

# Machinery Program Analysis 1968 Imports

### **Machinery Program Analysis** DEPARIMENT OF INDUSTRY

+1D 9705 ·CZA3

IRADE & COMATERCE LIBRARY

BIBLIO

MINISTERE DE L'INDUSTRIE ET DU COMMERCE

### **1968** Imports

The Machinery Program was introduced on January 1, 1968, in accordance with the provisions of tariff item 42700-1. It covers a broad range of machines, as well as their accessories, attachments, control equipment and tools, used by Canadian manufacturing and service industries, and replaced 18 tariff items under which such machines were formerly dutiable. The rates of duty under the new tariff item (42700-1) are 21/2 per cent B.P. and 15 per cent M.F.N. with provision for duty remission when machinery is not available from Canadian production.

This report identifies the full range of machinery and related equipment not available from Canadian production, and imported free of duty during 1968 under this tariff item.

The statistical detail is presented under 47 main groups of machinery which are, in turn, divided into generally identifiable sub-groups.

Enquiries concerning this report should be addressed to:

Machinery Branch, Department of Industry, Trade and Commerce. 112 Kent Street. Ottawa.

#### TABLE OF CONTENTS

#### Section 1

#### SPECIAL PURPOSE AND SERVICE INDUSTRIES MACHINERY AND EQUIPMENT

Other Special Purpose and Service Industries Machinery and Equipment 13	Cleaning, Blasting, Plating and Spraying Equipment and Systems	4
Food Products, Beverage and Tobacco Machinery and Equipment       9         (Excluding canning machines)       9         Motor Vehicle, Aircraft, Rail, Marine and Machinery Maintenance       12         Equipment       12         Other Special Purpose and Service Industries Machinery and Equipment       13         Office Machinery       15	Commercial Laundry and Dry Cleaning Equipment	5
(Excluding canning machines)9Motor Vehicle, Aircraft, Rail, Marine and Machinery Maintenance12Equipment12Other Special Purpose and Service Industries Machinery and Equipment13Office Machinery13	Washing, Filling, Packaging and Labelling Machinery	6
Motor Vehicle, Aircraft, Rail, Marine and Machinery Maintenance Equipment 12 Other Special Purpose and Service Industries Machinery and Equipment 13 Office Machinery 11	Food Products, Beverage and Tobacco Machinery and Equipment	
Motor Vehicle, Aircraft, Rail, Marine and Machinery Maintenance       12         Equipment       12         Other Special Purpose and Service Industries Machinery and Equipment       13         Office Machinery       13	(Excluding canning machines)	9
Other Special Purpose and Service Industries Machinery and Equipment 13 Office Machinery		
Other Special Purpose and Service Industries Machinery and Equipment 13 Office Machinery 11	Equipment	12
• mee meeninery	Other Special Purpose and Service Industries Machinery and Equipment	13
	Office Machinery	15
		16

#### Section II

#### CUSTOM ENGINEERED MACHINES

Compressors and Industrial Fans and Blowers	17
Pumps and Valves	18
Industrial Air Conditioning and Refrigeration Equipment	19
Sawmill, Lumbermill and Woodworking Machinery and Equipment	21
Veneer and Plywood Machinery and Equipment	22
Pulp and Paper Machinery	23
Power Transmission Equipment, Pneumatic Cylinders and Actuators	24
Moulding and Casting Systems and Equipment	25
Non-Metallic Mineral Industry Machinery	26
Physical Properties Testing, Inspection, and	
Pollution Abatement Equipment	26
Chemicals and Pharmaceuticals Industries Machinery	27
Industrial Filters and Water and Sewage Treatment Equipment	28
Industrial Separators	28
Industrial Heat Exchangers	28
Pressure and Vacuum Vessels	29
Industrial Furnaces and Furnace Equipment	29
Hydraulic Gates and Operating Mechanisms and Governors	29
Other Miscellaneous Custom Engineered Machines	30
Bundling and Strapping Machinery (Not agriculture)	30

#### Section III

### CONSTRUCTION AND MATERIALS HANDLING MACHINERY AND EQUIPMENT

Excavating, Dredging and Loading Equipment	31
Concrete Construction Equipment	32
Road Graders, Sweepers, Rollers and Compactors	32
Other Construction and Maintenance Machinery and Equipment	33
Conveyors, Conveyor Systems, and Crushing Plants	34
Hoisting Machinery	35
Industrial Trucks, Tractors, Trailers and Stackers	36
Rubber Working and Plastic Industry Machinery and Equipment	37
Mills and Mixing Machinery	39
Metal Rolling Mill Equipment	39
Hydraulic Turbines and Self-Contained Electric Generating Sets	39
Grain Elevator Machinery (Excluding materials handling	
and dust control)	40

#### TABLE OF CONTENTS

#### Section IV

#### METAL WORKING AND HAND POWER TOOL MACHINERY

Metal Cutting Machine Tools	41
Metal Forming Machinery and Equipment	
Cutting and Forming Tools for Metal Working Machinery	
Power Operated Hand Tools, Pneumatic or Electric	50

#### Section V

#### INDUSTRIAL CONTROL EQUIPMENT

Industrial Control Equipment	52
Electrical Motors, Generators and Power Conditioning Equipment	55
	55
Electrical Appliances	56

#### Section I SPECIAL PURPOSE AND SERVICE INDUSTRIES MACHINERY AND EQUIPMENT

## cleaning, blasting, plating and spraying equipment and systems

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Abrasive cleaning and blasting equip-	U.S.A.	128	330
ment and parts	This equipment is now avection of horizontal machines.	vailable from Canac tumbling barrel ty <sub>l</sub>	dian production with the pe airless blast cleaning
Steam cleaning and washing equipment and parts	U.S.A.	756	219
·	Excluding high pressure v of 180 to 200 g.p.h. at 400		cleaners, with capacities
Other cleaning equipment and parts	U.S.A. Others	1,510	138 2
		1,510	140
	U.S.A.		440
Plating equipment and parts		38	440
riating equipment and parts	Others	2	23
Plating equipment and parts		mbination hoisting	463 custom designed heavy
	Others Excluding plating rack of production automatic con	units and certain mbination hoisting	463 custom designed heavy
Spraying equipment and parts	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A.	units and certain mbination hoisting	463 custom designed heavy and conveying machines 467
	Others Excluding plating rack of production automatic con for plating racks or barrel	units and certain mbination hoisting s. 505 <u>–</u>	463 custom designed heavy and conveying machines
	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others	units and certain mbination hoisting s. 505 505 oray units, automat	463 custom designed heavy and conveying machines 467 <u>2</u> 469 ic high speed horizontal
	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp	units and certain mbination hoisting s. 505 505 oray units, automat	463 custom designed heavy and conveying machines 467 <u>2</u> 469 ic high speed horizontal
Spraying equipment and parts Floor machines and parts (excluding	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp rotary arm paint spraying U.S.A.	units and certain mbination hoisting s. 505 505 oray units, automat	463 custom designed heavy and conveying machines 467 2 469 ic high speed horizontal nt curing ovens. 561
Spraying equipment and parts	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp rotary arm paint spraying U.S.A. W. Germany	units and certain mbination hoisting 505 505 oray units, automat machines, and pair 723  723	463 custom designed heavy and conveying machines 467 2 469 ic high speed horizontal nt curing ovens. 561 3 564
Spraying equipment and parts Floor machines and parts (excluding	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp rotary arm paint spraying U.S.A. W. Germany	units and certain mbination hoisting 505 505 oray units, automat machines, and pair 723 723 ers and polishers, ce	463 custom designed heavy and conveying machines 467 2 469 ic high speed horizontal nt curing ovens. 561 3
Spraying equipment and parts Floor machines and parts (excluding	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp rotary arm paint spraying U.S.A. W. Germany Excluding certain scrubbe	units and certain mbination hoisting 505 505 oray units, automat machines, and pair 723 723 ers and polishers, ce	463 custom designed heavy and conveying machines 467 2 469 ic high speed horizontal nt curing ovens. 561 3 564
Spraying equipment and parts Floor machines and parts (excluding	Others Excluding plating rack of production automatic con for plating racks or barrel U.S.A. Others Excluding airless paint sp rotary arm paint spraying U.S.A. W. Germany Excluding certain scrubbe	units and certain mbination hoisting 505 505 oray units, automat machines, and pair 723 723 ers and polishers, ce	463 custom designed heavy and conveying machines 467 2 469 ic high speed horizontal nt curing ovens. 561 3 564

# commercial laundry and dry cleaning equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)	
Washing machines and parts	U.S.A. Sweden	905 5 910	471 <u>9</u> 480	
	Excluding coin operated a and continuous washing r	machines capacity	up to 18 lbs. dry weight	
· ·				
Drying tumblers and parts	U.S.A. Excluding coin operated r	59 machines capacity (	112 up to 16 lbs. dry weight.	
Laundry finishing equipment and parts	U.S.A. Excluding certain hydro ex	230 stractors.	276	
Other commercial laundry equipment and parts	U.S.A. U.K.	212	220 31 7	
	Italy Sweden Others	13 163 4	86 	
	Excluding steam heated ir widths of 110 ins. and 126		367 ith two or more rolls in	
Dry cleaning presses and finishing equipment	U.S.A.	637	497	
	Excluding vertical bag type pants toppers, and utility presses (legger, silk press, wool press and all purpose utility), in all buck sizes.			
Dry cleaning units and parts	U.S.A. U.K. Italy W. Germany	130 51 25 21	339 185 111 <u>89</u>	
		227	724	
Other dry cleaning equipment and parts	U.S.A. W. Germany	351 <u>4</u>	328	
	Group Total	355 2,810	356 2,812	

