CATALOGUE No. 44-207 ANNUAL

Tru



# GLASS AND GLASS PRODUCTS MANUFACTURERS

1964

ANNUAL CENSUS **OF MANUFACTURES** 

Published by Authority of The Minister of Trade and Commerce

# DOMINION BUREAU OF STATISTICS

**Industry Division** 

November 1966

6506-852

Price: 50 cents

DOMINION BUR OF STATISTIC NOV 30 1966 PROPERTY OF TH

REAU

DF THE

The contents of this document may be used freely but DBS should be credited when republishing all or any part of it.

### PUBLICATIONS

In addition to the report, on this industry, the DBS publishes annual statistics on a number of related industries and current statistics on the more important commodities. Copies of reports provided in the following list are available from the Information and Public Relations Division of the DBS, Ottawa or from the Queen's Printer, Hull, P.Q.

Cotolomia			Pr	ice
Catalogue number	Title	Periodicity	Per copy	Per year
44 - 202	Abrasives Manufacturers	A	.50	.5
44 - 203	Asbestos Products Manufacturers	Α	.25	.2
44 - 204	Cement Manufacturers	A	.50	
44-205	Concrete Products Manufacturers	А	.50	.5
44 - 207	Glass and Glass Products Manufacturers	A	.50	.5
44 - 209	Lime Manufacturers	A	.25	
44 - 210	Other Non-metallic Mineral Products Industries	A	.50	
44 - 211	Ready-Mix Concrete Manufacturers	A	.50	
44 - 212	Mineral Wool Manufacturers	A	.50	
44 - 213	Stone Products Manufacturers	А	.50	
44 - 214	Refractories Manufacturers	A	.50	
44 - 215	Clay Products Manufacturers (from Domestic Clays)	A	.50	
44-216	Clay Products Manufacturers (from Imported Clays)	A	.50	
44 - 217	Gypsum Products Manufacturers	A	.50	
26 - 001	Asbestos	м	.10	\$1.
26 - 001 26 - 007		M	.10	4
	Production of Canada's Leading Minerals			1.
26-007	Production of Canada's Leading Minerals	M M	.10	1.
26-007 26-009	Production of Canada's Leading Minerals Salt Asbestos Mining Industry	M M A	.10 .10 .50	1. 1.
26 - 007 26 - 009 26 - 205	Production of Canada's Leading Minerals Salt Asbestos Mining Industry Salt Industry	M M	.10 .10 .50 .50	1. 1.
26 - 007 26 - 009 26 - 205 26 - 214	Production of Canada's Leading Minerals Salt Asbestos Mining Industry Salt Industry Stone Quarrying Industry	M M A A	.10 .10 .50 .50	1. 1.
26 - 007 26 - 009 26 - 205 26 - 214 26 - 217	Production of Canada's Leading Minerals	M M A A A	.10 .10 .50 .50 .50 .25	1. 1.
26 - 007 26 - 009 26 - 205 26 - 214 26 - 217 26 - 221	Production of Canada's Leading Minerals Salt	M M A A A A	.10 .10 .50 .50	1. 1.
26 - 007 26 - 009 26 - 205 26 - 214 26 - 217 26 - 221 31 - 001	Production of Canada's Leading Minerals	M M A A A A M	.10 .10 .50 .50 .50 .25 .30	1. 1.
$\begin{array}{r} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \end{array}$	Production of Canada's Leading Minerals Salt	M A A A A M A	.10 .50 .50 .50 .25 .30 \$2.00	1. 1.
$\begin{array}{c} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \\ 44 - 001 \end{array}$	Production of Canada's Leading Minerals	M A A A A M A M	.10 .50 .50 .25 .30 \$2.00 .10	1. 1. 3. 2. 1.
$\begin{array}{c} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \\ 44 - 001 \\ 44 - 002 \end{array}$	Production of Canada's Leading Minerals Salt	M M A A A A M A M M	.10 .50 .50 .50 .25 .30 \$2.00 .10 .10	1. 1. 3. 2. 1. 1.
$\begin{array}{r} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \\ 44 - 001 \\ 44 - 002 \\ 44 - 003 \end{array}$	Production of Canada's Leading Minerals Salt Asbestos Mining Industry Salt Industry Stone Quarrying Industry Gypsum Mining Industry Inventories, Shipments and Orders in Manufacturing Industries General Review of the Manufacturing Industries of Canada Cement Concrete Products Gypsum Products Mineral Wool	M M A A A A M A M M M	.10 .10 .50 .50 .25 .30 \$2.00 .10 .10 .10	1. 1. 3. 2. 1. 1. 1.
$\begin{array}{r} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \\ 44 - 001 \\ 44 - 002 \\ 44 - 003 \\ 44 - 004 \\ 44 - 005 \end{array}$	Production of Canada's Leading Minerals	M M A A A A M A M M M M	.10 .10 .50 .50 .25 .30 \$2.00 .10 .10 .10 .10	1. 1. 1. 3. 2. 1. 1. 1. 1. 1.
$\begin{array}{c} 26 - 007 \\ 26 - 009 \\ 26 - 205 \\ 26 - 214 \\ 26 - 217 \\ 26 - 221 \\ 31 - 001 \\ 31 - 201 \\ 44 - 001 \\ 44 - 002 \\ 44 - 003 \\ 44 - 004 \end{array}$	Production of Canada's Leading Minerals Salt Asbestos Mining Industry Salt Industry Stone Quarrying Industry Gypsum Mining Industry Inventories, Shipments and Orders in Manufacturing Industries General Review of the Manufacturing Industries of Canada Cement Concrete Products Gypsum Products Mineral Wool	M M A A A A M A M M M M M	.10 .10 .50 .50 .25 .30 \$2.00 .10 .10 .10 .10 .10	\$1 1 1 3 1 1 1 1

A - Annual

M-Monthly

Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information and Public Relations Division, Ottawa or to the Queen's Printer, Hull, P.Q.

