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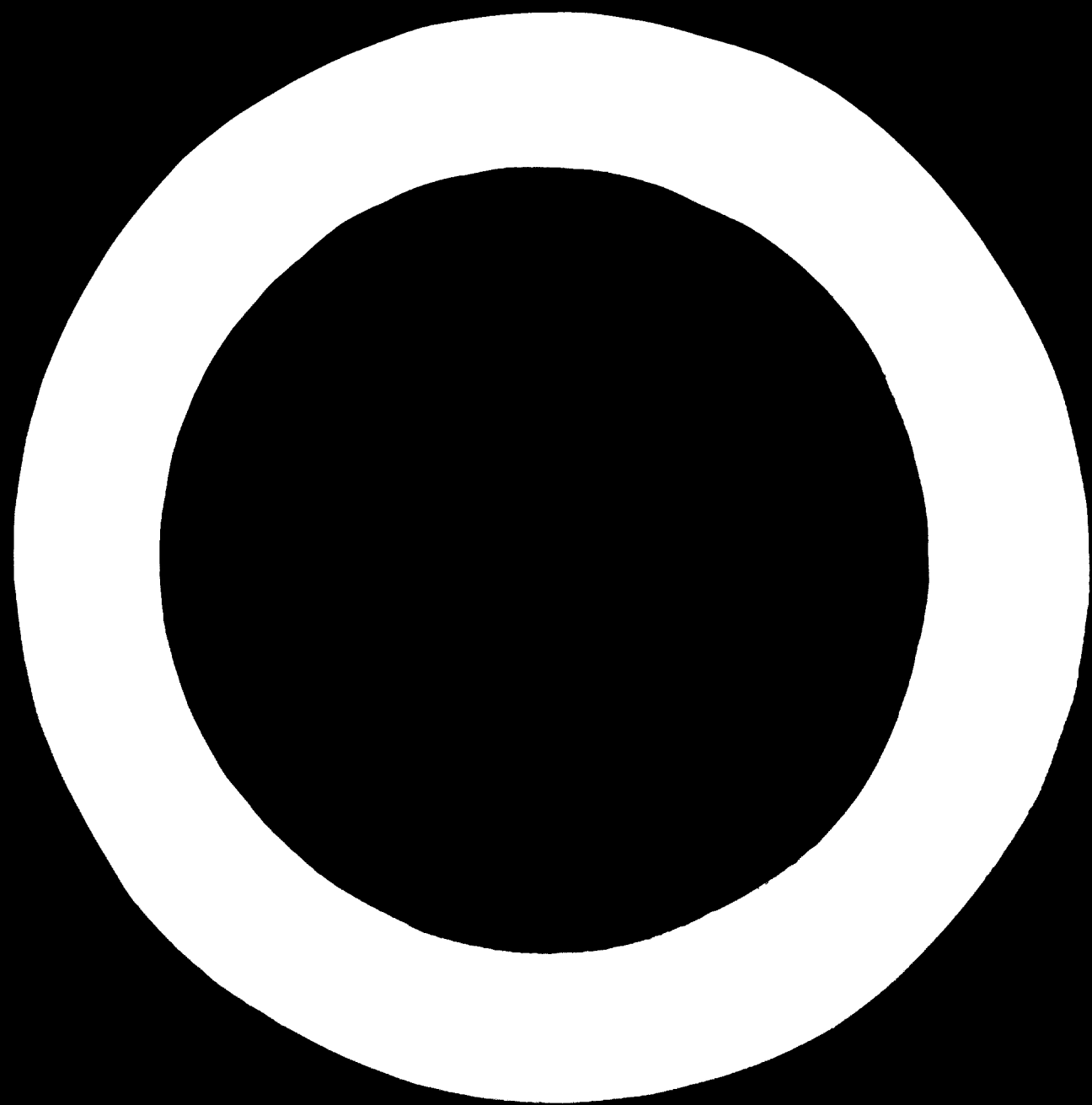
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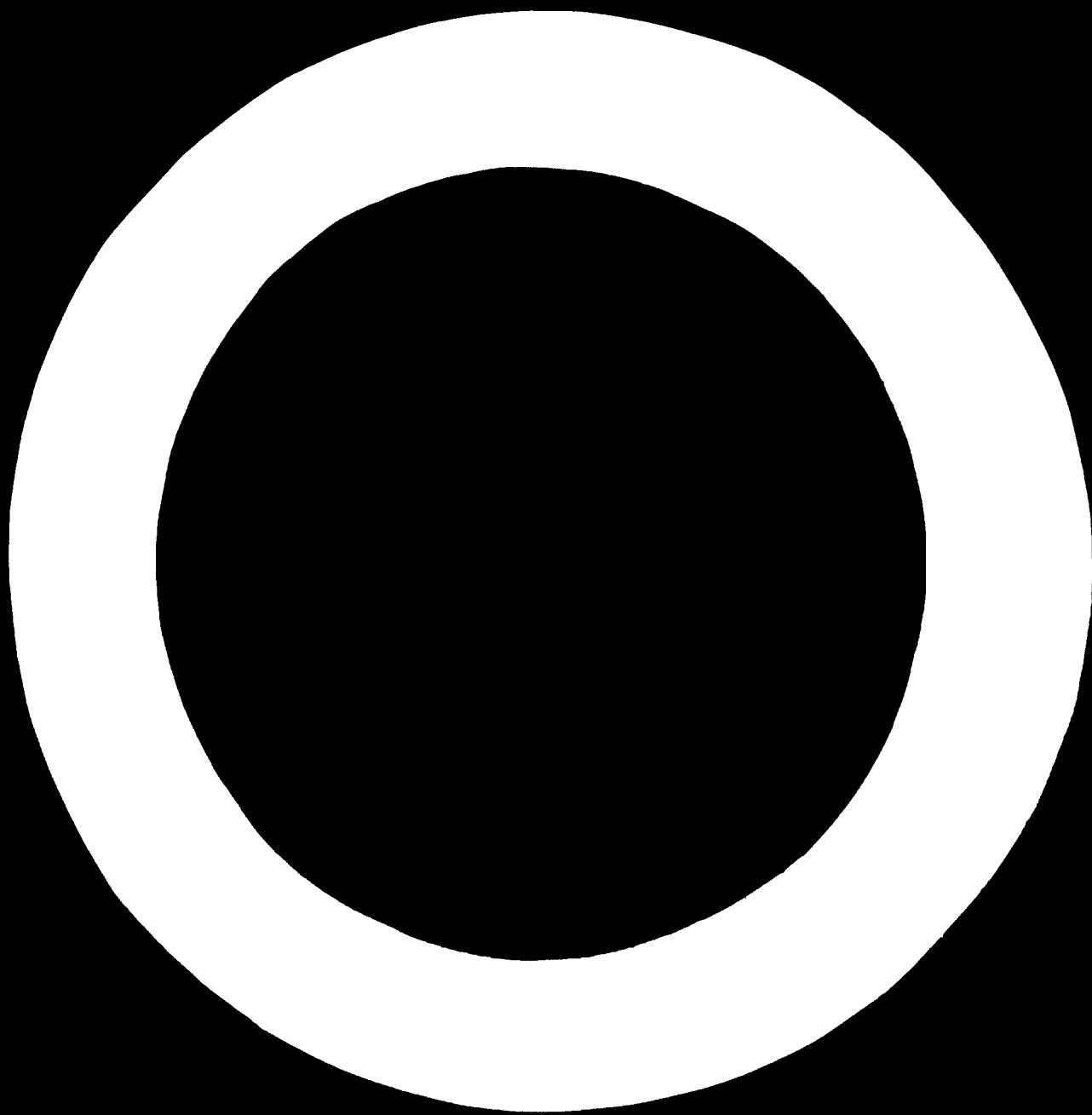
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FIXED AND WORKING CAPITAL REQUIREMENTS FOR SELECTED SMALL OR
MEDIUM-SIZED INDUSTRIAL PLANTS IN THE UNITED STATES