# washing, filling, packaging and labelling machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Bottle washing machinery and parts	U.S.A. Mainly for breweries, dist	20 illeries and soft dri	349 nk industry.
Bottle filling machinery and parts	U.S.A. Others Excluding in-line liquid fil	$\frac{49}{9}$ 58	421 142 563
	Excluding m-me inquid m		ning neads.
		2.4	122
Bottle capping machinery and parts	U.S.A. U.K.	34 4	133 262
	Others	8	24
		46	419
Bottle cartoning and uncartoning ma- chinery and parts	U.S.A.	2,072	312
	Excludes: case packers fo by 40 ins. by 24 ins.; end- operating at speeds of up can cartoning machines f	loading cartoning i to 1,000 bottles p	machines for beer bottle per minute; wrap-around
Bottle sealing and labelling machinery	U.S.A.	29	454
		29	454
	U.S.A. Mainly sealing machinery	29	454
	U.S.A. Mainly sealing machinery	29	454
and parts	U.S.A. Mainly sealing machinery shoulder label capacity.	29 v and combination 25	454 Iabelling machines with
and parts	U.S.A. Mainly sealing machinery shoulder label capacity. U.S.A. U.S.A.	29 v and combination 25	454 Iabelling machines with 580
and parts Can making machinery and parts	U.S.A. Mainly sealing machinery shoulder label capacity. U.S.A.	29 y and combination 25 30 30 3	454 Iabelling machines with 580
and parts Can making machinery and parts	U.S.A. Mainly sealing machinery shoulder label capacity. U.S.A. U.S.A.	29 v and combination 25 30 <u>33</u> Iler machines; volu	454 Iabelling machines with 580 <u>321</u> <u>27</u> <u>348</u>
and parts Can making machinery and parts	U.S.A. Mainly sealing machinery shoulder label capacity. U.S.A. U.S.A. U.K. Excludes: canned ham fi	29 v and combination 25 30 <u>33</u> Iler machines; volu	454 Iabelling machines with 580 <u>321</u> <u>27</u> <u>348</u>
and parts Can making machinery and parts	U.S.A. Mainly sealing machinery shoulder label capacity. U.S.A. U.S.A. U.K. Excludes: canned ham fi	29 v and combination 25 30 <u>33</u> Iler machines; volu	454 Iabelling machines with 580 <u>321</u> <u>27</u> <u>348</u>

	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other can washing, filling, closing and labelling machinery and parts	U.S.A. Others	40	209 2
	Excluding spot labellers to high by 8 ins. in diameter.	43 9 ins. by 6 ins. o	211 n containers to 14.5 ins.
Bag and envelope filling and stuffing	U.S.A.	64	277
machinery and parts	W. Germany	<u> </u>	<u> </u>
Combination bag and envelope making,	U.S.A.	39	351
filling and closing machinery and parts	U.K. Japan	2 6	8 15
	Others	2	33
		49	407
Other bag and envelope packaging machinery and parts	U.S.A.	97	185
	Excluding bag sealers - peo	lal operated, up to :	30 ins.
		9	
Box, carton and case forming machinery	U.S.A.	5	119
Box, Carton and case forming machinery and parts	O.S.A. Others		3
Box, Carton and Case forming machinery and parts		9 cases to 32 ins. by	3 122 40 ins. by 24 ins.; lock
Box, Carton and Case forming machinery and parts	Others Excluding: case formers of	9 cases to 32 ins. by	3 122 40 ins. by 24 ins.; lock
and parts Box, carton and case filling machinery	Others Excluding: case formers of	9 cases to 32 ins. by	$\frac{3}{122}$ 40 ins. by 24 ins.; lock
and parts	Others Excluding: case formers of tab carton formers from bla	9 cases to 32 ins. by anks to 23 ins. by 34 16	3 122 40 ins. by 24 ins.; lock 4 ins. 225
and parts Box, carton and case filling machinery	Others Excluding: case formers of tab carton formers from bla U.S.A.	9 cases to 32 ins. by anks to 23 ins. by 34 16	3 122 40 ins. by 24 ins.; lock 4 ins. 225
and parts Box, carton and case filling machinery and parts Box, carton and case closing machinery	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3 U.S.A.	9 cases to 32 ins. by anks to 23 ins. by 34 16 22 ins. by 40 ins. by 42	<u>3</u> 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180
and parts Box, carton and case filling machinery and parts	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3	9 cases to 32 ins. by anks to 23 ins. by 34 16 22 ins. by 40 ins. by 42 , bottom, or top a	3 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180
and parts Box, carton and case filling machinery and parts Box, carton and case closing machinery	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3 U.S.A. Excluding case sealers top,	9 cases to 32 ins. by anks to 23 ins. by 34 16 22 ins. by 40 ins. by 42 , bottom, or top a	3 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180
and parts Box, carton and case filling machinery and parts Box, carton and case closing machinery and parts Combination box and carton opening,	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3 U.S.A. Excluding case sealers top, cases to 32 ins. by 40 ins. by U.S.A.	9 cases to 32 ins. by anks to 23 ins. by 34 16 22 ins. by 40 ins. by 42 , bottom, or top a	3 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180 nd bottom sealers, for 271
and parts Box, carton and case filling machinery and parts Box, carton and case closing machinery and parts	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3 U.S.A. Excluding case sealers top, cases to 32 ins. by 40 ins. by	9 cases to 32 ins. by anks to 23 ins. by 34 16 22 ins. by 40 ins. by 42 bottom, or top a 24 ins.	3 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180 nd bottom sealers, for
and parts Box, carton and case filling machinery and parts Box, carton and case closing machinery and parts Combination box and carton opening,	Others Excluding: case formers of tab carton formers from bla U.S.A. Excluding case packers to 3 U.S.A. Excluding case sealers top, cases to 32 ins. by 40 ins. by U.S.A.	9 cases to 32 ins. by anks to 23 ins. by 34 16 2 ins. by 40 ins. by 42 bottom, or top a 24 ins. 18 7	<u>3</u> 122 40 ins. by 24 ins.; lock 4 ins. 225 24 ins. 180 nd bottom sealers, for <u>271</u> <u>96</u>

1

•

,

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Blister sealing machinery and parts	U.S.A.	8	163
с , <u>,</u>	W. Germany		23
		8	186
Film wrapping machinery and parts	U.S.A.	36	306
	U.K.	<u> </u>	47 353
	Excluding sleeve wrappers		
Other plastic packaging machinery and	U.S.A.	128	510
parts	Others	128	<u> </u>
	Excluding: shrink tunnels automatic and semi-auto automatic and semi-auton 18 ins. wide; pouch mach by 2 ins. to 6 ins. by 8 ins	with tunnel openii matic L sealers to natic baggers to 16 ines for pouches ra	ngs to 11 ins. by 27 ins.; size 40 ins. by 40 ins.; ins. wide; bag sealers to
Special purpose packaging machinery	U.S.A.	81	325
and parts (including ampoule and cap- sule filling and sealing)	Sweden Others	3 17	63 69
suic ming and scame,	Others	101	457
Miscellaneous packaging machinery	U.S.A.	608	432
and parts	U.K.	6	66
	Others	621	<u> </u>
Labelling machinery and parts (exclud-	U.S.A.	547	316
ing bottle and can labelling machinery)	W. Germany	16	158
	Others		4
		563	478
Tape dispensing machinery and parts	U.S.A.	1,662	120
Wrapping machinery and parts	U.S.A.	43	350
	Others	9	55
		52	405

,

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Marking and stamping machinery and parts	U.S.A.	327	116
ματό	Group Total	6,242	9,397

#### food products, beverage and tobacco machinery and equipment (excluding canning machines)

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Bakery mixing machinery and parts	U.S.A. U.K. Netherlands W. Germany Others Excluding vertical mixers horizontal large capacity of	1,080 32 13 9 	457 262 10 10 <u>2</u> 741 y and certain stationary
Bakery moulders and parts	U.S.A. U.K. Netherlands Switzerland W. Germany Others	45 31 13 3 11 7 110	$     \begin{array}{r}       102 \\       5 \\       1 \\       6 \\       4 \\       -7 \\       -125     \end{array} $
Bread slicing machines and parts	U.S.A. W. Germany	18,041 2 18,043	116 7 123
Other bakery machinery and equip- ment and parts	U.S.A. France Netherlands W. Germany Others Excluding certain dough elevators, and automatic g		712 24 23 15 <u>11</u> 785 an oilers, bread dough

U.S.A. U.K. W. Germany Others U.S.A. Italy	63 5 25  93 301	638 135 51 <u>4</u> 828
U.K. W. Germany Others U.S.A. Italy	5 25 — 93	135 51 4
W. Germany Others U.S.A. Italy	<u>93</u>	4
Others U.S.A. Italy	<u>93</u>	4
U.S.A. Italy		828
Italy	301	
Italy	301	
		351
	23	5
W. Germany	383	3
Excluding manually operat	707 ted non-gravity feed	359 d machines.
U.S.A.	284	433
Denmark	3	8
Japan	3	5
W. Germany	44	60
Others	4	7
Excluding certain animal s		513 nent.
U.S.A.	722	1,937
Sweden	4	22
Others	3	22
Fuel uling anythin button o		1,981
excluding certain butter of	r marganne print io	imers and wrappers.
115 4	1 553	685
		17
		157
Others	7	15
	2,191	874
U.S.A.	1,412	2,374
Japan	5,484	<sup>′</sup> 10
Others	7	11
Mainly bottling machiner	6,903	2,395
	•	
U.S.A.	48	382
	16	86
	3	24
Others		79
	67	571
	U.S.A. Denmark Japan W. Germany Others Excluding certain animal s U.S.A. Sweden Others Excluding certain butter o U.S.A. Italy W. Germany Others U.S.A. Japan Others Mainly bottling machinery U.S.A. U.S.A. U.S.A. Japan	Excluding manually operated non-gravity feedU.S.A.284Denmark3Japan3W. Germany44Others4338Excluding certain animal slaughtering equipmedU.S.A.722Sweden4Others3729Excluding certain butter or margarine print forU.S.A.1,553Italy306W. Germany325Others72,191U.S.A.1,412Japan5,484Others76,903Mainly bottling machinery.U.S.A.48U.K.16W. Germany3Others-03Others-03Others-03Others3

Ą

.