# GLASS AND GLASS PRODUCTS MANUFACTURERS

# 1964

For statistical purposes the industry titled Glass and Glass products Manufacturers in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing flat glass; plate glass; glass containers; glassware; ovenware; glass brick; fibrous glass products except textile fabrics; mirrors; stained, leaded and ornamented glass; glass novelties and other articles made from glass. This industry includes establishments primarily engaged in etching or painting glass or glassware. Establishments primarily engaged in manufacturing optical lenses and opthalmic lenses are classified in Scientific and Professional Equipment Manufacturers. Establishments primarily engaged in spinning glass yarns or weaving glass fabrics are classified in Synthetic Textile Mills.

Note: For purposes of presentation of statistics in this report recognition is being given to the operations of two sub-classifications within this Industry group (a) Glass Manufacturers and (b) Glass Products Manufacturers. The former includes establishments primarily engaged in manufacturing flat glass and glass containers while the latter includes establishments engaged in manufacturing articles from glass, such as, mirrors, hermetically sealed windows, non-shatterable glass, leaded and ornamental glass, etc. The two sub-classifications as a group are covered in Tables 1 to 11 while Tables 12, 13 and 15 carry a separate breakdown of the two sub-classifications. Table 14 gives totals for Canada for certain items regardless of the industries in which they were produced.

Value of shipments and other revenue (manufacturing and non-manufacturing) of the Glass and Glass Products Industry amounted to \$160.2 millions in 1964, compared with \$146.9 millions in 1963, an increase of \$13.3 millions or about 9 per cent. For the two sub-classifications in this industry group the values were \$86.5 millions in 1964 versus \$80.0 millions in 1963 for Glass Manufacturers and \$73.8 millions in 1964 versus \$66.9 millions in 1963 for Glass Products Manufacturers.

Products of own manufacture shipped by Glass Manufacturers including bottles, sealers and window glass were valued at \$81.2 millions in 1964. Other revenue (non-manufacturing) amounted to \$5.3 millions. For Glass Products Manufacturers, manufactured products such as mirrors, non-shatterable glass, etc. accounted for \$68.3 millions in 1964 while other revenue (non-manufacturing) accounted for \$5.4 millions.

The cost of materials and supplies, etc. used in the production of goods of own manufacture decreased by \$0.4 millions for Glass Manufacturers and increased by \$4.3 millions for Glass Products Manufacturers, a net increase of about \$3.8 millions for the industry as a group. Cost of materials and supplies, etc. (inputs) in 1964 represented 28 per cent of value of Glass Manufacturers' shipments of own manufacture (outputs) compared to 30 per cent in 1963. Cost of materials and supplies, etc. in 1964 represented 53 per cent of value of Glass Products Manufacturers' shipments of own manufacture compared to 52 per cent in 1963. Total cost of materials and supplies etc. in 1964 for the two industries combined represented 40 per cent of value of shipments of own manufacture, unchanged from a similar ratio in 1963.

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

TABLE 1. Principal Statistics, 1961-64

				Man	ufacturing	activity				Т	otal activ	ity	
Year and	Estab- lish-		duction s ated work		Cost of	Cost of materials	Value of shipments of goods	Value	Working and p	owners artners	Empl	loyees	Value
province	ments	Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$'000				\$'000		\$'0	00
1961													
Totals	109	7, 795	16, 549	30, 604	4.966	43.651	113.154	66, 246	41	155	9, 802	40, 963	68, 358
1962													
Totals	111	7, 912	16, 891	32, 765	5, 798	53, 025	136, 168	77, 697	41	163	10, 042	43, 660	79,476
1963									1				
Newfoundland	-	-	-	-	-	-	-	-		-		-	18-
Prince Edward Island	-	-	_	_	-	-	-	-	-	-	-	-	- 58
Nova Scotla	-	-	_	-	-	-	-	-	-	-	-	-	
New Brunswick	-	-		_	_	-	-	_	_	-	-	-	-
Quebec	35	2,727	6,157	11.554	2,076	12, 237	37,433	24, 248	10	47	3, 459	15,370	24, 565
Ontario	53	4,494	9,632	20, 356	3,270	36,423	86,501	47,220	17	72	5,742	27,353	48, 103
Manitoba	7	h											
Saskatchewan	2	131	275	431	17	1, 948	3, 253	1,276	-	-	169	613	1, 270
Alberta	7	717	1,508	2,825	234	4,246	11,626	7,212	x	x	846	3,465	7,215
British Columbia	7	32	62	112	4	442	713	286	x	x	128	318	371
Yukon and Northwest Territories		-		_		_	-	-	_	_		-	
			17 024	05 000	E 001		120 200	00.000	32	140	10.240	47 100	01 804
Totals	111	8.101	17.634	35,278	5.601	55.297	139, 526	80, 222	34	143	10.346	47, 120	81, 524
1964		215								0.00		-	
Newfoundland	-	-	-	-	-		- 1-	-	-	-	-	-	-
Prince Edward Island	-	1	-	-	-	-	- 16	_	-	-	-	-	_
Nova Scotia	-	-	-	-	-	-	-	-	_	-	-	-	-
New Brunswick	i	x	x	x	x	x	x	x	x	x	x	x	x
Quebec	42	2,754	8,398	12.346	2, 209	13,882	41,975	25,966	12	49	3,495	16,289	26,666
Ontario	53	4.537	9,952	21,816	3,239	38,124	90,656	50,348	19	91	5,787	29,124	50,993
Manitoba	7	89	183	313	17	1,027	1,872	843	-		117	467	838
Saskatchewan	2	x	x	x	x	x	x	x	-	-	x	x	x
Alberta	7	x	x	x	x	x	x	x	x	x	x	x	x
British Columbia	9	54	104	185	7	674	1,084	413	4	23	75	301	558
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	121	8,200	18,228	37, 790	5.719	59, 117	149, 555	86, 076	38	171	10, 362	49.927	87, 541