Prepared by: Policies and Programming Division
United Nations
Industrial Development Organization





FIXED AND WORKING CAPITAL REQUIREMENTS FOR SELECTED SMALL OR MEDIUM-SIZED INDUSTRIAL PLANTS IN THE UNITED STATES

Introduction

The basic data appearing in this paper are derived from the Industry Profiles, a series of pamphlets prepared for the U.S. Agency for International Development by Surveys & Research Corporation, Washington, D.C.

It is pointed out in these industry profiles that in so far as any general criterion has been used in choosing industries, consideration has been given to their suitability for areas still in an early stage of industrialization and their potential for stimulating over-all economic development.

The plants described are mostly of the minimal size that is economically and technically feasible under modern conditions of manufacture and marketing. For some of them, nevertheless, the capital investment required is substantial, even though they may be small units by the standards of United States industrial operations.

Furthermore, the plants described are basically mechanized, even though their mechanization is not necessarily as complete as would be technically possible. Generally speaking, they are feasible only where transport, power and water facilities, a reservoir of labour with some of the necessary skills or the ability to acquire them, and some banking and commercial services already exist. The economic infrastructure and the commercial environment need not be of the most advanced kind, but there are minimum external requirements that are indispensable in operating modern industrial plants, however small their scale.

Capital Requirements:

Fixed Capital:

Land. No figure has been given for land cost, since the price of land varies too greatly from area to area. Where land is purchased, its cost will need to be added to the other fixed capital costs. In some cases it may be necessary or preferable to rent land rather than buy it. In such instances, the rent must be included in the Annual Costs listed in paragraph 6 of the Production Requirements tables.

Building. Unless otherwise stated, buildings may be constructed of any local materials suitable for a factory. Any special requirements are mentioned.