٢

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Fish preparing machinery and parts	U.S.A. Netherlands Others	45 3 — 48	227 9 <u>1</u> 237
Fresh fruit and vegetable processing machinery and parts	U.S.A. Sweden Mainly peeling and pitting	1,189 <u>85</u> 1,274 g machinery.	$ \begin{array}{r} 334 \\ \underline{14} \\ \overline{348} \end{array} $
Other food products machinery and equipment and parts	U.S.A. Denmark W. Germany Others	$ \begin{array}{r} 24\\2\\3\\-2\\-31\end{array} $	$ \begin{array}{r} 28\\ 44\\ 3\\ -9\\ -84 \end{array} $
Tobacco processing machinery and parts	U.S.A. U.K. W. Germany	35 15 <u>17</u> 67	83 142 <u>90</u> 315
	Mainly processing and filte	er-making machiner	<b>у</b> .
Food mixers, juicers and blenders and parts	U.S.A. U.K. W. Germany Others	1,187 23 24 <u>204</u> 1,438	$ \begin{array}{r} 72\\ 3\\ 14\\ \underline{}\\ 92 \end{array} $
Meat grinders, choppers and slicers, electric and parts (excluding domestic)	U.S.A. W. Germany Mainly grinders and chopp	5,032 283 5,315 ers in excess of 68 I	250 <u>11</u> 261 Ibs. per minute.
Other food grinders, choppers and slicers, electric and parts (excluding domestic)	U.S.A. Italy W. Germany	1,813 32 <u>9</u> 1,854	237 9 <u>2</u> 248
Other food preparation appliances and parts	U.S.A. W. Germany	370 <u>89</u> 459	105 5 110

Ą

.

1

.

COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
U.S.A.	706	120
U.S.A.	328	14
Group Total	42,237	11,124
	U.S.A. U.S.A.	U.S.A. 706 U.S.A. 328

## motor vehicle, aircraft, rail, marine and machinery maintenance equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Tire servicing and repairing equipment	U.S.A.	12,325	362
The servicing and repairing equipment	U.K.		363
	Sweden	197	16
	W. Germany	150	9
		12,672	750
	Excluding: tire repair vu spreaders; certain tire rep side wall repair machines; wall machines; certain tir	oair moulds; certain : certain inlay rubbe	passenger tire bead and r slitting and inlay colour
Motor vehicle, maintenance, servicing	U.S.A.	864	730
and repair equipment and parts	W. Germany	_	6
	Mainly lathes and boring and engine blocks; ce machines.		
Aircraft maintenance, servicing and repair equipment and parts	U.S. <b>A</b> .	13	44
Rail maintenance, servicing and repair	U.S.A.	3,296	346
equipment and parts	Others	65	5
		3,361	351
	Excluding certain tables certain rip jacks.		ransferring rail cars and

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other maintenance, servicing and re-	U.S.A.	998	89
pair equipment and parts	U.K.		40
		998	129
	Mainly mechanical and air	r-hydraulic jacks.	
Industrial lubricating equipment, sys-	U.S.A.	549	184
tems and parts	Group Total	18,457	2,194

# other special purpose and service industries machinery and equipment

	U.S.A. Denmark Italy W. Germany Excluding clicking machir machines, rack and fitting moulding machines. U.S.A.	room transporters	226 50 18 7 301 g machines, breast skiver and certain forming and
	Italy W. Germany Excluding clicking machir machines, rack and fitting moulding machines.	9 6 151 nes, edge trimming room transporters	18 7 301 machines, breast skiver
	W. Germany Excluding clicking machir machines, rack and fitting moulding machines.	6 151 nes, edge trimming room transporters	7 301 machines, breast skiver
	Excluding clicking machir machines, rack and fitting moulding machines.	151 nes, edge trimming room transporters	301 g machines, breast skiver
	machines, rack and fitting moulding machines.	nes, edge trimming room transporters	g machines, breast skiver
	machines, rack and fitting moulding machines.	room transporters	g machines, breast skiver and certain forming and
	U.S.A.		
	U.S.A.		
Rubber, canvas, and other footwear	0.0.7	146	354
machinery and parts	Italy	4	5
machinely and parts	Sweden	4,550	5
	W. Germany	27	59
	Others	5	10
		4,732	433
	Mainly sole and heel attac	hing to uppers mac	hinery.
Leather tanning and working machine-	U.S.A.	62	60
ry and parts	Others	4	55
		66	115
Textile machinery and parts	U.S.A.	1,713	510
rextile indefiniery and parts	U.K.	-	5
	Japan	195,242	162
	Śweden	13	27
	Switzerland	353	30
	W. Germany	255	40
	Others	10	13
		197,586	787
	Excluding certain washing,	drying and dyeing	machines.

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Electric motor production machinery and parts	U.S.A.	33	202
Radio, TV and electronics machinery and parts	U.S.A.	519	839
Lens grinding and finishing machinery and parts	U.S.A. Others	136 3 139	166 <u>30</u> 196
	Excluding: certain rimles machines; lap cutting ma generator machines.	ss edgers; hand s	urfacers; giant cylinder
Photographic machinery and process- ing equipment and parts	U.S.A.	17	713
Lawn conditioning and preparation equipment and parts (excluding lawn mowers)	U.S.A.	7,609	333
Miscellaneous special purpose ma- chinery and equipment and parts	U.S.A. U.K. W. Germany Others	8,620 6 36 <u>45</u> 8,707	2,269 37 85 53 2,444
Printing machinery and parts	U.S.A. Japan W. Germany	3,890 	492 8  510
*			
Surgical and medical machinery and equipment and parts	U.S.A. U.K. W. Germany	5,209 123 5,332	112 35 <u>4</u> 151

ŧ

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Amusement and sports devices and	U.S.A.	49	156
parts	Italy	33	18
•	W. Germany	_	53
		82	227
Barber shops and beauty parlor equip- ment and parts	U.S.A.	538	10
	U.S.A. Excluding shavers (key-we chairs and hydraulic lift m Mainly electric lather mac	ound, spring opera techanisms.	nted) and beauty parlor

### office machinery

ŧ

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Cheque protectors and signers and parts	U.S.A.	1,684	133
Stencil cutting machines and parts	U.S.A. Denmark Japan W. Germany	54 39 40 <u>241</u> 374	12 14 10 <u>141</u> 177
Other office machinery and parts	U.S.A. U.K.	163,089 3,334	2,543 295
	Belgium Japan Sweden W. Germany Excluding paper joggers a postage meter machines u Mainly perforators and p addressers, shorthand mu autograph registers, pape drilling equipment and au	p to 10,000 pieces/ł paper shredders, m achines, decollator. r binding equipme	hr. hail openers, automatic s, paper sheet sorters, ht, hole punching and

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Vending machinery and equipment and parts	U.S.A. Netherlands	2,088 20 2,108	788 <u>4</u> 792
	Mainly upright milk mach single cup coffee mach separately mounted coin a wrapping machines.	nines, İce cream ma nines, ticket mach	ines, trading machines,
	Group Total	2,108	792

### vending and coin handling machinery

#### Section II CUSTOM ENGINEERED MACHINES

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Air compressor package units and parts	U.S.A. Others	11 3	102 40
	Mainly oil-free, screw type	14 e.	142
Air compressors, portable and parts	U.S.A. Mainly in excess of 600 c.f	12 .m. and 125 p.s.i.g.	212
Reciprocating air compressors and	U.S.A. Others	72	118
parts	Mainly for specialty applic	$\frac{6}{78}$	<u>1</u>
	manny for specially appres		
Rotary type air compressors and parts	U.S.A.	54	441
	U.K. Others	49 10	120 160
		113	721
	Mainly in excess of 600 c.f.	.m.	
Other air compressors and parts	U.S.A.	1,559	93
	0.0.7 %	1,555	,,,
Gas compressors and parts (excluding	U.S.A.	55	515
refrigeration types)	Others		8
	Mainly centrifugal, for hydr for natural gas service.	55 o-carbon synthesis;	523 and reciprocating type
Industrial fans and blowers and parts	U.S.A. Others	397	361
		<u>21</u> 418	<u> </u>
	Mainly high speed, centrifu charge pressure and in the	ugal, single stage, le order of 25,000 c.f.r	ess than 10 p.s.i.g. dis-
	Group Total	2,249	2,200