				Man	ufacturing	activity				Т	otal activ	rity	
Size gtoup	Estab- lish- ments		duction a ated work		Cost of fuel and	Cost of materials	Value of shipments of goods	Value		owners artners	Employees		Value
		Number	Man- hours paid	Wages	eiec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$'000				\$'000	-	\$*(	00
1963						}					-		
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 '' 49,999 50,000 '' 99,999 100,000 '' 199,999 500,000 '' 499,999 500,000 '' 4,999,999 1,000,000 '' 4,999,999 5,000,000 and over Head offices, sales offices and auxiliary units	3 15 17 13 11 23 11 9 9	17 48 99 140 402 377 1,344 5,674  8,101	35 98 199 288 856 784 2,943 12,430 	55 161 287 443 1,323 1,343 6,348 25,316  35.278	- 6 9 31 24 111 123 1, 268 4, 029  5, 601	6 97 278 494 737 3,427 4,448 9,973 35,838  55,297	13 249 663 1,071 1,649 6,797 8,334 26,724 94,027 	7 147 382 550 894 3,246 3,780 15,398 55,819  80,222	3 13 10 3 1 2 - - - -  32	5 45 58 12 5 18 - - - - - - - - - - - - - -	21 62 126 179 558 534 1,655 6,672 539 <b>10,346</b>	65 218 398 613 2,132 2,165 8,081 30,785 2,663 47,120	7 164 383 606 973 3,548 4,085 15,415 56,460 (117 <b>81,524</b>
1964													
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 '' 99,999 50,000 '' 99,999 200,000 '' 499,999 200,000 '' 499,999 500,000 '' 499,999 5,000,000 '' 4,999,999 5,000,000 and over Head offices, sales offices and auxiliary units	15 22 11 14 23 8 12 12	20 42 61 144 385 252 829 6.467	44 92 143 312 866 525 1.782 14,463	58 158 198 464 1,373 835 3,614 31,089	7 15 28 25 143 52 557 4,891	7 87 299 381 893 3,507 3,377 9,773 40,792	26 246 801 824 1,972 7,221 5,790 20,363 112,312	18 155 524 420 1.075 3,545 2,381 10,046 67,913	3 13 17 3 2 	7 49 90 11 15  -	1 26 60 80 193 504 339 1,074 7,614 471	4 76 219 290 668 2,032 1,366 4,983 37,506 2,785	18 195 552 488 1,156 3,704 2.765 9,929 68,968 (233
Totals	121	8, 200	18,228	37.790	5, 719	59.117	149.555	86.076	38	171	10.362	49,927	87.541

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

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

				Maz	nufacturing	activity				1	otal acti	vity	
Size group	Estab- lish- ments		oduction ated wor)		Cost of Cost of shipments fuel and materials of goods			Value		owners artners			Value
		Number	Man- hours paid	Wages	elec- tricity	and supplies	of own manu- facture	added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$*000				\$'000		\$*0	100
1963					1								
Under \$10,000	12 19 13 18 19 11 5 7 7	9 33 75 199 351 379 336 1,292 5,427	19 68 151 404 732 824 717 2,798 11,921	26 111 227 606 1,142 1,326 1,351 6,362 24,127	4 9 13 49 85 96 192 1,327 3,828	100 276 515 1,383 2,991 4,294 3,631 13,999 28,108	169 606 961 2,746 5.841 7,763 8,685 35,204 79,550	72 321 441 1,309 2,741 3,374 2,907 19,825 49,233	10 16 3 	31 77 12 23 	10 42 99 269 506 474 434 1,686 6,287 539	30 139 321 935 1,953 1,819 1,850 8,772 28,637 2,663	71 339 501 1.504 3.160 3.434 2.901 20,116 49,616
		4 + 1							* * *				( 117
Totals	111	8, 101	17.634	35,278	5,601	55,297	139.526	80, 222	32	143	10, 346	47, 120	81, 524
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 ** 49,999 100,000 ** 99,999 200,000 ** 199,999 200,000 ** 499,999 500,000 ** 499,999 1,000,000 ** 4,999,999 5,000,000 and over Head offices, sales offices and	10 25 15 20 15 17 6 5 8	9 30 67 198 243 571 366 1,212 5,504	20 66 139 448 537 1,216 789 2,692 12,321	28 100 207 680 818 2,046 1,527 6,150 26,234	3 17 15 60 74 144 199 1,326 3,881	$\begin{array}{r} 39\\ 343\\ 466\\ 1,544\\ 2,586\\ 6,876\\ 5,570\\ 9,846\\ 31,848\end{array}$	100 778 953 3,160 4.731 12,548 10,163 27,452 89,671	61 425 504 1,577 2,061 5,586 4,330 16,453 55,078	7 222 7 1 1 	25 99 33 8 7	13 42 87 261 318 756 476 1,516 6,422	41 138 290 970 1,238 3,088 2,219 7,889 31,269	101 425 594 1.661 2.358 5.826 4.319 16.630 55.850
auxiliary units											471	2,785	( 23.3
Totals	121	8,200	18.228	37,790	5, 719	59,117	149,555	86,076	38	171	10,362	49, 927	87.541