Equipment, Furniture and Fixtures. The estimates are for the delivered cost of new equipment. Used machinery is often available, but should be bought only if it has been rebuilt by a reputable concern which is prepared to give a satisfactory guarantee that it is in good working order.

Working Capital. The figure given for working capital represents the initial operational outlays that must be made before receipts from sales start to come in. These outlays will be for direct materials, direct labour, manufacturing overhead (supplies, power, fuel, water, own transportation costs, indirect labour), administrative costs (interest, insurance, legal and audit charges), contingencies, sales costs (sales commissions, freight out, travel), and labour training costs. In most cases the allowance for direct materials, direct labour, and manufacturing overhead is calculated as one-sixth of the annual costs, on the assumption that a month will be needed to build up an inventory of finished products and an additional month for collection of accounts. There are, however, deviations from this figure, depending on the time normally required to get delivery of materials, and on other factors.

For administrative costs, contingencies and sales costs, an allowance of one month is generally considered appropriate, since most of these costs will not begin until selling is started and, in many cases, a period of time will elapse before payment becomes due. For training costs, an estimate is made of the amount of labour time that will be non-productive or only partially productive, wastage of materials, and non-productive use of items coming under manufacturing overhead. Variations in the allowances under this heading arise from differences in the training time needed. In some cases, production is of such kind that no allowance for training costs is necessary.

The extent to which a producer can get materials and supplies on credit will vary with the industry and the circumstances. To the extent that he can do so, working capital requirements will be reduced. A new venture may experience initial difficulty in getting credit from suppliers but may, on the other hand, be able to obtain short-term bank credit until such time as the business is well established and suppliers are willing to extend credit.

**MANUFACTURING
INDUSTRY**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	In thousand dollars		As % of total capita
				Fixed Capital	Working Capital	
20 Food Industries			344.2	290.0	54.2	15.7
Fish Oil and Fish Meal	n.a.	2,000.t.oil 2,300.t.meal	198.4	135.0	63.4	68.0
Fish Fried and Salted	n.a.	30.5.	121.6	74.5	47.1	61.3
Unfermented Grape Juice	4-5.m.	125.th.gallons	143.4	114.2	29.2	79.6
Biscuits and Crackers	1.m.	1040.th.p.	1426.5	503.0	923.5	35.3
Orange Juice in Containers	2-3.m.	20.5.th.ccnt.	121.0	53.2	67.8	44.0
Salted Peanuts	2-3.m.	50.t.	213.9	120.0	93.9	56.1
Quick-frozen Fish	n.e.	2,500.th.p.	280.5	115.7	164.8	41.2
Animal Feed Pellets	n.a.	12.5.t.(3)	444.6	337.4	107.2	75.9
Wheat Flour	0.3.m.	5th.5.(3)	143.5	76.0	67.5	53.0
Ice	25.th.	3,200.t.	45.4	28.4	17.0	62.6
Bakery	20.th.	140,000 \$	2384.7	2220.0	164.7	93.1
Raw Sugar	1.m.	10.th.5.2	9.0	7.1	1.9	78.9
Crushed Ice & Cubes pack.	25.th.	120.t.	228.0	135.0	93.0	59.2
Meat Processing	0.6.m.	23,000 ^{4/}	384.0	142.0	242.0	37.0
Slaughtering & Meat Pack.	0.1.m.	3,276.th.lbs	164.8	111.3	53.5	67.5
Smoked Meat	0.5.m.	885.th.lbs	878.0	393.0	485.0	44.8
Citrus Fruit-Whole Sect.Can.	n.a.	22.m.cans ^{5/}	54.2	48.5	5.7	89.5
Block Ice.	0.5.m.	1,825.t.(3)	40.0	37.3	2.7	93.1
Crude Olive Oil	n.a.	90.th.lbs ^{6/}	37.7	23.7	14.0	62.9
Mayonnaise	1.m.	250.th.lbs	1045.0	523.0	522.0	50.1
Orange Juice, canned	n.a.	20.5.m.cans ^{7/}	1349.0	995.0	354.0	73.8
Orange Juice, concentrate	n.a.	17.m.6oz ^{8/}				
		2.7.m.12oz cans				

1. Unless otherwise specified
2. All capacities refer to one shift operations unless otherwise specified
3. Continuous operation during 5 month season
4. Hundredweight
5. 10-hour shift, 160 days annually
6. 40 weeks a year (one shift)
7. One 10-hour shift, 160 days annually
8. Three shift operation. 18-20 weeks annually