### compressors and industrial fans and blowers

### pumps and valves

DESCRIPTION		QUANTITY	VALUE (\$,000)
Pumps, centrifugal, single stage, and	U.S.A.	17,972	280
parts	Others	<u> </u>	<u></u>
	Mainly for specialty applic	18,131 cations.	302
Pumps, measuring and proportioning, and parts	U.S.A.	4,630	771
	Mainly for use in dispensi	ng chemicals into p	process streams.
Pumps, reciprocating, piston type and	U.S.A.	371	209
parts	Others	<u> </u>	$\frac{56}{265}$
	Mainly high discharge—e		265
Pumps, reciprocating (excluding piston types) and parts	U.S.A.	44	167
types) and parts	Mainly extra high discharg	ge pumps.	
Pumps, rotary, gear or vane types, and	U.S.A.	660	119
parts	Others	<u> </u>	<u> </u>
	For specialty application.		
Other pumps and parts (excluding va-	U.S.A. Others	2,325 10,555	216 55
cuum pumps)	Others	12,880	271
Vacuum pumps and parts (excluding	U.S.A.	481	332
vacuum pumps for milking machines)	U.K. Others	165	94 7
		646	433
	Mainly for high vacuum s sure vacuum pumps.	techniques. Exclude	es low and medium pres-
Valves and parts	U.S.A.	1,397	583
	Others	4	1
		1,401	584

## industrial air conditioning and refrigeration equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Room air conditioners, window and wall sleeve type, in excess of 12,000 b.t.u.'s per hour, and parts	U.S.A.	227	165
	Mainly ''through the wa production.	all" units, now a	vailable from Canadian
Self-contained air conditioning units (excluding window and wall sleeve types) and parts	U.S.A.	228	186
	Mainly package air conditi	oning units in exces	ss of 15 tons.
Roof top type air conditioners, com- bination heating and cooling (exclud-	U.S.A.	667	933
ing heat pumps) and parts	Mainly roof top units less	than 5 tons and ur	nits in excess of 40 tons.
Other air conditioners, combination heating and cooling (excluding heat pumps) and parts	U.S.A.	1,087	350
Dehumidifiers, self-contained, and hu- midifiers and parts	U.S.A. Switzerland	1,294 25	245 9
	Commercial units.	1,319	254
Special purpose refrigeration cabinets and parts	U.S.A.	638	119
	Mainly low temperature,	high humidity env	/ironmental_equipment.
Drinking water coolers, including office type, self-contained, and parts	U.S.A.	3,651	448
Ice makers and parts	U.S.A. Excluding ice cube making Ibs. per day inclusive. Th Canadian production.	1,091 g machines with ca nese ratings are no	427 pacity from 100 to 600 ot now available from

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Automotive air conditioning units and parts	U.S.A.	4,180	370
Truck refrigeration units, mechanical, and parts	U.S.A.	724	2,375
Other commercial refrigeration units	U.S.A.	130	270
and parts (including railroad units)	U.K.	<u>5</u> 135	<u>28</u> 298
Hermetic and semi-hermetic refrigera- tion compressor units and parts	U.S.A.	63,041	2,230
	Excluding 1/4 h.p. welded Welded hermetics in the service and semi-hermetic from Canadian production	5 - 7,000 b.t.u.h. ra cş to 125 h.p. are n	inge for air conditioning
Refrigeration compressor units and bare compressors, open type, except ammo-	U.S.A.	62	164
nia and parts	Mainly units in excess of 3	80 h.p.	
Refrigeration compressor units and bare	U.S.A.	159	326
compressors, ammonia type, recipro- cating and rotary, and parts	Denmark Sweden	4	4 22
		163	352
Other refrigeration compressor units and bare compressors and parts	U.S.A.	92	242
Refrigeration condensing units and parts	U.S.A.	1,313	131
Liquid chillers, centrifugal type, and parts	U.S.A.	132	2,214
	Mainly units in excess of 1		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Liquid chillers, absorption type, and	U.S.A.	285	428
parts	Mainly units in excess of 1	00 h.p.	
Other air conditioning and refrigera-	U.S.A.	893	422
tion and parts	Group Total	79,928	12,108
		15,520	12,100

## sawmill, lumbermill and woodworking machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Lumber dressing and trimming machine-	U.S.A.	8	184
ry and equipment and parts	Others	3 11	<u>4</u> 188
	Mainly planer-matchers; Canadian production.		
Other sawmill and lumbermill machine- ry and equipment and parts	U.S.A. Others	19	136 25
Ty and equipment and parts	Others	19	161
	Mainly twin band saws or in diameter.		
Woodworking saws, circular, and parts	U.S.A.	71	116
	Others	37	41
	Mainly radial saws exceed	108 ling 12 ins. diamete	157 er and large panel saws.
	, 	°	
Other woodworking saws and parts	U.S.A.	73	69
Č I	U.K.	18	44
	Others	24	17
	Mainly small panel saws.	115	130
Tenoning machines and parts	U.S.A.	6	155
	U.K. Belgium-Lux.	—	18
	Others	3	15 12
		9	200
	Mainly double-end tenone		200

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Planers, routers and shapers, wood-	U.S.A.	31	91
working, and parts	U.K.	11	46
	Japan	13	23
	Sweden		11
	Others	21	22
		76	193
	Mainly multi-spindle shap		
 -			
Sanders, surfacing and finishing, and	U.S.A.	1,748	122
parts	U.K.	7	25
F	Belgium	4	23
	Italy	13	5
	Netherlands	16	43
	Sweden	9	14
	W. Germany	18	50
	,	1,815	282
		1013	
	Mainly wide belt sanders f		
		or wood-working a	pplication.
Other woodworking machinery and	U.S.A.	or wood-working a 4,569	pplication. 558
Other woodworking machinery and parts	U.S.A. U.K.	or wood-working a 4,569 11	pplication. 558 120
	U.S.A. U.K. Italy	or wood-working a 4,569 11 43	pplication. 558 120 44
	U.S.A. U.K. Italy Japan	or wood-working a 4,569 11 43 5,484	pplication. 558 120 44 10
	U.S.A. U.K. Italy Japan Switzerland	or wood-working a 4,569 11 43	pplication. 558 120 44 10 28
	U.S.A. U.K. Italy Japan Switzerland U.S.S.R.	or wood-working a 4,569 11 43 5,484 3 —	pplication. 558 120 44 10 28 8
	U.S.A. U.K. Italy Japan Switzerland U.S.S.R. W. Germany	or wood-working a 4,569 11 43 5,484 3  32	pplication. 558 120 44 10 28 8 40
	U.S.A. U.K. Italy Japan Switzerland U.S.S.R.	or wood-working a 4,569 11 43 5,484 3 —	pplication. 558 120 44 10 28 8
	U.S.A. U.K. Italy Japan Switzerland U.S.S.R. W. Germany	or wood-working a 4,569 11 43 5,484 3  32	pplication. 558 120 44 10 28 8 40

# veneer and plywood machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Particle board, flake board and hard	U.S.A.	8	145
board machinery and equipment (in-	U.K.	5	9
cluding presses) and parts	W. Germany		8
		13	162
	Mainly particle board prep	paration machinery	and presses.

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Mainly for veneer patching and hand-	U.S.A.	39	225
ling	Italy	11	82
5	W. Germany	4	21
		54	328
	Mainly materials equipmen	nt.	
	Group Total	67	490

### pulp and paper machinery

ð

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Pulp mill machinery and equipment	U.S.A.	42	177
and parts	Norway		67
	Mainly centrifugally cast ro	42	244
	manny centringany casere		
Pulp, paper and paperboard machinery	U.S.A.	12	490
and equipment and parts	Sweden	_	16
	W. Germany	833	49
	Mainly finished product ha turing equipment such as f	845 andling equipment, or diapers.	555 and specialty manuf.
	Mainly finished product h turing equipment such as f U.S.A. U.K.	andling equipment, or diapers. 14 	and specialty manufa 100 <u>13</u>
Paper and paperboard converting ma- chinery and parts	turing equipment such as f	andling equipment, or diapers. 14 — 14 14	and specialty manufa
chinery and parts	turing equipment such as f U.S.A. U.K. Mainly printer slotter equip	andling equipment, or diapers. 14 	. and specialty manufa 100 <u>13</u> 113
chinery and parts Other pulp and paper machinery and	turing equipment such as f U.S.A. U.K.	andling equipment, or diapers. 14 — 14 14	and specialty manufa 100 <u>13</u>
chinery and parts	turing equipment such as f U.S.A. U.K. Mainly printer slotter equip	andling equipment, or diapers. <u>14</u> <u>—</u> 14 oment. 68	. and specialty manufa 100 <u>13</u> 113

## power transmission equipment, pneumatic cylinders and actuators

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Hydraulic transmission package systems and parts	U.S.A. Others	488 9	225 11
	Most of this equipment	497 now available fro	236 m Canadian production.
Gear motor units under 1/4 h.p. and parts	U.S.A. Others	3,596 2	82 1
		3,598	83
Fluid couplings and parts	U.K.	245	228
Clutches, power transmission and parts	U.S.A.	336	502
Drives, mechanical, variable speed and	U.S.A. U.K.	1,927	915
parts	U.K.	<u> </u>	<u>34</u> 949
Other gear, gear units and power trans- mission equipment (excluding vehicle)	U.S.A. Others	2,594 4	544 
and parts	This group includes main and power transmissior production.	2,598 nly "power take-off equipment are a	585 s''; most gear, gear units available from Canadian
Pneumatic cylinders, actuators and air motors and parts	U.S.A.	121	53
	Group Total	<b>9,</b> 378	2,636

Ą.

