures is the **establishment**. The majority of establishments are firms, but many firms have more than one manufacturing establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements described below.

Beginning with the 1961 Census of Manufactures the establishment is defined as follows:

"The smallest unit which is a separate operating entity capable of reporting all 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, Inventories, Shipments or sales."

Following is a description of the main features of the new establishment concept introduced in the 1961 Census, how they differ from those of the old "activity" concept and the steps taken to correct for breaks in continuity.

(a) The establishment is to be distinguished from smaller subdivisions or departments which do not have records that permit them to report all items required of an establishment. Prior to 1961, some establishments were required to submit two or more separate reports when they were engaged in activities which were classifiable to different industries. Beginning with 1961, separate reports for such activities are required only in cases where accounting records can provide the necessary input and output elements of principal statistics. Special reporting arrangements were made with respondents when the acceptance of combined reports would have seriously affected the statistics for particular industries or areas. Where continuity of industry statistics was affected by this change in reporting procedures, adjustments to the data were made back to 1957 in order to maintain comparability of the series for recent years.1

(b) A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. Prior to 1961, the Census of Manufactures attempted to cover the manufacturing activities of all establishments, whether or not they were primarily engaged in manufacturing. Beginning with the 1961 Census, establishments (accounting entities) which are not primarily engaged in manufacturing are no longer included as manufacturing establishments in the basic industry statistics.

¹ Most of these adjustments were made when the results of the 1961 Census were being compiled. Since publication of these results in the 1961 reports additional adjustments were made to the 1961 data, as noted earlier, and these are reflected, where applicable, in the revised 1961 statistics contained in this report.

Again, adjustments were made to reflect the removal of such reporting units for the period 1957-60. These reporting units are now listed as establishments in other Bureau surveys, such as Wholesale Trade, Construction etc. This has resulted in a somewhat smaller universe represented by the Census of Manufactures. In terms of overall 1960 Census results, the number of establishments transferred to other industries totalled 2,786 or 8% but these represented only 0.7% of total employment and of total value of shipments of manufactured products. In order, however, to maintain complete coverage of certain commodity items produced mainly in manufacturing establishments, many non-manufacturing establishments are now surveyed by the Industry Division for commodity shipments only and the latter are included in those tables of industry reports showing shipments of certain commodities "from all industries".

(c) A manufacturing establishment may be, and often is, engaged in other activities in addition to its principal manufacturing activity. Prior to 1961 the main emphasis in the Census of Manufactures was on manufacturing activity. Beginning with 1961, each establishment reports on all the activities carried out within its accounting boundaries (except income from investments such as rent, interest and dividends) and data on different activities (manufacturing, trading in goods not of own manufacture, construction by own labour force, revenue from services etc.) are requested separately. However, the statistics published in the 1961 reports were confined to manufacturing activity only in order to maintain comparability with previous years and to permit a more thorough audit of the new data. The 1962 reports contain principal statistics on total activities of manufacturing establishments for 1961 and 1962 with the main elements of manufacturing activity shown separately as in the past. It should be noted that the statistics for separate activities are not completely consistent. Some respondents cannot distinguish in their records materials, shipments and inventories relating to own manufacturing activities from those relating to goods not of their own manufacture or to other activities and can report operational data in total only under manufacturing activity. This situation has always existed, however, and is not considered important enough to invalidate the use of the data in the measurement of manufacturing as an "activity". The values assigned by the respondent to materials and shipments of own manufactured goods include costs in varying degrees that relate to internal (to the establishment) transportation, warehousing and selling activities, but it is not possible to make adjustments to arrive at a uniform valuation for manufacturing activity only; although valuation at the establishment "boundary" must be accepted, the items valued under manufacturing activities still relate, in most cases, to "goods of own manufacture". In the case of employment only data on manufacturing production workers and manufacturing man-hours can be assigned, in total, to manufacturing activity; administrative and office employees can seldom be allocated to separate activities.

Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level, and for studies or statistical measures requiring accurate co-ordinated data, the "total" statistics should be used.