**MANUFACTURING
INDUSTRY**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	In thousand dollars		Fixed Capital	Working Capital	is % of total capit.
				Fixed Capital	Working Capital			
20 Food Industries (Cont'd)								
Vanilla Extract	n.a.	60.th.gallons	130.5	39.5	91.0	30.3	69.7	
Sea Salt	n.a.	50.th.5	188.0	136.0	52.0	72.3	27.7	
Potato Flakes	8.m.	4.2.m.lbs ^{3/}	539.0	392.0	147.0	72.7	27.3	
Lemon Oil	n.a.	45.th.lbs ^{4/}	56.0	46.0	10.0	82.1	17.9	
Vegetable Canning (Commerc).	200,000 people	400.th.cans ^{5/}	95.0	46.0	49.0	48.7	51.6	
Vegetable Canning (Co-op)	100,000 people	200.th.cans ^{5/}	32.0	24.0	8.0	75.0	25.0	
Canned Beef	n.a.	450.th.cans	124.0	67.0	57.0	54.0	46.0	
Canned Tuna Fish	10.m.	22,000.th ^{6/}	2460.0	962.0	1498.0	39.1	60.9	
21 Beverage Industries								
Carbonated Beverages	0.5.m.	3.m.bottles	75.0	59.7	15.3	79.6	20.4	
23 Textiles								
Surgical Cotton	1-2.m.	12.t.	55.8	47.1	8.7	84.4	15.6	
Men's Socks	1.m.	80.th.doz.(2)	118.7	70.7	48.0	59.6	40.4	
Hooked Rugs	n.a.	8000 rugs	19.4	3.0	16.4	15.5	84.5	
Silk Screen Print.on textiles	n.a.	250.th.yards	112.5	97.4	15.1	86.6	13.4	
Men's underwear	1.m.	300.th.doz briefs	135.4	85.2	50.2	62.9	37.1	
		16.th.doz. shirts						
Cotton Shirting	0.5.m.	925.th.yards	358.1	318.2	39.9	88.9	11.1	
Terry Cloth	1.m.	1080.th.sq.yds	292.2	205.0	87.2	70.2	29.8	
Cotton Crochet & Knit.yarn	1.m.	200.th.lbs ^{7/}	181.7	152.0	29.7	83.7	16.3	
Woolen Yarn	2-3.m.	400.th.lbs (3)	369.4	254.7	114.7	68.9	31.1	
Worsted Yarn	n.a.	350.th.lbs (3)	465.9	309.0	156.9	66.3	33.7	
Jute Yarn	n.a.	420.th.lbs (3)	90.0	66.0	24.0	73.3	26.7	

1. Unless otherwise specified
 2. All capacities refer to one shift operations unless otherwise specified
 3. Shift operation for 200 days a year
 4. One shift operation - 8 months
 5. Manufacture during 4 months annually
 6. 200 days annually

MANUFACTURING
INDUSTRY

- 3 -

	Size of market (in terms of population) <u>1/</u>	Plant Capacity <u>2/</u>	Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital	
			<u>In thousand dollars</u>				<u>As % of total capit</u>	
23 Textiles (Cont'd)								
Ramie Decor	n.a.	1.68.m.lbs	407.5	342.0	65.5	83.9	16.1	
Nylon Hosiery	2-3.m.	30th.doz.prs.(3)	216.0	175.0	41.0	81.0	19.0	
Wool Scouring	n.a.	2.5.m.lbs(2)	295.2	264.2	21.0	92.6	7.4	
Cloth Bags for Agri.Prods.	n.a.	720.th.bags	199.0	143.0	56.0	71.9	28.1	
Cotton Yarn	0.5.m.	1.56.m.lbs(3) <u>3/</u>	1108.0	957.0	151.0	86.4	13.6	
Cotton Yarn (Small Plant)	100.th.	260.th.lbs.(3) <u>3/</u>	201.0	172.0	29.0	85.6	14.4	
24 Clothing and Footwear								
Men's Dress Shirts	2-3.m.	15,000.doz.	133.7	64.0	69.7	47.9	52.1	
Work Cloves	5.m.	400.th.pairs	37.5	20.3	17.2	54.1	45.9	
Cotton Dresses	1.m.	7th.doz.dresses	59.9	23.2	36.7	38.7	61.3	
Men's Work Pants	1.m.	15,000.doz	122.8	58.3	64.5	47.5	52.5	
Men's Work Shirts	1.m.	15,000.doz	119.8	64.0	55.8	53.4	46.6	
Men's Dress Shoes	1-2.m.	50.th.pairs	241.5	173.0	68.5	71.6	28.4	
Ladies' handbags & other items	n.a.	3,000.handbags	14.6	6.0	8.6	41.1	58.9	
Ladies' Dress Shoes	2.m.	7,500.oth.items	233.0	167.7	65.3	72.0	28.0	
Men's Work Shoes	2.m.	50.th.pairs	232.0	169.0	63.0	72.8	27.1	
Women's Shoes	1.m.	125.th.pairs <u>4/</u>	428.0	310.0	118.0	72.4	27.6	
25 Wood and Cork								
Step and Ext. Ladders	1.m.	10,000 ladders	40.6	23.0	17.6	56.7	43.3	
Cork Products	n.e.	6.m. pieces	18.6	8.8	9.8	47.3	52.7	
Sash and Door Plant	2.m.	8,400 pieces	196.4	116.5	79.9	59.3	40.7	
Hardwood Parquet Flooring	n.a.	150.th.blocks	56.8	37.0	19.8	65.1	34.9	
Flush Doors	2.m.	12,500.doors	43.8	28.0	15.8	63.9	36.0	