# moulding and casting systems and equipment

ð

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Core making systems and equipment and parts	U.S.A.	20	184
	Mainly core and shell blow	ving machines.	
Sand conditioning machinery and equipment and parts	U.S.A. U.K.	18	183 5
equipment and parts	W. Germany		1
	Mainly aerators and aerato	18 r feeders, mixer-slin	189 Igers and mullers.
Moulding machines, including jolts and	U.S.A.	8	218
jolt squeezes, and parts	Mainly jolts and jolt squeez	zes.	
Mechanized moulding systems and	U.S.A.	7	424
parts	Denmark	7	<u>11</u> 435
		,	155
Other moulding success and a single		10	
Other moulding systems and equip- ment and parts	U.S.A. U.K.	18 —	880 9
	W. Germany		10
		10	899
Casting systems and equipment and parts	U.S.A. W. Germany	37 601	236 17
		638	253
	Mainly automatic casting m		
	Group Total	709	2,178

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Cement, clay, and concrete products	U.S.A.	901	500
machinery equipment and parts	U.K.	114	57
	W. Germany	8	92
	Mainly briquetting and ext	1,023	649
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Glass industries machinery and parts	U.S.A.	252	688
(excluding furnaces and moulds)	Others		32
	Mainly glass container pro	252 duction equipment	720
	, - ,		
Other non-metallic mineral industry	U.S.A.	1,220	320
machinery	Others	7	52
		1,227	372
	Group Total	2,502	1,741
	·		•

#### non-metallic mineral industry machinery

## physical properties testing, inspection, and pollution abatement equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Hardness and strength of materials	U.S.A.	90	185
testing machines and parts	U.K.	<u> </u>	<u> </u>
Dynamometer water brake (for testing	U.S.A.	36	149
diesel engines and electric engines) and parts	Others	37	<u> </u>
Autometrology systems and equipment	U.S.A.	48	259
and parts	U.K. Others	2	23 1
		50	283

U.S.A. U.K. Italy	1.331 11	1,113 164
-	11	164
Italy		
	4	11
Norway	4	12
W. Germany	27	19
Others	5	11
	1,382	1,330
U.S.A.	340	148
Most of this equipment no	w available from Ca	anadian production.
Group Total	1,905	2,102
	W. Germany Others U.S.A. Most of this equipment no	W. Germany 27 Others <u>5</u> 1,382 U.S.A. 340 Most of this equipment now available from Ca

# chemicals and pharmaceuticals industries machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Petro-chemicals manufacturing ma-	U.S.A.	79	916
chinery and equipment and parts	U.K.		26
		79	942
	Mainly custom engineere glass lined stirred vessels.	ed machines—e.g.	wiped wall vessels and
Paint manufacturing machinery and	U.S.A.	492	101
equipment and parts			
equipment and parts			
	U.S.A.	4,508	1,203
equipment and parts Other chemicals and phamaceuticals machinery, equipment and parts	U.S.A. U.K.	4,508 11	1,203 31
Other chemicals and phamaceuticals			
Other chemicals and phamaceuticals	U.K.		31
Other chemicals and phamaceuticals	U.K. France Japan Sweden		31 12 14 7
Other chemicals and phamaceuticals	U.K. France Japan Sweden W. Germany		31 12 14 7 123
Other chemicals and phamaceuticals	U.K. France Japan Sweden		31 12 14 7
Other chemicals and phamaceuticals	U.K. France Japan Sweden W. Germany		31 12 14 7 123
Other chemicals and phamaceuticals	U.K. France Japan Sweden W. Germany	11 4   3 4,526	31 12 14 7 123 3

### industrial filters and water and sewage treatment equipment

94 119 al filters now available from Canadian production.
505 156 — 1
505 157 ents of sewage systems.
er ta

#### industrial separators

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Industrial separators, centrifugal and parts (excluding air pollution abate-	U.S.A. Others	152	194
ment systems)	Mainly centrifugal separate	152 ors or centrifuges.	201
Other industrial separators and parts (excluding air abatement systems)	U.S.A.	12	82
	Group Total	164	283

#### industrial heat exchangers

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Industrial heat exchangers and parts	U.S.A. For special purpose machin	4 9 <i>es</i> .	74
	Group Total	4	74

### pressure and vacuum vessels

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Pressure and vacuum vessels	U.S.A. Special purpose equipment	6	38
	Group Total	6	38

#### industrial furnaces and furnace equipment

COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
		366 uble drum driers, flake
U.S.A.	32	211
U.K.		4
	32	215
Mainly certain laboratory a	nd high temperatur	e vacuum furnaces.
-	U.S.A. Mainly driers for commu board driers, food and pha U.S.A. U.K.	U.S.A. 160 Mainly driers for communications cable, do board driers, food and pharmaceutical driers. U.S.A. 32 U.K. <u>–</u>

## hydraulic gates and operating mechanisms and governors

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Hydraulic gates and operating mecha- nisms and parts	U.S.A.	73	84
	Group Total	73	84

## other miscellaneous custom engineered machines

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other miscellaneous custom engi- neered machines	U.S.A. U.K. Others	416 — 30	333 10 14
		446	357
	Group Total	446	357

## bundling and strapping machinery (not agriculture)

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Bundle forming and tying machinery and parts	U.S.A.	113	214
Strapping machinery and parts	U.S.A. Others	2,123 95	424 73
	Mainly pneumatic hand-h	2,218 eld strapping machi	inery.
Other bundling machinery and parts	U.S.A.	24	160
	Group Total	2.355	871

é

#### Section III CONSTRUCTION AND MATERIALS HANDLING MACHINERY AND EQUIPMENT

### excavating, dredging and loading equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)		
Excavator type cranes and shovels,	U.S.A.	30	1,916		
crawler-mounted, and parts	Mainly convertible crawle excess of 100 tons.	er-mounted cranes	with lifting capacities in		
Excavator type cranes and shovels, wheel-mounted, and parts	U.S.A.	17	403		
wheel-mounted, and parts	Mainly self-propelled 4- excavators.	wheel steering, 4-	wheel drive, hydraulic		
Other excavator type cranes and shovels, powered, including attach-	U.S.A.	38	1,055		
ments, accessories, and parts	Mainly integrated backhoe loaders, pipe layers, hydraulic excavators with straight telescopic booms.				
Bulldozing and angle dozing equip- ment and parts	U.S.A.	10	210		
Scrapers, dig-carry-haul type, and parts	U.S.A. Excluding tow-type with s	164 struck-heaped capa	3,058 city of 14/20 cu. yards.		
Loaders, self-propelled, bucket type,	U.S.A.	171	1,298		
and parts	Mainly light duty skid steer front end loaders.				
	U.S.A. Mainly integrated tractor a	47 nd bucket loaders	692		
Other loaders, self-propelled, and parts	Manny integrated tractor at				
Other loaders, self-propelled, and parts					
Other loaders, self-propelled, and parts Other excavating, dredging and loading equipment and parts	U.S.A.	35	652		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Concrete mixer-agitators and parts	U.S.A.	15	142
	W. Germany	10	55
	Others		$\frac{7}{204}$
	Mainly truck-mounted—o		
Concrete, plaster and mortar mixers	U.S.A.	65	137
and parts	0.3. <del>A</del> .	05	157
	Mainly those with a capac	ity in excess of 6 cu	. yards.
Concrete block, brick and drain tile	U.S.A.	15	427
machinery and parts	Others	<u> </u>	12
	Most of this machinery is	15 now available fro	439 m Canadian production.
Concrete pumps, placing machinery	U.S.A.	39	279
and mortar guns and parts	W. Germany Others	_	72 7
	Others	39	358
	Mainly integrated mortar	mixers and pumps.	
		254	205
Other concrete construction equip- ment and parts	U.S.A. Sweden	351	385 12
ment and parts		351	397

4.

Ą

#### concrete construction equipment

# road graders, sweepers, rollers and compactors

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Compacting rollers and dozers and	U.S.A.	81	558
parts (including vibratory compactors	U.K.	—	23
and sanitary fill compactors)	W. Germany	36	62
	Others		6
		117	649
	Excluding tow-type vibratory compactors with vibrational impa- between 30 and 40,000 lbs. and self-propelled fill compactors w compaction weight of under 65,000 lbs.		th vibrational impact of ed fill compactors with a

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other road rollers and parts	U.S.A.	275	1,180
	France	21	61
	W. Germany	215	480
		511	1,721
Other graders, sweepers and parts	U.S.A.		
		49 	121 12
	U.S.A.		