(d) Additional changes resulted from intensive editing and follow-up consistent with the introduction of the new concept. An example of such changes is the provision for the elimination, in total, of sales taxes and outward transportation charges from value of shipments. Prior to 1961, although the value of shipments for each product was requested excluding taxes and transportation charges, no allowance had been made for the reporting of these items in total when the respondents' records did not permit their deduction from the values of the individual products. Another example is a change in the valuation of shipments where, prior to 1961, a manufacturing company operating warehouses or sales outlets was reporting value of shipments in terms of an estimated manufacturer's price in accordance with the old activity concept, even though his records were not kept on this basis. Since the accounting boundary in such cases extends to distribution operations, the respondent was instructed in 1961 to report shipments at the final selling price in order to obtain more realistic and accurate data.2 Adjustments were made to the value of shipments for the period 1957-60 to reflect such changes and maintain continuity of the shipments data. Since no actual data to make these corrections were available for back years, 1961 adjustment ratios were applied to the previous years for each industry affected, on the assumption that the valuation changes in 1961 applied in equal proportions to the preceding period.3

(e) The new concept also demands that inventories held apart from plant be included with plant inventories if establishment boundaries extend to warehouses and sales outlets. Prior to 1961, compilations took into account only the inventories held at plant. In this case, however, most of the missing data were available from supplementary questions in the Annual Census and from the Monthly Inventories and Shipments Survey and actual corrections could be made for previous years.

3 See footnote 1.

(f) Prior to 1961 the Census of Manufactures did not have complete coverage of head and administrative offices and had never surveyed separate sales offices, warehouses or laboratories operated by manufacturing firms. Beginning with the 1961 survey, complete coverage of these auxiliary units was effected. In the past the employment and salaries and wages of those head and administrative offices that were surveyed were either coded in total to the industry in which the greatest portion of the company's manufacturing activities was classified or else, in the case of certain large multi-unit firms with establishments in several industries, were pro-rated among the different industries involved. In the original 1961 statistics published in 1961 reports, the same coverage and treatment of head offices was applied to maintain comparability over the 1957-61 period. Beginning with the revised 1961 statistics, all head offices and auxiliary units are covered and are processed according to the methods described below.

1. Single-Establishment Companies

In the great majority of cases central administrative and executive personnel of companies consisting only of one establishment are generally located at the site of the manufacturing plant and are automatically included in the plant reports. Where head offices and auxiliary units are geographically separate from plant locations and employ a sizeable number of workers they are surveyed on special questionnaires.

Separately located head offices, sales offices, administrative offices and other separate auxiliary units (laboratories, warehouses, etc.) do not usually constitute separate establishments for purposes of industry statistics since they do not normally generate operational revenues but give rise only to costs of operation (mainly salaries and wages) which make up part of the selling price of manufactured products and which are thus included in the value of shipments or sales. Where such units belong to single-establishment companies, they will be considered as extensions of the establishment's boundaries and their operations consolidated with the establishment's total activity.

2. Multi-Establishment Companies

In the case of companies with more than one establishment the following rules are applied:

- (i) Where all the establishments of a company are classified to the same (three-digit) industry, the head office and other auxiliary units are coded to that same industry.
- (ii) Where the establishments of a company are not all classified to the same (three-digit) industry but are coded to different industries, or industries in different industry groups or even different divisions

² Some manufacturing firms operate sales branches or selling warehouses as separate sales establishments for which complete accounting records of receipts. expenses, employment and sales are maintained. In such cases the plants, in effect, "sell" to the sales outlets on much the same basis as they would to independent buyers. The value of plant shipments is based on factory prices and the "boundary" of the manufacturing establishment does not extend beyond the plant. The sales outlets in such cases constitute separate sales establishments and are classified to wholesale or retail trade. Some sales outlets of manufacturing firms, although they physically handle products of the plants, do not maintain separate accounts and are generally treated for statistical purposes as extensions of manufacturing operations. Special arrangements were made for separate reporting in a few cases where the treatment of such outlets as manufacturing extensions would seriously affect the significance of statistics for particular manufacturing and trade industries.

⁴ See footnote 2 for exceptions.

of the Standard Industrial Classification, the inclusion of data for head office and auxiliary units in any one of the (three-digit) industries concerned would distort the relationship between items of principal statistics. In such cases, the auxiliary units are coded at the group (two-digit) level in tabulations of industry statistics. Where multi-establishment companies cut across group or major division lines of the Classification, the head office and auxiliary units will be coded to the (two-digit) industry group in which the major part of the company's operations are classified. Although this may result in some distortion of (two-digit) industry group statistics it will eliminate distortion within groups as it will leave statistics at the (three-digit) industry level free of these company-wide data.