1. Unless otherwise specified
2. All capacities refer to one shift operations unless otherwise specified
3. 300 days annually
4. 250 days a year

**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	In thousand dollars			As % of total ca	
			Total Capital (excl. land)	Fixed Capital	Working Capital		Fixed Capital
25 Wood and Cork (Cont'd)							
Plywood	1.m.	5.m.sq.ft.	515.9	426.0	89.9	82.6	17
Particle Board	4.m.	23.m.sq.ft.(3)	1024.7	914.0	110.7	89.2	10
Wooden Spoons & Sticks	n.a.	160.m.pieces	96.1	80.0	16.1	83.2	16
Wooden Shoe Lasts	n.a.	35.th.pairs	221.4	200.0	21.4	90.3	9
Rough Sawing of Logs	n.a.	4.m.board.ft.	103.3	50.0	53.3	48.4	51
Barrels	n.a.	100,000 barrels	156.2	131.2	25.0	84.0	16
Boxes and Shooks	C.3.m.	10,000,000 of ea.	151.5	98.5	53.0	65.0	35
Costumers,lamps & pict.frames	1.m.	50.th.units	92.5	74.0	18.5	80.0	20
Crates, Baskets and Hampers	1.m.	700.th.units	212.0	159.0	53.0	75.0	25
Kitchen Cabinets	2.m.	5,000.units	61.0	30.0	31.0	49.2	50
Wood Fiber Souvenirs	n.a.	240.th.units	47.0	26.6	20.4	56.6	43
Planing Mill	1.m.	750.th.board.ft.	114.0	77.0	37.0	67.5	32

26 Furniture and Fixtures

Baby beds, Feus & Bassinets	1.m.	5,000 beds	113.1	82.0	31.1	72.5	27
		5,000 pens					
		5,000 bassinets					
Bedroom & Dining Rm. Furn.	0.5.m.	3,000 sets	228.8	181.0	47.8	79.1	20
Upholstered occasional chairs	1.m.	12.th.chairs	127.7	90.7	37.0	71.0	29
Foam rubber & Polyurethane Ban	n.a.	160.th.lbs.(3)	93.7	70.0	23.7	74.7	25
Folding Chairs	1.m.	20,000.chairs	34.2	22.7	11.5	66.4	33
Overstuffed Furniture	0.5.m.	3,000 chairs	134.1	93.7	40.4	69.9	30
		6,230 sofas					
Cotton Ball-Edged Mattresses	0.3.m.	8000 lbg. 4000 sm	55.3	26.8	18.5	66.5	33
Office Chairs	n.a.	12,500 chairs	135.5	95.0	40.5	70.1	29
Reed and Rattan Furniture	5.m.	4,000 units	125.8	82.8	43.0	65.8	31
Wood Tables and Chairs	1.m.S	29,750 pieces	89.0	51.8	37.2	58.2	4

1. Unless otherwise specified
2. All capacities refer to one shift operations unless otherwise specified

MANUFACTURING
INDUSTRY

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	In thousand dollars			As % of total capit	
			Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital
27. Paper Products							
Paper Bags	3-4.m.	100 m.bags	202.3	138.6	63.7	68.5	31.5
Corrugated Fiber Boxes	n.a.	5.4 m. boxes	573.0	439.5	135.5	76.7	23.3
Fiberboard	n.a.	23 m. sq. ft (3)	1015.2	915.0	100.2	90.1	9.9
Envelopes	0.5.m.	12.5 m.	64.6	53.5	11.1	82.8	17.2
Cardboard Boxes & Paper Prods.	1-2.m.	350,000 \$	115.0	62.0	55.0	53.9	46.1
Beverage Boxes	4.m.	125 th. boxes	111.6	82.6	29.0	74.0	26.0
Coarse Wrapping Paper	0.3.m.	6,000 t. (3)	1055.0	947.0	108.0	89.8	10.2
Coarse Wrapping Paper	0.5.m.	12,500 t. (3)	1841.0	1651.0	190.0	89.7	10.3
Corrugated Paper Cartons	n.a.	1664 th. units	234.0	131.0	103.0	56.0	44.0
Pulp from Bagasse for Wallboard	n.a.	23 m. sq. ft (3)	347.7	262.4	85.3	75.5	24.5
Pulp from Scrap Wood for Wallboard	n.a.	20 m. sq. ft. (3)	316.3	265.4	80.9	76.6	23.4
Woodpulp for Coarse Wrap. Pap.	n.a.	600 tons (3)	367.6	265.4	95.2	73.6	26.4
Woodpulp for Wallboard	n.a.	23 m. sq. ft (3)	357.1	265.4	91.7	74.3	25.7
Wallboard from Vagasse	5.m.	23 m. board ft. (3)	994.0	876.0	118.0	88.1	11.9
28 Printing & Publishing							
Job Printing	n.a.	85,000 \$	59.3	27.2	12.1	69.2	30.8
Small Print. Shop (Books)	n.a.	200,000 \$	276.0	253.0	23.0	91.7	8.3
Book Bindery	0.5.m.	33,000 \$	37.9	34.4	3.5	90.8	9.2
Textbook Publishing	n.a.	5 m. books (2)	1191.0	712.0	479.0	59.8	40.2
29 Leather Products							
Leather Tanning	2-3.m.	3.5 m. sq. ft	349.4	195.4	154.4	55.8	44.2
Small Leather Tannery	n.a.	9.5 th. sq. ft	10.2	9.0	1.2	88.2	11.8