				Mar	ufacturing	activity				Т	otal activ	rity	
Size group	Estab- lish-		oduction ated work			Cost of	Value of shipments of goods		Working owners and partners		Empl	loyees	
	ments	Number	Man- hours paid	Wages	elec- tricity	materials and supplies	of goods of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	Value added
	No.		'000			\$'000				\$'000		\$*0	000
1963						1							
Under \$10,000         \$ 10,000 to \$ 24,999         25,000 '' 49,999         50,000 '' 99,999         100,000 '' 199,999         200,000 '' 499,999         500,000 '' 499,999         1,000,000 '' 499,999         5,000,000 '' 499,999         5,000,000 '' 4,999,999         5,000,000 '' 4,999,999         5,000,000 '' 4,999,999	12 18 13 16 18 15 5 7 7 7	9 30 63 160 302 482 336 1,292 5,427	19 62 129 321 645 1,022 717 2,798 11,921	26 100 198 485 1,005 1,625 1,351 6,362 24,127	4 9 46 68 119 192 1,327 3,828	100 272 380 1.344 2.172 5.291 3.631 13,999 28,108	169 590 2,483 4,652 9,383 6,685 35,204 79,550	72 309 420 1,105 2,396 3,956 2,907 19,825 49,233	10 16 3 	31 77 12 23 	10 38 84 205 399 664 434 1.686 6,287	30 122 284 685 1,482 2,594 1,850 8,772 28,637	71 309 438 1,165 2,466 4,561 2,901 20,116 49,616
Head offices, sales offices and nuxiliary units											539	2,663	(117)
Totals	111	8, 101	17,634	35,278	5.601	55.297	139, 526	80,222	32	143	10,346	47,120	81, 524
1964													1
Under \$10,000 \$ 10,000 to \$ 24,999 25,000 " 49,999 100,000 " 99,999 200,000 " 499,999 200,000 " 499,999 500,000 " 499,999 1,000,000 " 4,999,999 1,000,000 ad over Head offices, sales offices and auxiliary units	7 27 14 19 17 18 6 5 8	3 32 52 165 270 596 366 1,212 5,504	6 70 113 372 606 1.258 789 2.692 12,321	7 106 167 571 927 2,101 1,527 6,150 26,234	1 19 11 555 799 147 199 1.326 3,881	21 355 318 1,480 2,313 7,367 5,570 9,846 31,848	61 805 751 2,957 4,548 13,148 10,163 27,452 89,671	41 438 428 1,470 2,164 5,674 4,330 16,453 55,078	5 24 7 1 1 1	18 108 33 8 7 	6 44 68 218 339 602 476 1,516 6,422	15 144 234 812 1,297 3,263 2,219 7,889 31,269	41 451 454 1,498 2.324 6,198 4,319 16,640 55,850
			* * *			• • •	* * *				471	2,785	( 233)
Totals	121	8,200	18.228	37.790	5, 719	59.117	149.555	86,076	38	171	10.362	49, 927	87.541

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

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

				Mai	nufacturing	activity					Fotal acti	vity	
Size group	Estab- lish-	Production and related workers			Cost of	Cost of	Value of shipments of goods			owners artners	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			-	\$'000		\$*0	000
1963				1									
Under 5 employed	33 234 7 3 4 7	47 157 737 338 320 1.075 5,427	97 323 1,566 720 701 2,306 11,921	150 504 2,483 1,234 1,515 5,266 24,126	14 36 183 198 193 1,150 3,828	414 1.682 7.524 3.439 6.957 7.173 28.108	877 3,096 14,482 6,546 12.045 22,929 79,550	455 1,373 6,767 2,916 5,034 14,444 49,233	2633 1111	108 12 23   	59 211 973 484 446 1.347 6,287 539	195 741 3,776 2,014 2,295 6,798 28,637 2,663	472 1,369 7,165 3,248 5,282 14,490 49,616 (117)
Totals	111	8, 101	17.634	35.278	5.601	55,297	139.526	80.222	32	143	10.346	47.120	81.524
		0,101	A 11 OUT	001410	01001	001001	100,000	001 000	314	140	70, 940	41,140	01.344
:964		-	1				1.1						
Unter a ratio of d - 14 compared	39 28 32 7 4 4 7	46 192 728 328 392 1,183 5,331	100 441 1,588 660 898 2,602 11,940	150 657 2,575 1,220 1,898 6,084 25,206	24 68 168 183 221 1,333 3,702	502 1,813 9,122 3,721 8,639 8,890 26,431	1, 134 3, 695 16, 421 7, 376 15, 199 26, 644 79, 087	621 1.861 7.151 3.398 6.427 16.717 49,900	33 4 1 	139 25 7 	63 253 952 460 542 1,432 6,189 471	207 924 3,889 1,983 2,801 7,587 29,751 2,785	634 1,916 7,571 3,658 6,720 16,620 50,655 (233)
Totals	121	8,200	18.228	37, 790	5,719	59.117	149.555	86.076	38	171	10, 362	49,927	87.541

	<u>_</u>	
-	ы.	-
	~	

				Man	ufacturing	activity					rotal acti	vity	
Type of organization	Estab- lish-		oduction lated wor	kers Cost of		Cost of materials	Value of shipments of goods			owners artners	Employees		Value
	ments	Number	Man- hours paid	Wages	fuel and elec- tricity	and supplies	of own manu- facture	Value added	Number	With- drawals	Number	Salaries and wages	added
	No.		'000			\$'000				\$'000		\$'0	00
1963													
Individual ownerships	20	32	66	106	9	245	594	340	21	87	37	117	340
Partnerships	5	23	46	80	6	181	441	254	11	55	26	104	254
Incorporated companies	86	8,046	17,522	35,091	5,587	54,871	138, 491	79,628			9,744	44, 236	81,047
Co-operatives	-	-	-	-	-	-	-	-			-	-	-
Head offices, sales offices and auxiliary units											539	2,663	( 117)
Totals	III	8, 101	17,634	35,278	5, 601	55, 297	139, 526	80. 222	32	143	10.346	47, 120	81, 524
1964	116												
Individual ownerships	26	46	101	160	18	366	893	514	27	126	54	184	528
Partnerships	5	5	12	16	3	74	173	96	11	45	6	18	96
Incorporated companies	90	8, 149	18, 115	37,614	5.699	58,677	148, 489	85,465			9,831	46,940	87, 149
Co-operatives	-		-	-	_	-	_	_			-	-	-
Head offices, sales offices and auxiliary units											471	2, 785	( 233)
Totals	121	8.200	18.228	37.790	5.719	59, 117	149.555	86,076	38	171	10.362	49.927	87.541