## other construction and maintenance machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Bituminous mixing and paving equip- ment and parts	U.S.A.	94	460
Railway car dumpers or unloaders and	U.S.A.	7	338
parts	Mainly automatic railway o	car hopper unloade	rs.
Other railway construction and main- tenance of way equipment and parts (excluding maintenance of way cars)	U.S.A.	542	1,209
Pneumatic hammers, construction type, and parts	U.S.A. Others	52 22	118 13
	Mainly light weight, self-c	74 contained, gasoline	131 engine propelled type.
Augers and parts	U.S.A. Excluding digger derricks d	873 esigned for light du	256 ty operation.

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Rock drills and parts	U.S.A.	3,961	272
	U.K.	123	36
	Japan	105	22
	Others		7
		4,189	337
	Excluding hand-held, stop	er or feed-leg mou	nted types.
Drilling rigs and equipment and parts	U.S.A.	275	2,784
	Sweden	14	50
	Others		3
		289	2,837
	Excluding rigs for diamone	d core drilling and s	oil sample drilling.
Other specialized construction and	U.S.A.	735	430
	W. Germany	347	169
maintenance machinery and parts			
maintenance machinery and parts	Sweden	97	47
maintenance machinery and parts		. <u> </u>	
maintenance machinery and parts	Sweden	97 — 1,179	47

# conveyors, conveyor systems, and crushing plants

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Bulk conveyors, mechanical, and parts	U.S.A. Most of this equipment no	 ow available from C	209 anadian production.
Bulk conveyors, pneumatic, and parts	U.S.A. Others	115  	137 7 144
	Mainly certain specialized rotary positive blowers, tv	l components—e.g	. large size rotary valves,
Aggregate classifying and washing plants, equipment and parts	U.S.A.	9	175
	Application for equipm barite ore.	ent and accessori	es — e.g. treatment of

\*\*\*\*\*\*

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other conveyors and conveyor systems and parts	U.S.A.	1,247	903
	W. Germany	161	21
·	Others	—	3
		1,408	927
	construction industry in t aggregate, felt paper and o	ther similar roofing	r materials.
Portable crushing plants and parts	U.S.A. Mainly large capacity po	12 ortable crushing p	540 lants.
	Group Total	1.544	1,995

### hoisting machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Elevators, escalators and parts (exclud- ing construction and mining industry types)	U.S.A. Others		9 145 154
	Mainly sophisticated con elevators.	mponents used i	
Truck-mounted cranes and parts	U.S.A.		2,428
	Others		16
•	Excluding hydraulic cranes and lattice boom type with		
Wheel-mounted cranes (self-propelled)	U.S.A.	73	3,051
and parts	Others	15	16
	Excluding hydraulic type v	88 with lifting capaciti	3,067 ies of less than 15 tons.
Crawler-mounted cranes and parts	U.S.A.	18	885
Tower and climbing cranes and parts	U.S.A.	20	333
	U.K.	6	413
	Sweden Others	9 3	19 13
	Others	38	778
	Mainly large capacity units early 1968.		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Locomotive-mounted cranes and parts	U.S.A.	_	218
Mobile lifts and parts	U.S.A.	433	135
	Mainly articulated boom	type hydraulic Ioad	ers with large capacities.
Gantry type cranes and parts	U.S.A. Mainly full revolving diese	 I electric mobile cra	232 anes.
Winches, general purpose, and parts	U.S.A. Japan	1,519 330	279 13
	Mainly worm-end gear ty trucking industries.	1,849 pe designed for use	<b>292</b> by the automotive and
Other hoisting machinery and parts	U.S.A.	906	918
	Denmark	8	19 55
	France Others	1,090 112	55 47
		2,116	1,039
	Group Total	4,542	9,244

### industrial trucks, tractors, trailers and stackers

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Lift trucks, industrial, internal combus-	U.S.A.	24	729
tion engine and parts	Others	24	732
	<ul> <li>Excluding lift trucks with h</li> </ul>	ifting canacity of 25	000 lbs_and_under
Lift trucks, industrial, electrically pow- ered and parts	~		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Tractors, industrial, materials handling,	U.S.A.	39	296
and parts	Mainly aircraft towing trac	tors with auxiliary p	oower units.
Log and timber skidders and parts	U.S.A. Mainly diesel electric log	21 stackers with very	262 v large lifting capacities.
Other industrial trucks, tractors, trailers,	U.S.A.	37	391
stackers and parts	Others	37	<u>– 18</u> – 409
	Group Total	137	2,042

### rubber working and plastic industry machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Tire vulcanizers and retreading ma- chines and parts	U.S.A.	39	293
Other vulcanizers and parts	U.S.A.		130
Rubber belt making machinery and equipment and parts	U.S.A. W. Germany		2 190
	Mainly reinforced wire rul	ber belt making ma	192 achinery.
Other rubber working machinery and	U.S.A.	14,012	1,308
parts	Others	4	11
Parto	Mainly new tire manufactu	14,016 Iring machinery.	1,319

U.S.A. U.K. Austria Italy W. Germany Mainly large injection mo capacity. U.S.A.	131 5 5 18 14 173 ulding machines in	3,011 47 57 144 228 3,487 excess of 250-ton clam
Austria Italy W. Germany Mainly large injection mo capacity. U.S.A.	5 18 <u>14</u> 173	57 144 <u>228</u> 3,487
Italy W. Germany Mainly large injection mo capacity. U.S.A.	18 <u>14</u> 173	144 228 3,487
W. Germany Mainly large injection mo capacity. U.S.A.	<u> </u>	228 3,487
Mainly large injection mo capacity. U.S.A.	173	3,487
capacity. U.S.A.		
U.S.A.		
	4	107
	9	42
	3	72
Others	_	39
Others	16	260
Mainly machines capable gallon.		-
USA	. 12	159
Others		85
	12	244
U.S.A. W. Germany	23 5 28	98 <u>179</u> 277
	compounders.	
U.S.A.	34	434
Switzerland	2	37
36 471 Mainly fully automatic moulding presses.		
U.S.A.	480	1,679
		994
	6	42
	4	49 214
vv. Germany		314 28
Others		and the second se
Mainly granulators, he expanded polystyrene m	ating and drying	3,106 equipment, and rota
Croup Total	14 840	9,779
	Austria W. Germany Others Mainly machines capable gallon. U.S.A. U.S.A. W. Germany Mainly twin-screw plastic U.S.A. Switzerland Mainly fully automatic ma U.S.A. U.S.A. Switzerland Mainly fully automatic ma U.S.A. U.S.A. Mainly granulators, hea	Austria       9         W. Germany       3         Others          16         Mainly machines capable of blowing contigation.         U.S.A.       12         U.S.A.       12         Others          12         U.S.A.       12         U.S.A.       23         W. Germany       5         28         Mainly twin-screw plastic compounders.         U.S.A.       34         Switzerland       2         36         Mainly fully automatic moulding presses.         U.S.A.       480         U.K.       17         Austria       6         Finland       4         W. Germany       6         Others       -7         520       Mainly granulators, heating and drying expanded polystyrene machines.

'n

#### mills and mixing machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Mills, grinding and pulverizing and	U.S.A.	39	311
parts	Others		14
		39	325
	Excluding ball mills, ink and rubber mills.	na pigment toner n	nns, gran and feed mins
Mixing machinery and parts including	ΙΙς Δ	1 001	346
Mixing machinery and parts, including batch-type mixers	U.S.A. W. Germany	1,001 201	346
Mixing machinery and parts, including batch-type mixers	U.S.A. W. Germany Others	1,001 201 4	346 38 21
	W. Germany	201 4	38 
	W. Germany	201 4 1,206 rs, ribbon mixers,	38 21 405 banbury mixers, transit

#### metal rolling mill equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Metal rolling mill equipment and parts	U.S.A.	1,071	1,740
	U.K.	326	589
	W. Germany	—	607
	Others	—	70
		1,397	3,006
	Group Total	1,397	3,006

### hydraulic turbines and self-contained electric generating sets

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Hydraulic turbines, gas and steam, and	U.S.A.	55	364
parts	U.K. Others	2 3	3 109
		60	476

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Self-contained electricity generating	U.S.A.	326	652
sets and parts	Group Total	386	1,128

### grain elevator machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Grain treating and processing machine- ry equipment and parts	U.S.A. Others	123	187 2
	Group Total	123	189

#### Section IV METAL WORKING AND HAND POWER TOOL MACHINERY

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Boring machines, precision (including	U.S.A.	_	128
jig borers) and parts	U.K.		28
Jig borers, and parts	Italy	_	36
	Japan	_	76
	W. Germany		93
	Switzerland	_	30
	Others	_	7
			398
	Excluding high production	, single and double	
Boring machines, horizontal and verti-	U.S.A.	17	250
cal, and parts	U.K.	4	85
	Belgium-Lux.		28
	Czechoslovakia	6	77
	East Germany	4	87
	Italy	9	283
	Japan		35
	Sweden	4	25
	W. Germany	15	333
	U.S.S.R.	—	40
		59	1,243
Drilling machines, bench, floor and	U.S.A.	2,294	657
pedestal and parts	U.K.	·	13
	Sweden	65	28
	W. Germany	183	53
	Others	26	34
		2,568	785
	Mainly of capacity over 2 multi-spindle.	ins.; high precisio	n sensitive; single head
Drilling machines, radial, and parts	U.S.A.	13	27
0, , , ,	U.K.	24	157
	East Germany	9	36
	Czechoslovakia	23	85
	Italy	28	57
	Japan	10	34
	Sweden	8	15
	W. Germany	33	95
	Others	10	25
		158	531
	Excluding radial drilling ma		