1. Unless otherwise specified

2. All capacities refer to one shift operations unless otherwise specified

**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	In thousand dollars			As % of total capital	
			Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital
30 Rubber Products							
Rubber soled Fabric Shoes	5 m.	430.th.pairs	325.0	229.0	96.0	70.5	29.5
Rubber Floor Tiles	n.a.	1.m. tiles	84.5	62.4	22.1	73.8	26.2
Rubber Cement	n.a.	75.th. galis.	60.0	49.0	11.0	81.7	18.3
Camelback	n.a.	240,000 lbs ^{2/}	99.6	68.0	31.6	68.3	31.7
Reclaimed Rubber Sheets	n.a.	2,100.t. (3)	451.2	407.0	44.2	94.2	9.8
Rubberized Sheetting	1.m.	1.25.m. yards	221.5	91.0	130.5	41.1	58.9
Rubber Soles and Heals	n.a.	200.th. lbs	64.0	43.0	21.0	67.2	32.8
Brake Lining Sets	10,000. veh.	135.th. sets	472.3	368.0	104.3	77.9	22.1
Automobile Tires	n.a.	24.th. tires (2)	4330.0	3945.0	385.0	91.1	8.9
Automobile Tubes & Tubes	n.a.	24,000 tires	606.0	426.0	80.0	86.8	13.2

31 Chemical Products

Synthetic Detergent	2.m.	1,252.th.	237.5	205.0	52.5	86.5	13.7
Caustic Soda	n.a.	7000.t. soda, 6300.t. chl(3)	1571.6	1430.4	91.2	91.0	6.0
Insecticides	1.m.	200.th. gallons	45.0	13.0	32.0	28.9	71.1
Fertilizer Mixing	1/4m. acres	22,500 t.t. 4/	440.1	310.0	130.1	70.4	29.5
Vinyl Chloride Pipes	n.a.	1.m. tiles	104.3	77.0	27.3	73.8	26.2
Castor oil Hydrogenated	n.a.	2,210.tb. lbs (3)	571.0	275.0	102.0	72.9	27.1
Dry Ice	n.a.	2,500.t.	275.0	358.9	16.1	95.7	4.3
Laundry & Milled Toilet Soap	1 m.	300.th. lbs	35.4	59.4	26.0	69.6	30.4
Oil of Clove	n.a.	26.th. 2 1/2	37.5	27.5	10.0	73.3	26.7
Paint	1.m.	25.th. 2 1/2	27.9	12.1	15.8	43.4	56.6
Pharmaceuticals, Tabs & Pills	1.m.	25.m. Pills	61.0	44.7	16.3	73.3	26.7
Salicylic Acid	n.a.	50.t. (3)	377.6	329.0	48.6	87.1	12.9

1. Unless otherwise specified
2. All capacities refer to one shift operations unless otherwise specified
3. Six months cycle (one shift operation)
4. One shift - 30 weeks a year