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

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

	Manufacti activit		Non-manufa activiti		Total activity		
	1963	1964	1963	1964	1963	1964	
			\$'000	)			
Output			1				
. Shipments and other revenue	139,526	149,555	7,414	10,695	146,940	160, 250	
Inventories - Goods of own manufacture:		-					
Add closing - Goods in process	1.136	970	• • •		1,136	970	
Finished goods	13,038	14,686			13,038	14, 686	
Deduct opening - Goods in process	1,143	1, 144			1, 143	1,144	
Finished goods	11. 437	13, 154			11,437	13, 154	
. Net inventory change	1,594	1,358			1, 594	1,358	
. Gross output (1 + 2)	141,120	150,913	7,414	10,695	148, 534	161,608	
Input				1.15			
. Purchases of goods not of own manufacture			5,200	8, 220	5,200	8,220	
Inventories - Goods not of own manufacture:							
Add opening			895	960	895	960	
Deduct closing			957	957	957	957	
. Cost of goods sold (not of own manufacture)			5,138	8,223	5,138	8, 223	
Materials, supplies, etc.	55, 297	59, 117	974	1,008	56,271	60,125	
. Fuel and electricity	5,601	5, 719			5,601	5,719	
. Gross input (5 + 6 + 7)	60, 898	64,836	6,112	9,231	67,010	74,067	
Value added (3 - 8)	80.222	86,076	1,302	I, 464	81.524	87, 541	

1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					Emplo	yees						Salari	es and wa	iges	
Your		Product related			Adm	inis-		les	To	tal	Producti	ion and	Admin-	Sales	
province	Manufa	cturing	Other		and office		distribution		- Court		related workers		istra- tive and	and distri-	Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	office	bution	
					numi	per				A · · · · · · · · · · · · · · · · · · ·			\$'000		
1963										}					
Newfoundland		-	-	-	-	-	-	-	-	-	-	-	-		-
Prince Edward Island	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Nova Scotia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick	-		-	-	-	-	-	-	-	-		-	-	_	-
Quebec	2,347	380	33	-	448	180	57	14	2,885	574	11,554	142	3,221	453	15, 370
Ontario	3,672	822	17	-	677	3 31	181	42	4, 547	1,195	20,356	66	5,890	1,040	27, 353
Manitoba	1														
Saskatchewan	} 107	24	-	-	27	8	3	-	137	32	431	-	168	14	613
Alberta	4 4 9	268	14	-	70	27	19	1	552	296	2,825	19	507	114	3,465
British Columbia	28	4	-	-	9	3	68	16	105	23	112	_	60	147	318
Yukon and Northwest Terri-															
tories	-	-	-	-	-	-	-	-		-		-			-
Totals	6,603	1,498	64	-	1.231	549	328	73	8, 226	2, 120	35.278	228	9, 845	1, 769	47,120
1964							211								
Newfoundland	-	-	-	-	-	-	-	-	-	-		-		-	-
Prince Edward Island	-	-	-		-	-	-	-		_	-	-	-		-
Nova Scotia	-	-	-	-	-	-		-	-	-	_	-	-	-	
New Brunswick	x		-	-	-	-	-	-	x	-	x	-		-	x
Caebec	2,374	380	6	-	474	176	65	20	2,919	576	12, 346	33	3,352	559	16,289
Qatario	3,715	822	4	-	69 2	335	172	47	4,583	1,204	21, 316	21	6,167	1,119	29,124
Manitoba	79	10	-	-	23	3	2	·	104	13	313		146	8	467
Suskatchewan	x	x	-	-	x	x	x	x	x	x	x	_	x	x	x
Alberta	x	x	-	-	x	x	x	x	x	x	x	-	х	x	x
British Columbia	42	12	-	-	11	4	6	-	59	16	185	_	67	49	301
Yukon and Northwest Terri-							-								
tories	-	-	-	-	-	-	-	-		-	-	-		-	-
Totals	6, 694	1.506	10	-	1,276	548	259	69	8,239	2, 123	37, 790	53	10,255	1,828	49, 927

# TABLE 8. Employment and Payroll, 1963 and 1964

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

Mark	196	3	1964			
Month	Male	Female	Male	Female		
		numbe	51			
Establishments reporting monthly detail (large establishments only):		1	1			
January	6, 240	1, 433	6,139	1, 258		
February	6,162	1,447	6, 187	1,431		
March	6,322	1,554	6,282	1, 42:		
April	6,336	1,534	6,288	1,519		
May	6,594	1,538	6, 585	1,552		
June	6,878	1,576	6, 896	1,609		
July	6,640	1,646	6,629	1,618		
August	6,340	1,543	6,614	1,653		
September	6,358	1,297	6,666	1,406		
October	6,327	1,333	6, 324	1, 290		
November	6,182	1,415	6,704	1,502		
December	6,259	1,375	6,357	1,519		
Averages	6,390	1,476	6,479	1,482		
Establishments reporting annual averages (small establishments only)	213	22	215	24		
Average for all establishments	6,603	1, 498	6,694	1,506		