### metal cutting machine tools

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Milling machines, precision, and parts	U.S.A.	36	90
	Switzerland	3	185
	W. Germany	32	854
	Others	_	22
		71	1,151
	Mainly die sinkers with tal		
Milling machines, production, and parts	U.S.A.	49	790
	U.K.	17	28
	Czechoslovakia	4	31
	France	11	186
	Italy	9	106
	Japan	4	32
	Spain	24	29
	Sweden	33	82
	W. Germany	16	97
		167	1,381
	Mainly planer mills; bec larger; and light productio	l-type_mills;_millin	g machine sizes 5 ar
Milling machines, special and parts	U.S.A.	9	351
Milling machines, special and parts	Czechoslovakia	_	25
Milling machines, special and parts	Czechoslovakia Switzerland	— 16	25 524
Milling machines, special and parts	Czechoslovakia	 5	25 524 
Milling machines, special and parts	Czechoslovakia Switzerland	— 16	25 524
Milling machines, special and parts	Czechoslovakia Switzerland	 5	25 524 
Other boring, drilling and milling ma-	Czechoslovakia Switzerland Others U.S.A.	 5	25 524 
	Czechoslovakia Switzerland Others U.S.A. U.K.	 5	25 524 24 924
Other boring, drilling and milling ma-	Czechoslovakia Switzerland Others U.S.A.	 5	25 524 24 924
Other boring, drilling and milling ma-	Czechoslovakia Switzerland Others U.S.A. U.K.	 5	25 524 24 924 123 131
Other boring, drilling and milling ma-	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany	 5	25 524 24 924 123 131 24
Other boring, drilling and milling ma-	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany	 5	25 524 24 924 123 131 24 43
Other boring, drilling and milling ma- chines and parts	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others		25 524 24 924 123 131 24 43 321
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A.		25 524 24 924 123 131 24 43 321 1,850
Other boring, drilling and milling ma- chines and parts	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.S.A. U.K.		25 524 24 924 123 131 24 43 321 1,850 379
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia		25 524 24 924 123 131 24 43 321 1,850 379 74
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia Italy		25 524 24 924 123 131 24 43 321 1,850 379 74 69
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia Italy Japan	 16 5 30          -	25 524 24 924 123 131 24 43 321 1,850 379 74 69 75
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia Italy Japan Switzerland	$ \begin{array}{r} - \\ 5 \\ 30 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $	$ \begin{array}{r} 25\\ 524\\ 24\\ -924\\ \end{array} $ $ \begin{array}{r} 123\\ 131\\ 24\\ -43\\ 321\\ \end{array} $ $ \begin{array}{r} 1,850\\ 379\\ 74\\ 69\\ 75\\ 210\\ \end{array} $
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia Italy Japan Switzerland W. Germany		$ \begin{array}{r} 25\\ 524\\ 24\\ 924\\ \end{array} $ $ \begin{array}{r} 123\\ 131\\ 24\\ 43\\ 321\\ \end{array} $ $ \begin{array}{r} 1,850\\ 379\\ 74\\ 69\\ 75\\ 210\\ 264\\ \end{array} $
Other boring, drilling and milling ma- chines and parts Grinding machines, production type	Czechoslovakia Switzerland Others U.S.A. U.K. W. Germany Others U.S.A. U.K. Czechoslovakia Italy Japan Switzerland	$ \begin{array}{r} - \\ 5 \\ 30 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ $	$ \begin{array}{r} 25\\ 524\\ 24\\ 924\\ \end{array} $ $ \begin{array}{r} 123\\ 131\\ 24\\ 43\\ \hline 321\\ \end{array} $ $ \begin{array}{r} 1,850\\ 379\\ 74\\ 69\\ 75\\ 210\\ \end{array} $

þ

,

42

.

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)	
Tool and cutter grinders and parts	U.S.A.	332	210	
	U. <b>K</b> .	11	28	
	Japan	9	21	
	W. Germany	50	89	
	Others	16	72	
		418	420	
Other grinders and grinding machines	U.S.A.	258	261	
and parts	Czechoslovakia	12	42	
	Denmark	14 5	34 52	
	Italy Sweden	28	52 72	
	W. Germany	70	247	
	Others	21	57	
	Outers	408	765	
		400	765	
Shapers (excluding gear shapers) and	U.K.	31	309	
parts	Others	36	59	
		67	368	
Planers, slotters and broaching ma-	U.S.A.	35	233	
chinery and parts	Others	11	24	
	46 257 Excluding slotters with a capacity of 11/4 ins. by 8 ins.			
Threading machinery, including thread	U.S.A.	824	389	
rolling machines, and parts	Others	8	18	
		832	407	
Tapping machinery and parts	U.S.A.	210	71	
	Others	_	2	
		210	73	
	Excluding self-contained tapping units.			
Cut-off machinery and parts	U.S.A.	118	136	
	W. Germany	91	29	
	Others	14	4	
		223	169	
	Excluding abrasive cut-off i	machines with whe	el diameters in excoss	

,

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Sawing machinery, band-saw type, and	U.S.A.	1,355	331
parts	W. Germany	115	75
	Others	17	12
		1,487	418
	Mainly horizontal band-sa Mainly vertical band-saws	ws with capacity in	excess of 6 ins. by 12 in: on sawing.
Sawing machinery, circular blade type,	U.S.A.	91	50
and parts	U.K.	13	85
	W. Germany	8	40
	Others	—	5
		112	180
Other sawing and filing machinery and	U.S.A.	999	292
parts	W. Germany	48	68
•	Others	30	16
		1,077	376
Lathes, engine and parts	U.S.A.	20	267
	U.K.	3	127
	Bulgaria	8	21
	Czechoslovakia		106
	Italy	9	51
	Japan	20	124
	Sweden	3	18
	W. Germany	27	169
	Others	12	60
	Mainly in excess of 21 ins	102 5. swing and 10 h.p.	943 , or high precision lathe
Lathes, turret and parts	U.S.A.	43	1,053
	U.K.	50	393
	Japan	19	215
	Others	22	86
		134	1,747
Lathes, special, and parts	U.S.A.	381	419
· · ·	U.K.	17	225
	Switzerland	19	28
	W. Germany	14	245
	Others	14	58
		445	975 rnishing lathes and met

٠

ø

Ņ

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Lathes, automatic and parts	U.S.A. U.K. W. Germany Others	62 23 4 <u>8</u> 97	1,363 602 122 40 2,127
Automatic screw machines and parts	U.S.A. U.K. Czechoslovakia W. Germany Others	17 11 5 12 <u>3</u> 48	321 311 39 45 <u>9</u> 725
Other lathes and parts	U.S.A. U.K. Italy Japan Switzerland W. Germany Others	80 93 8 18 6 53 14 272	$ \begin{array}{r} 131 \\ 67 \\ 57 \\ 60 \\ 30 \\ 403 \\ 30 \\ \hline 778 \\ \end{array} $
Gear cutting and finishing machines and parts	U.S.A. W. Germany Others		363 $101$ $-24$ $488$
Assembly machines and parts	U.S.A. Mainly custom-built machin	22 nery.	886
Numerically controlled machining cen- tres and parts	U.S.A. Italy	17  17	3,811 406 4,217
Numerically controlled boring ma- chines and parts	U.S.A. France Italy	13   13	808 152 90 1,050

,

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Numerically controlled drilling ma- chines and parts	U.S. <b>A.</b> Japan	4	337 22 359
Numerically controlled milling ma- chines and parts	U.S.A. Excluding numerically cor	16 htrolled ram-type tu	3,026 rret milling machines.
Other numerically controlled machine tools and metal cutting machinery and parts	U.S.A. France		152 350 502
Other metal cutting machine tools and metal cutting machinery and parts	U.S. <b>A.</b> W. Germany Others	1,109 3,661 7 4,777	328 84 13 425
	Group Total	14,437	31,460

# metal forming machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)	
Presses, hydraulic, extrusion moulding	U.S.A.	8	281	
and powdered metallurgy and parts	W. Germany		8	
		8	289	
	Mainly extrusion and pow	dered metal presses	5.	
Other presses, metal working, hydrau-	U.S.A.	41	230	
lic and pneumatic and parts	Mainly special small type presses.			
Presses, horizontal, including extruders	U.S.A.	18	295	
and cold headers and parts	U.K.	3	1,030	
		21	1,325	
	Mainly cold header presse	25.		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Numerically controlled turret punch	U.S.A.	3	181
presses and parts	W. Germany		91
		3	272
Other presses, powered, and parts	U.S.A.	453	449
	U.K. Switzerland		26 30
	W. Germany	5	50
	Others	4	39
	0	462	596
	Mainly special auxiliary eq		370
Plate, sheet, bar rod and angle shears	U.S.A.	49	61
and parts	U.K.	21	17
	Italy	15	43
	W. Germany	54	79
	Others	2	5
		141	205
	Mainly universal iron work	ers and alligator she	ears.
Punching machinery and parts	U.S.A.	315	264
	Italy	13	51
	Sweden W. Germany	9 49	10 171
	Others		8
	Others	200	504
	Excluding punch presses.	388	504
Other punching, shearing and slitting	U.S.A.	115	206
machinery and parts	Others	7	7
		122	213
	Mainly special auxiliary equ	ipment.	
		165	
Sheet metal forming, folding, seaming	U.S.A.	165	144
machinery and parts	Small sheet metal equipme	nt.	
Plate rolls	W. Germany		301
	Others		28
			329