**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)			As % of total capital		
			Fixed Capital	Working Capital	Fixed Capital	Working Capital		
In thousand dollars								
31. Chemical Products (Cont'd)								
Superphosphate & Diammonium	2 m. acres	150 th. t. (2)	5880.0	550.0	91.4	8.6		
Tanning Extracts	n.a.	4 th. t.	385.0	71.0	81.6	18.4		
Superphosphates	400 th. acres	34,000 t. (3)	406.0	191.4	68.0	32.0		
Book Matches	3 m.	120 m. books	775.0	95.0	89.1	10.9		
Saccharin	n.a.	26,400 lbs	104.0	15.0	87.4	12.5		
Artists' Oil Paints	n.a.	200 th. tubes	36.5	11.5	76.0	24.0		
Carbide	n.a.	1,200 t. (3)	235.0	25.0	89.4	10.6		
Sulfuric Acid	n.a.	15,000 t. (3)	497.0	48.0	90.3	9.7		
32. Petroleum & Coal								
Asphalt Floor Tiles	5,000 houses	1.5 m. tiles	75.0	20.5	78.5	21.5		
Lubricating Oil reclamation	n.a.	750 th. gallons	139.7	19.0	90.0	10.0		
Asphalt Paving Material	n.a.	20,000 t.	160.0	35.0	87.1	12.9		
33. Mineral Products								
Glass Containers								
Mirror Manuf. & Resilvering	0,3 m.	6,000 t. (3)	1062.0	138.0	89.5	10.5		
Pharmaceutical Glass (capite)	1 m.	30 th. sq. ft.	27.5	8.5	76.4	23.5		
Sheet Glass	n.a.	25 m. pieces (3)	552.5	65.8	88.1	11.9		
Asbestos-Cement Siding	10 m.	10 m. sq. ft. (3)	1107.0	185.0	85.7	14.3		
Building Bricks	5 m.	123.6 th. sheets	396.0	257.0	60.6	39.4		
Cement	1 m.	6.5 m. bricks	223.0	45.5	83.1	16.9		
Ceramic Dinnerware	1 m.	35 th. t.	1552.0	101.0	93.3	6.7		
Kitchen Earthenware	2 m.	75 th. doz.	150.0	59.0	71.8	28.2		
Mineral Wool	2 m.	4 m. pieces	335.0	71.0	78.8	21.2		
Pharm. ampoules, Glass	n.a.	10 th. t.	691.0	79.0	88.6	11.4		
	n.a.	25 m. pieces (3)	244.0	90.8	62.8	37.2		

1. Unless otherwise specified

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MANUFACTURING INDUSTRIES

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	In thousand dollars		As % of total capital
				Fixed Capital	Working Capital	
33. Mineral Products (Cont'd)						
Small Ceramics Shop	n.a.	16,000 pieces	12.0	6.0	50.0	50.0
Concrete Blocks	0.5 m.	500 th. blocks	71.7	18.7	73.9	26.1
Concrete Pipe	n.a.	500 th. feet	271.9	46.4	82.9	17.1
Concrete Slabs	n.a.	5,000 slabs	98.4	30.2	69.3	30.7
Asbestos-Cement Pipe	n.a.	370 th. pieces (3)	789.4	234.4	70.3	29.7
Concrete Cinder Blocks	n.a.	500 th. blocks	72.3	19.3	73.3	26.7
Cut Glass	n.a.	500 th. pieces	149.2	80.2	46.2	53.8
Hand Blown Glass & Fine Cast Crystal	n.a.	200 lbs daily	41.1	5.5	86.6	13.4
Manganese						
Marble Cutting and Polishing	n.a.	2,500 t. (3)	1519.0	322.0	78.8	21.2
Plaster of Paris Pottery, etc.	n.a.	3000 sq. ft. (2)	158.1	53.4	66.2	33.8
Porcelain Enamel Ceram. Ware, O.g. m.	n.a.	10,100 t. (3)	544.4	36.6	93.0	7.0
Refractory Bricks	n.a.	25,000 pieces	555.0	66.0	81.4	18.6
Sandpaper	5 m.	1,875 th. bricks	510.4	34.4	92.3	6.7
Chalk whitening	n.a.	12 m. sheets	155.0	26.0	60.7	19.3
Dry Mixture Concrete in bags	n.a.	4,600 t.	61.6	15.6	74.7	25.3
Soda-Lime Window Glass	n.a.	17750 t.	224.0	38.0	83.0	17.0
Soda-Lime Window Glass	n.a.	5,500 t. (3)	1025.0	127.0	87.6	12.4
Soda-Lime Window Glass	n.a.	7,500 t. (3)	1332.0	166.0	87.5	12.5
Soda-Lime Window Glass	n.a.	10,500 t. (3)	1672.0	212.0	87.3	127.0
34. Basic Metal Industries						
Building Hardware	6 m.	300 th. doz. pieces	250.0	154.6	61.3	36.2
Primary hardware	1 m.	100 th. pieces	67.5	54.1	80.1	19.8