Period Covered

Respondents are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where respondents find it impossible to supply calendar year data from accounting records. However, the data on employees, salaries, wages and man-hours are requested on a calendar year basis in all cases.

When establishments are operated for only a portion of a year, a report is required covering the period of operation.

Working Owners or Partners

Beginning with the revised 1961 statistics working owners and partners of unincorporated businesses are shown as a separate category in the principal statistics and are neither included in the number of employees nor in 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. In all previous reports of the Census of Manufactures these workers were included as part of the number of administrative and office employees and their withdrawals were included as part of salaries. Withdrawals are defined as amounts withdrawn by owners or partners for normal living expenses, excluding withdrawals for payment of income tax.

Number of Establishments

The number of establishments represents the number of operating units (accounting entities as per the new definition of the establishment) for which separate reports are submitted. Head offices located apart from establishments and which are surveyed separately and separate sales and administrative auxiliaries that are treated as extensions of manufacturing activities are not included in the establishment count. However, the operational statistics (employment, salaries etc.) of such auxiliary units which are coded at the "three-digit"

level are included in the principal statistics of industries coded at the same level; those units coded at the "two-digit" level are included with the statistics for groups of industries.

Employees

As noted above, the number of working owners and partners are excluded from the number of employees, beginning with the revised 1961 statistics. This change brings the definition of "employees" in the Census of Manufactures in line with that of "employees" in the Bureau's monthly Employment Survey and with that of "paid workers" in the Bureau's Labour Force Survey. For purposes of historical comparisons, the number of working owners and partners should be added to total employees (beginning with the revised 1961 data) in order to correspond with the figure of "total employees" published in previous reports concerned with the Annual Census of Manufactures.

In addition to production and related workers engaged in manufacturing activities, total employees include administrative, office, sales and distribution workers as well as any production workers employed in non-manufacturing activities such as construction undertaken for the use of the establishment by its own employees (when these are treated as a separate work force) or logging (mostly in connection with sawmills or planing mills). Number of employees represents as closely as possible equivalent annual full-time employment. Adjustments are made when reported figures indicate the existence of part-time or seasonal employment.

Administrative and office employees include all executive and supervisory officials such as presidents, vice-presidents, controllers, secretaries, treasurers etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical etc. Sales and distribution workers include office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truck drivers and their helpers, etc. They exclude persons working on a commission basis who are not considered regular employees.

Production and related workers in manufacturing activities include, in addition to those engaged in processing and assembling, those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees in related activities such as maintenance, repair, janitorial and watchman services. Working foremen doing similar work to that of employees they supervise are also included. Production workers employed in non-manufacturing activities such as construction undertaken for the use of the establishment, logging

employees or outside piece-workers employed in certain industries are excluded from the number of production and related workers but are part of the total number of employees in those industries.

Production and related workers 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 twelve. This procedure is followed even though the plant did not operate in all months in order to derive equivalent annual full-time employment. The numbers are somewhat affected by turn over, in that employment is overstated when an employee changes employment within the same industry during a pay period. Other categories of workers are reported in the form of annual averages. Figures on employment and man-hours refer to the calendar year whether or not some establishments report other data on a financial year basis.

Man-hours of production and related workers in manufacturing activities represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays etc.). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

Salaries and Wages

Salaries and Wages refer to gross earnings of the employees described above, 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 workers' earnings. Payments for overtime are included.

Wages refer to amounts paid to production and related workers engaged in manufacturing operations as defined above. Salaries refer to amounts paid to all other categories of employees including relatively small numbers of production workers engaged in construction and extractive operations or who are employed as outside piece-workers. Figures on salaries and wages refer to the calendar year whether or not some establishments reported other data on a financial year basis.

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.

Materials and Supplies

(a) Used in 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. The statistics represent only commodity items or physical goods (costs 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. Respondents are required to report materials and supplies used not purchased. 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) Purchases for resale as such, Figures represent the 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.

(c) 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. Value of construction and repair work done by outside contractors is 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 establishmentoperated cafeterias and lunch counters, first aid medical supplies, laboratory supplies etc.

Shipments

In general the figures represent revenue from all production, sales, services and related activities of reporting establishments. Non-operating revenues such as rent, interest and dividends and the sale of used fixed assets are excluded.