TABLE	10.	Inventories,	1964
-------	-----	--------------	------

		Manufa		Non- manufacturing			
Province	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale	Total inventories	
			book value	\$'000			
Opening:							
Newfoundland	-	-	-		-		
Prince Edward Island				-	-		
Nova Scotia		-		-	-		
New Brunswick	-	-		-	-	-	
Quebec	2,783	100	8,109	10, 992	219	11,211	
Ontario	7,468	1,039	6,087	14,594	737	15,331	
Manitoba	212	3	26	241	-	241	
Saskatchewan	х	х	X	x	х	х	
Alberta	x	x	x	x	x	x	
British Columbia	130		7	138	-	138	
Yukon and Northwest Territories	-	-	-	-	-	-	
Totals	11.511	1,144	15.236	27, 892	960	28, 852	
Closing:							
Newfoundland	-			-	-		
Prince Edward Island	_	-	-	-	-	-	
Nova Scotia			-		-	-	
New Brunswick		100 100		-			
Quebec	2,729	98	8,069	10,896	260	11, 156	
Onterio	8,998	861	7,320	17, 180	692	17,872	
Manitoba	269	10	33	312	_	312	
Saskatchewan	x	x	x	x	x	x	
Alberta	x	x	x	x	x	x	
British Columbia	188	-	18	205	-	20	
Yukon and Northwest Territorles	_	-	-		_		
Totals	13, 219	970	16.644	30.832	957	31.78	

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

	1963		1964		
Description		Quantity	Cost	Quantity	Cost
			\$'000		\$'000
1. Large establishments reporting commodity detail:					
Bituminous coal:					
(a) From Canadian mines	ton	-	-		-
(b) Imported		2,795	33	3,054	35
Sub-bituminous coal (from Alberta mines only)	**	- 1	-		-
Anthracite coal	14	2		2	
Lignite coal	2.8	40		_	-
Coke				-	
Gasoline (including gasoline used in cars and trucks)	lmp. gal.	325,360	116	300, 627	103
Fuel oil including kerosene or coal oil		28,305,929	2,063	26, 804, 781	1,996
Wood	cord	-	-	-	-
Gas:					
(a) Liquefied petroleum gases	Imp. gal.	118,992	29	172, 766	41
(b) Other manufactured gas	M cu. ft.		-		
(c) Natural gas		4,030,332	1,828	3, 280, 829	1,928
Other fuel			12		13
Electricity purchased	kwh.	225, 910, 332	1,463	236,662,765	1,523
Steam purchased	*****		-		-
2. Small establishments not reporting commodity detail:					
Estimate for fuel and electricity			57		80
3. All establishments:					
Total fuel and electricity used			5,601		5,719

<sup>1</sup> The difference between figures in this table and those in Table 7 arises from firms reporting output of products on the basis of production rather than of shipments. Consequently, inventories of finished products for such respondents are not taken into account for purposes of compiling value added in Table 7. See also "Concepts and Definitions" for explanation of other variances.

		1963		1964		
Description	Ē	Quantity	Cost	Quantity	Cost	
			\$'000		\$*000	
Glass manufacturers						
Materials used:         Arsenic         Barytes         Borax         Cobalt oxide         Cobalt oxide         Chromite         Cullet         Fluorspar.         Lime         Nepheline syenite         Salt cake         Selenium (metal and salts)         Silica sand         Soda ash         All other materials and components used         Operating, maintenance and repair supplies used (excluding fuei)         Amount paid out to others for work done on materials owned by establishments.         Totals		$\begin{array}{c} 172.\ 404\\ 1,\ 675,\ 022\\ 29,\ 956\\ 5,\ 864\\ 64\\ 42,\ 417\\ 1,\ 968\\ 60,\ 320\\ 33,\ 838\\ 6,\ 069,\ 156\\ 6,\ 691\\ 329,\ 563\\ 107,\ 845\\ \cdots\\ \cdots\\$	12 38 2 8 5 552 128 440 541 102 34 2,929 4,615 492 4,537 8,867 54 23,355	$\begin{array}{c} 168,793\\ 1,361,400\\ 30,415\\ 4,762\\ 64\\ 36,973\\ 2,744\\ 47,279\\ 33,858\\ 6,527,046\\ 6,729\\ 298,009\\ 108,997\\ \ldots\\ \ldots\\$	13 32 499 177 346 577 11 33 2,55 4,677 1,043 4,393 8,306 155 22,910	
Glass products manufacturers					40101	
Materials used:						
Materials used.     Bevelied or polished edge plates     Bevelied or polished edge sheets     Figured and cathedral glass, leaded glass, etc.     Glass blanks for making cut glass articles     Giass tubing     Plate glass used for beveling, silvering, laminating, etc.     Sheet glass used for beveling, silvering, iaminating, etc.     Grinding and polishing materials     Silver nitrate.     All other materials and components used <sup>1</sup>			453 43 696 66 11,911 6,389 157 68 10,567		37' 4. 77: 11: 13: 29: 7. 97( 16: 7; 11: 54:	
Containers and other packaging materials and supplies used			1.019		1.07	
Operating, maintenance and repair supplies used (excluding fuel)			560		67	
Amount paid out to others for work done on materials owned by establishments			13		8	
totals			31.942		36.20	
Grand totals			55, 297		59.117	

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

<sup>1</sup> No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated costs were \$2,127,293 in 1963 and \$2.446,798 in 1964.

TABLE 13. Shipmen	S O	Goods	of	Own	Manufacture.	1963	and 1	964
-------------------	-----	-------	----	-----	--------------	------	-------	-----

Description	Vali	ue
Description	1963	1964
	\$'0(	00
Glass manufacturers	1	
. Products: Glass manufacturers; Pressed, blown and drawn glass (including bottles, sealers, artistic glass, window glass, etc.)	78,439	81,568
Amount received in payment for work done on materials and products owned by others	-	33
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above	( 315)	(388)
Total adjusted value of shipments and work done	78,123	81,212
Glass products manufacturers		
. Products: Mirrors: Plate glass Sheet glass Other products of glass: Bevelled or polished edge plate Bevelled or polished edge sheet glass Leaded glass, including memorial windows Cut glass (tumblers, bowls, etc.) Decorated glassware (including engraved, etched, sand-blasted, applied colour, etc.). Druggists' physicians' and laboratory glassware Insulating multi-pane window units, air seal (hermetically sealed). Other glass products All other products	3,664 1,122 151 172 298 917 1,632 460 10,060 40,887 1,359	4,170 1,021 343 178 319 1,082 1,836 649 12,829 43,201 2,102
Amount received in payment for work done on materials and products owned by others Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above	782 (100)	704 (92)
Total adjusted value of shipments and work done	61,403	68,343
Grand totals	139,526	149,555