\*\*\*\*\*\*

\*\*\*\*\*\*\*

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Rolls and benders, bars, shapes, tubes	U.S.A.	723	144
and pipes	Others	4	9
		727	153
Other bending, forging, forming ma-	U.S.A.	243	585
chinery and parts (including press	W. Germany	6	23
brakes)	Others	6	19
	Mainly forging presses.	255	627
			600
Drawing machines and draw benches	U.S.A.	27	603
and parts	U.K.	3	137
	W. Germany	. 3	110
	Others		11
	Drawing machinery now a	33 available from Cana	861 dian production.
Wire cable making machinery and	U.S.A.	85	275
parts	W. Germany	6	131
parts	France	2	60
	Others	2	22
		95	488
	Cabling and stranding production.		
Spring making machinery and parts	U.S.A. U.K.	23	162 37
	0	23	199
Wire fabric-making machinery (includ-	U.S.A.	39	96
ing wire weaving machines) and parts	W. Germany	9	171
	Others		5
		48	272
		160	363
Other wire and ribbon forming ma-	U.S.A.	100	
Other wire and ribbon forming ma- chinery and parts	U.S.A. W. Germany	9	85

ŝ

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Other die casting machinery and equip-	U.S.A.	19	401
ment and parts	U.K.	—	17
	Others		4
		19	422
	Machinery and equipmer aluminum.	nt in excess of 8 o	ozs. capacity mainly for
Welding equipment and parts	U.S.A.	7	73
	U.K.		1
		7	74
	This equipment new availa	hle from Canadian	production
	This equipment now availa	ible from Canadian	production.
	This equipment now available	iore from Canadian	
Other metal forming machinery and		61	
Other metal forming machinery and equipment and parts	U.S.A. W. Germany		307 42
Other metal forming machinery and equipment and parts	U.S.A.		307
	U.S.A. W. Germany		307

#### cutting and forming tools for metal working machinery

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Taps, threading chasers and threading dies	U.S.A.	24,761	291
Saw blades, knives and shear blades	U.S.A. W. Germany Others	21,195 331 —	158 21 1
		21,526	180
Dies-punching, forming, drawing	U.S.A.	50,294	129
	U.K. W. Germany	67 134	8 7
		50,495	144

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Cutting and forming tools, metallic	U.S. <b>A</b> .	39,940	194
carbide, high speed and other tool	U.K.	2,091	42
steel, and parts	Others	1,176	20
		43,207	256
	able boring tools.		
	able boring tools.		
Other cutting and forming tools and	U.S.A.	120,585	463
Other cutting and forming tools and parts	~	120,585 370	463 36
5	U.S.A.	,	
5	U.S.A. W. Germany	370	

## power operated hand tools, pneumatic or electric

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Power operated hand drills and parts	U.S.A.	27,700	794
	U.K.	—	297
	Japan	862	52
	Sweden	112	7
	W. Germany	741	69
	- ,	29,415	1,219
	Mainly pneumatic machin		1,215
Power operated hand hammers and	U.S.A.	2,850	351
parts	U.K.	18	1
1 -	Japan	133	10
	Śweden	54	2
		3,055	364
	Mainly pneumatic machin		5
Power operated hand grinders and	U.S.A.	1,594	158
parts	U.K.	139	7
	Japan	364	19
	Sweden	50	3
	W. Germany	1,344	97
		3,491	284
	Mainly pneumatic machin	es.	
Power operated hand nut setters and	U.S.A.	9,627	1,318
parts	U.K.		190
	Japan	1,006	73
	Sweden	53	21
	W. Germany	43	8
		10,729	1,610
	Mainly pneumatic machin		

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Power operated hand riveters and	U.S.A.	500	38
parts	Sweden W. Germany	1,302	7 62
	W. Germany	1,802	107
	Mainly pneumatic machin		
Power operated hand routers and parts	U.S.A.	1,417	90
	These machines available 1,1968.	from Canadian p	roduction as of October
Power operated hand sanders and	U.S.A.	3,133	227
polishers and parts	U.K.	92	3
	Japan	<u>50</u> 3,275	$\frac{2}{232}$
	Mainly disc sanders and p		
Power operated hand saws and parts	U.S.A.	12,366	224
	W. Germany	115	7
	Mainly pneumatic machine	12,481 es.	231
Power tool attachments	U.S.A.	82,576	737
	U.K.	5,949	45
	Japan Netherlands	2,060	6
	W. Germany	18 76	3 18
		90,679	809
	Mainly paint stirrers, angle		
Other power operated hand tools and	U.S.A.	1,422	152
parts	W. Germany	1,075	45
	Mainly pneumatic machine	2, <b>49</b> 7 s.	197
	Group Total	158,841	5,143

#### SECTION V INDUSTRIAL CONTROL EQUIPMENT

### industrial control equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Numerical control equipment and read- out accessories and parts	U.S.A.	244	670
	Two and/or three axis n.c. equipment available from Canadian pro- duction since June or July, 1969.		
Humidity or moisture detecting, in- dicating, recording, controlling or trans- mitting devices and parts	U.S.A.	54,284	112
Other process control equipment and parts	U.S.A. U.K.	520 56 576	188 <u>19</u> 207
	Excluding paper mill co equipment and certain o	ontrol, steel mill	control, refinery control
Core storage static computer memories and parts	U.S.A.	82	3,774
Drum computer memory units and parts	U.S.A.	6	202
r	System components.		
Disc computer memory units and parts	U.S.A.	7,354	1,098
Disc memory drives and control units for disc and drum memories and parts	U.S.A.	19	107
Other random access mass magnetic computer memories and parts	U.S.A.	9	196
Digital magnetic tape equipment and parts	U.S.A.	192	597
	Excluding magnetic tape	cleaners.	

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
On-line readers, accessories and parts	U.S.A. Excluding paper tape read	239 ers.	1,079
On-line optical scanning readers and parts	U.S.A.	18	616
Other on-line computer read-in equip- ment and parts	U.S.A.	10	29
On-line card punch equipment and parts	U.S.A.	65	353
On-line computer printers and print- out equipment and parts	U.S.A.	30	160
Other on-line computer read-out equip- ment and parts	U.S.A. Others	$\frac{35}{4}$ 39	355 $-3$ $358$
Card read/punch equipment and parts, excluding on-line computer types	U.S.A.	127	479
Other combination read-in/read-out equipment and parts, excluding on-line computer types	U.S.A.	122	702
Paper tape preparation equipment and parts, other than typewriters	U.S.A. Sweden	73 <u>12</u> 85	104 7 111
Card preparation equipment and parts	U.S.A. U.K.	3,155 	2,505 <u>631</u> 3,136
		J,744	3,130
Card context and printers and parts	U.S.A.	17 // (	111
Card sorters and printers and parts	U.S.A.	12,466	611

.

.

4

•

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Data transmission equipment and parts	U.S.A.	35	124
Typewriters/flexowriters, automatic and	U.S.A.	260	616
special purpose for paper tape or punch card, and parts	Netherlands	<u> </u>	<u>203</u> 819
· ·		505	019
Code and character recognition equip-	U.S.A.	14	346
ment and devices and parts	Excluding optical paper ta	pe readers.	
Other proof and encoding equipment and parts	U.S.A.	132	817
Automatic filing systems and parts	U.S.A.	196	201
Full voltage manual starters, AC single phase and DC fractional horsepower,	U.S.A.	5	246
1 h.p. max., 250 v. max., and parts			
	Special custom units		
Other industrial control equipment and	U.S.A.	863	682
parts	U.K. Italy	10 7	89 14
	, Mainly special purposes cu	880 Istom designed equ	785
	Group Total	81,036	17,935

## electrical motors, generators and power conditioning equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Electrical motors and generators and	U.S.A.	3	19
parts	U.K.	5	89
		8	108
Power conditioning equipment and parts including disconnect switches	U.S.A.	68	988
Power conditioning equipment and parts, including disconnect switches and parts	Excluding motor generator	r sets, s.c.r. control.	
parts, including disconnect switches		r sets, s.c.r. control.	

# special purpose electrical/electronic machinery and equipment

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Radio frequency production machine- ry and parts	U.S.A.	11	106
Electrical component winding and form-	U.S.A.	24	79
ing machinery and parts	Japan		12
		24	91
Other special purpose electrical/elec-	U.S.A.	4,986	415
tronic machinery and equipment and	U.K.		15
parts	W. Germany		11
		4,986	441
	Mainly production equipm	ent for solid state/i	ntegrated circuits.
	Group Total	5.021	638

### electrical appliances

DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY	VALUE (\$,000)
Garbage disposal units and parts	U.S.A.	13,789	433
Food grinders and parts	U.S.A.	9,738	159
	W. Germany	5,329	15
	Mainly hamburger type ur	15,067 nits.	174
Juice extractors, centrifugal, and parts	U.S.A.	454	13
Julee extractors, centinugai, and parts	Japan	5,000	85
	W. Germany	1,000	15
		6,454	113
Other electrical appliances and parts	U.S.A.	22,088	303
	Japan	28,456	37
	Sweden	300	1
	Switzerland	30,180	35 30
· · ·	W. Germany	1,700	
		82,724	406
	Group Total	118,034	1,126

¢