(a) 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 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. (See notes on "Establishment").

Such shipments are net of returned goods, and value figures at the establishment exclude discounts, returns, allowances, sales taxes and excise duties, returnable containers, and charges for outward transportation by common or contract carriers. Transportation or delivery expenses incurred by the reporting establishments' own carriers are not deducted.

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 form B.13 "Customs Canada, Export Entry" has been completed, are treated as shipments.

In four industries, viz. Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair, where work on principal products extends over a relatively long period, the value of production, rather than the value of shipments, is recorded, For these industries value of production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on units delivered in the year under review. Adjustments to the value of shipments are also made for firms in these industries and in some other industries which operate on the basis of progress payments. The latter are treated as sales and not as inventory, so that for firms which use a progress payments account, an adjustment to the value of shipments is made for the net change in this account during the year.

(b) Shipments of goods not of own manufacture

These figures represent the net selling value at the establishment (less discounts, returns, allowances, sales taxes and excise duties 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 goods on a rental basis value of shipments represents the book value of such goods. All sales of consignment goods from other countries are included.

(c) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs and alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishments' 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 establishments' own employees, such as revenue from goods produced for rental (the book value of such goods are included as part of factory shipments), servicing revenues, commissions on sales (when not included in value of sales), revenue from company-operated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishments' 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 inventory

Values represent the book value of manufacturing inventory owned in Canada. The value of inventory held for which progress payments have been received is treated as shipments and is not included in inventory owned. 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. Inventory owned abroad has already been reported as shipments and is excluded.

(b) Inventory of goods purchased for re-sale

Figures represent the book value of inventory of goods purchased for re-sale as such without further processing, owned by reporting establishments and held at the plants and at any warehouses or selling outlets which are treated as extensions of establishments. Inventory owned in transit in Canada or on consignment in Canada is included.

Because of changes in classification, the receipt of revised data, the inclusion of new establishments or the removal of old establishments which did not operate during the latest year, the opening inventory for the latest year does not necessarily coincide with the closing inventory of the preceding year.

Value Added

(a) By manufacturing activities

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



10

(b) By total activities

Figures consist of value added by manufacturing activities plus value added by non-manufacturing activities and is compiled by deducting the cost of goods purchased for re-sale and the cost of other materials and supplies used from the value of shipments of goods not of own manufacture plus other revenue, adjusted for changes in the value of inventories of goods purchased for re-sale.

"Value added" is sometimes referred to as net production. However, to arrive at the National Accounts concept of net production, or "Gross domestic product at factor cost", it would be necessary to subtract also the cost of advertising, insurance and other business expenses which are not collected in 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.

Short Forms

Since 1949, in order to ease the reporting burden for smaller firms, a one-page short form has been used asking for only a limited amount of detail. For purposes of publication, missing data were estimated on the basis of appropriate ratios. Beginning with the 1959 census, the general limit for short forms was raised from \$50,000 (the limit used since 1949) to \$100,000 value of shipments and a new medium form was used. This form is a shortened version of the long form in that some of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000-\$500,000 value of shipments, but in the case of both the

short and medium forms there are lower cut-offs for a number of industries in which the smaller firms account for a larger share of total shipments.

Prior to 1961, the short form was limited to a question on the principal items of factory shipments. In the 1961 and 1962 censuses, in addition to the question on shipments of goods of own manufacture, general questions on employment and payroll and on total revenue were added on all short forms. The other elements of principal statistics, viz. value of materials, fuel and electricity and inventories, were estimated by using ratios based on the change in the value of shipments reported in 1961 and 1962. This was done to permit the complete compilation of basic industry statistics by industry and by geographic location. The proportions of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

Beginning with the 1963 census, general questions on total purchases of materials, fuel and electricity and on total inventory were added on the short forms. The two questions, however, were designed so that the data can be easily derived from respondents' regular accounting records. This will permit a complete tabulation of principal statistics without the necessity of estimating missing items and will result in increased accuracy for rural area statistics where small firms account for a relatively important part of industrial output.

The addition of extra questions on the short form in recent years has also permitted an increase in the cut-off limits for short forms in many industries. This has meant that many more firms are now receiving the short form instead of the long or medium form. It has also resulted in the withdrawal of the medium form in a number of industries, thus further simplifying collection and tabulation procedures.