#### TABLE 14. Shipments of Selected Goods of Own Manufacture - All Industries, 1955-64 (Includes shipments from other industries which manufacture, as a secondary activity, the commodities listed) A. Metal Windows<sup>1</sup>

Year	Aluminum	Steel	Combination and scre	insulating multi-pane window units	
			Aluminum	Steel	air seal (hermetically sealed)
			\$*000		
1955         1956         1957         1958         1959         1959         1960         1961         1962         1964	$\begin{array}{c} 12,304\\ 13,193\\ 19,441\\ 22,416\\ 22,152\\ 11,453\\ 17,663\\ 17,905\\ 19,785\\ 24,852 \end{array}$	2.903 5.107 4.931 4.245 4.036 5.650 4.378 4.519 3.802 3.159	5,686 6,710 7,399 8,877 12,051 15,847 15,147 13,360 17,631 18,907	3 3 5 3 3 3 3 3 3 3 3 3	2 2 2 2 2 9,394 12,506 14,108 16,629

Residential, factory and commercial use.
 New category for 1960—Included in other categories previously.
 Included in "steel", column 2.

TABLE 15. Principal Statistics classified by Industry Sub-group	ips. 1961 - 6	Sub-groups.	Industry	by	classified	Statistics	Principal	15.	TABLE
---	---------------	-------------	----------	----	------------	------------	-----------	-----	-------

				Manu	afacturing	activity				5	Fotal acti	vity	
Year and	Estab- lish-		ated worl		Cost of	Cost of	Value of shipments			; owners artners	Total employees		Total
sub-group	ments	Number	Man- hours paid	Wages	fuei and elect- 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		\$10	00				
Glass manufacturers								1					
1961 1962 1963 1964	12 12 12 13	5,814 5,765 5,873 5,900	12,340 12,327 12,910 13,244	22,926 24,005 25,724 27,513	4,156 4,913 4,661 4,695	21,249 24,390 23,355 22,916	68.111 81.573 78,123 81,212	44, 164 51, 731 51, 644 54, 400	X X X	X X X	7.077 7,125 7,293 7,221	29,312 30,230 32,675 34,457	44,338 52,052 51,969 54,799
Glass products manufacturers												1.1	
1961 1962 1963  1964	97 99 99 108	1, 981 2, 147 2, 228 2, 300	4,208 4,564 4,725 4,984	7,678 8,760 9,554 10,277	810 885 940 1,024	22,402 28,635 31,942 36,201	45.044 54.595 61,403 68,343	22,082 25,966 28,578 31,676	X X X X	x x x x	2,725 2,917 3,053 3,141	11,651 13,430 14,444 15,470	24,020 27,424 29,555 32,742

# 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	
Glass ma	nufacturers	
Quebec:		
Canadian Pittsburgh Industries Ltd. Consumers Glass Co. Ltd. Dominion Glass Company Limited Iroquois Glass Ltd.	258 Second Ave., Ville-St-Pierre 2376 Wellington St., Montreal	
Ontario:		
Chalet Artistic Glass Ltd. Consumers Glass Co. Ltd. Dominion Glass Company Limited Hickford Glass Co. Pilkington Bros. (Canada) Ltd.	249 Kipling Ave. S., Toronto Hamilton and Wallaceburg 230 Spruce St., Sault Ste. Marie	
Alberta:		
Altaglass Dominion Glass Company Limited Peace River Glass Company Ltd.	Redcliff	
	s manufacturers	
New Brunswick:		
Cuppens Studio	190 Somerset St., St. John	
Quebec:		
Anglo-Canadian Mercantile Co. Ltd. Belgian Glass Works Reg'd. Canadian Pittsburgh Industries Ltd. Canadian Plate Glass and Mirror Co. Ltd. Centre du Thermo Enr'g.	Pointe-aux-Trembles 255 Decarie Blvd., St-Laurent 8151 Metropolitan Blvd., Montreal	

#### List of Establishments classified to This Industry, 1964 - Continued

Name	Location

Glass products manufacturers - Continued

Quebec - Conciuded:

1	
	Columbia Frame Inc.
	D.C. Glass Ltée. David, R., Cie. Enrg.
	Dugal Auto Glass Edag Crystal Co. Ltd.
	Glass Hall Co. Ltd.
	Glasspack Limited Insulation Manufacturers and Processors Ltd
	Lafavette Glass Co. Ltd.
	Les Industries Duovitre Ltée
	Les Produits de Verri Scelle Ltée Les Unités-Scelles Enrg.
	Lorraine Glass Industries Ltd.
	Lubbers, Theodore J. Co., Ltd.
	Miroir Victoria Ville Ltée.
	Neon Company. The
	Phillips Cut Glass Co. Ltd.
	Scientific Glassblowing Reg'd. Star Glass (1963) Ltd.
	Stotter, E. Glass Products
	Superseal Corporation
	Vitra Glass Ltée.
	Viterle Bouchard Glass Inc.
	Vitrerie Canadienne Inc. Vitrerie Contrecoeur Enr'g.
	Vitrerie D.C. Glass Ltée.
	Vitrerie Generale Daveluyville Ltée Vitrerie Magog Glass Inc.
	Walker Glass Co. Ltd.
	Winter and Company

Octario:

Acadian Glass and Mirror Co. Arom Products (Canada) Ltd. Armalux Glass Industries Limited Beach Neon Canadian Pittsburgh Industries Ltd. Clapperton and Sons Ltd. Coming Glass Works of Canada Ltd. Cutler Brands Limited Duryl Products Corp. (Canada) Ltd. Duujate Canada Ltd. Duplate Canada Ltd. Duplate Canada Ltd. Duplate Canada Ltd. Duplate Canada Ltd. Elcyda Corp. Limited Elcyda Corp. Limited Fiex-O-Lite of Canada Ltd. Goldfish Supply Co. Ltd. Holophane Co. Ltd. The Hughes, W.J., and Sons "Com Flower" Ltd. Jonna Strling Limited. Lipman Sterling Limited. Lipman Sterling Limited. Morawiec, Jan North American Glass Industries Ltd. Morawiec, Jan North American Glass Industries Ltd. Poli Industries. De Pilkington Bros. (Canada) Ltd. Politington Bros. (Canada) Ltd. Service Glass Co. Ltd. Service Glass Altd. Service G 636 St. Paul St. W., Montreal 3640 Sabrevois, St., Montreal-Nord 6272 St.Hubert St., Montreal 969 Rachel St., Montreal 9999 Parn St., Montreal 6832 Garnier St., Montreal 75 Stinson Blvd., St. Laurent 2165 Parthenais St., Montreal Chicoutimi St. Antoine-des-Laurentides 296 de La Concorde, Montreal-Nord 275 Murray St., Montreal Chicoutimi 9124 Park Ave., Montreal 9124 Park Ave., Montreal 9124 Park Ave., Montreal Ville D'Anjou 2251 Papineau Ave., Montreal 15 Moliere, St., Montreal 4040 Jean Talon St. W., Montreal 450 Port Royal W., Montreal Douville 281, rue Darveau, Québec 6026 Hochelaga, Montreal 7640 Lajeunesse St., Montreal 7640 Sabrevois St., Montreal-Nord. Daveluyville Magog Ville D'Anjou 234 Laurier Ave. W., Montreal

5 Roslyn Ave., Toronto 27 Penn Drive, Weston 17 Racine Rd., Rexdale 54 Alice Crescent, Scarborough 1057 Eglinton Ave. W., Toronto 59 York St., London 135 Vanderhoof Ave., Toronto 126 Geary Ave., Toronto 126 Geary Ave., Toronto 127 Walker Rd., Windsor 166 South Service Rd., Oakville Pirst Ave., Oshawa 1850 Walker Rd., Windsor 66 Penn Drive, Weston 2 Thornciffe Pk. Dr., Toronto 17 Lesmill Rd., Don Mills St. Thomas Crowland Township Stouffville 418 Kipling Ave., S., Toronto 192 Parliament St., Toronto 194 Dent St., Voronto 679 York St., London 162 Parliament St., Toronto 194 John St., Toronto 194 Din St., Toronto 1932 Mattawa Ave., Cooksville 243 Victoria St., Toronto 1932 Mattawa Ave., Cooksville 247 Bridgeland Ave., Toronto 183 St., Toronto 1932 Mattawa Ave., Cooksville 247 Bridgeland Ave., Toronto 185 Roselawn Ave., Cooksville 247 Bridgeland Ave., Toronto 186 Soutial St., Toronto 1932 Mattawa Ave., Cooksville 247 Bridgeland Ave., Toronto 186 Soutial St., Toronto 187 Beiheld Rd., Rexdale Strathrog 134 Hartzel Rd., St. Catharines 19 New St., Toronto 67 Racine Rd., Rexdale Branpton 56 King St. W., Hamllton

# List of Establishments classified to This Industry, 1964 - Concluded

Name	Location								
Glass products manufacturers - Concluded									
fanitoba:									
Allmar Distributors Ltd. Brooker Window Ltd. Parmount Glass and Millwork Ltd. Seal-Dow Ltd. Structural Glass Ltd. Tru-Vu Industries Ltd. Westcan Industries Ltd.	602 Des Meurons St., St. Boniface 105 Panet Rd., St. Boniface Fennel and Somerville Sts., Fort Garry 466 Higgins Ave., Winnipeg Berry St. at Ellice St., Winnipeg								
askatchewan:									
Canadian Pittsburgh Industries Ltd. Solarpane Manufacturing Co. Ltd.									
Alberta:									
Continental Glass Mfg. Co. Ltd. Custom Glass Ltd. Vroom Art Studios Ltd. Winter Art Glass Studio	11402 - 105th Ave., Edmonton 2135 Kensington Rd., Calgary								
British Columbia:		150							
Fraser, J., Glass Works Hastings Glass and Mirrors Gordon, E.M. & Sons Ltd.	1150 E. Cordova St., Vancouver Prince George								
Kam-Seal Mfg. Ltd. Model Glass Shop. Seaboard Chemicals Ltd. Shick, Samuel E.	1751 Kingsway, Vancouver 1050 West 6th Ave., Vancouver 2137 Yew St., Vancouver	ni -							
Wallin's Glass Co. Ltd. Western Glass Co. Ltd.		Ь							

# 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 and wages) which are automatically salaries 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" above.

#### (d) Sales and distribution workers

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

#### (e) Total Employees

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

#### **Working Owners or Partners**

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

#### Salaries and Wages

Salaries and wages refer to gross earnings of employees **before** deductions for income tax and employees contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages. bonuses, profits shared with employees, the value of room and board where provided, commissions (paid to regular employees only) as well as any other allowance forming part of the worker's earnings. Payments for over-time are included. Figures on salaries and wages refer to the calendar year.

#### **Fuel and Electricity**

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

#### **Materials and Supplies**

#### (a) Manufacturing activities

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

#### (b) Non-manufacturing activities

1. Purchases for re-sale as such

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

2. Other materials and supplies used

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of purchased machinery and equipment. Also included is the cost of office supplies not chargeable to fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

#### Shipments

#### (a) General

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

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

#### (b) Shipments of goods of own manufacture

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

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

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

#### (c) Shipments of goods not of own manufacture

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

#### (d) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees, such as revenue from goods produced or purchased for rental (the book value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for 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 ovn 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 purchased 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".