1. Unless otherwise specified
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**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital	
			In thousand dollars				As % of total capital	
35. Metal Products								
Metal Filing Cabinets	n.a.	8,000 Units	87.8	62.0	25.8	70.6	29.4	
Brass Foundry	n.a.	40 th.lbs	105.0	40.0	65.0	38.1	61.9	
Buckets, Pails and Pans	2.m.	350 th.pieces	134.0	81.5	52.5	60.8	39.2	
Copper Tubing	n.a.	1875 t.	559.0	254.0	305.0	45.4	54.6	
Copper Wire	5.m.	120 t.	100.7	74.0	26.7	73.5	26.5	
Farm Hand Tools	4-5.m.	250 th.tools	289.0	214.0	75.0	74.1	25.9	
Abrasive Wheels	n.a.	106 th.lbs	109.0	79.0	30.0	72.5	27.5	
Agricultural Implements	400 th.Acres	1,800 units	317.0	253.0	64.0	79.8	20.2	
Aluminum Architectural Specialties	n.a.	2,500 units	42.4	29.0	13.4	68.4	31.6	
Aluminum Cooking Utensils	1.m.	150 th.items	157.6	117.0	40.6	74.2	25.8	
Coil Springs	n.a.	100 t.	587.0	522.0	65.0	88.9	11.1	
Metal Stripping	0.5.m.	30 th.pieces	29.6	22.4	7.2	75.7	24.3	
Ornamental Ironwork	n.a.	160 Jobs	30.6	23.0	7.6	75.2	24.8	
Plating	n.a.	35,000 sq.ft.	15.3	11.0	2.3	82.7	17.3	
Sanitary Ware	5.m.	44,250 pieces	363.0	225.0	138.0	62.0	38.0	
Split Git-Head Keys, & Taper Pins	n.a.	250 t.	362.5	315.0	47.5	86.9	13.1	
Stainless Steel Utensils	2-3.m.	40 th.pieces	51.6	40.9	10.7	79.3	20.6	
Storage Fins	1.m.	3,000 units	27.7	20.5	7.2	74.0	26.0	
Two-Burner Gas Plates	1.m.	25,000 units	42.5	13.0	29.5	30.6	69.4	
Wire Nails	n.a.	500 t.	48.1	30.5	17.6	63.4	36.5	
Aluminum Die Castings	n.a.	400 th.lbs	119.3	75.1	44.2	63.0	37.0	
Centrifugal Cast Iron Pipe	n.a.	8,750 t.	50.3	262.0	138.3	72.4	27.6	
Flexible Steel Conduit	n.a.	1,300 t.	422.5	332.5	90.0	78.7	21.3	
Galvanized Steel Pipe	n.a.	10,500 t.	357.1	528.0	329.1	61.6	38.4	
Iron Cooking Utensils	3-4.m.	200 th.pieces	166.0	98.4	67.6	59.3	40.7	
Steel Mechanical Tubes	n.a.	11 m.ft.Tube	403.5	294.8	108.7	73.1	26.9	
Aluminum Storm Windows and doors.	n.a.	9,000 windows 2250 doors	60.5	28.0	32.5	45.2	53.8	
Chain-Link Fencing	n.a.	613 m.sq.ft.	256.0	185.0	71.0	72.3	27.7	

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**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital	
			<u>In thousand dollars</u>				<u>As % of total capital</u>	
35. Metal Products (Cont'd)								
Enameled Plates, Teapots & Kettles	3 m.	600 th. pieces	377.0	285.0	92.0	75.6	24.4	
Hand Tools	2 m.	500 th. tools	181.0	124.0	57.0	68.5	31.5	
Kitchen Equipment	0.5 m.	105 th. pieces	116.4	85.0	31.4	73.0	27.0	
Welded Pipe	n.a.	750 t.	228.5	190.0	38.5	83.2	16.8	
Gray Iron Jobbing Foundry	n.a.	4 m. lbs	202.0	99.0	103.0	49.0	51.0	
Steel Bars & Shapes	n.a.	15 th.t.	970.0	595.0	375.0	61.3	38.7	
Steel Bars and Shapes	n.a.	30 th.5.(3)	1859.0	1139.0	720.0	61.3	38.7	
Steel Billets	n.a.	20 th.t.(3)	625.0	356.0	269.0	57.0	45.0	
Electroplating	n.a.	150,000 v.	75.0	54.0	21.0	72.0	28.0	
Straight Pins	2 m.	1.6 m.packs (?)	77.0	56.0	21.0	72.7	22.3	
36. Machinery								
Plows	n.a.	12,500 units	168.4	109.0	59.4	64.7	35.3	
Rice Paddy Cultivators	n.a.	7,500 units	43.6	19.2	24.4	44.0	56.0	
Job Machine Shop	n.a.	230,000 v.	156.0	118.0	38.0	75.5	24.4	
Shallow Well Hand-Pumps	4 m.	30,000 units	60.8	37.0	23.8	60.9	39.1	
Water Filters Domestic	0.5 m.	25,000 filters	62.9	37.0	25.9	58.8	41.2	
37. Electrical Machinery								
Automobile Batteries	n.a.	24 th. units	115.5	72.4	43.1	62.7	37.3	
Electric Motors (1/6 to 10 horsepower)	n.a.	3,000 units	181.9	111.5	70.4	61.3	38.7	
Motor Starters	n.a.	4,200 units	83.5	45.0	38.5	53.9	46.1	
Refrigerated Walk-In Coolers	n.a.	84 coolers	63.5	40.3	23.2	63.5	36.5	
Electric 12" Oscillating	1 m.	10 th. units	80.5	50.5	30.0	62.7	37.3	
Electric Space Heaters	1 m.	25 th. units	79.5	59.5	20.0	74.8	25.2	
<u>Air Conditioners & Refrig.</u>	1 m.	6,000 units	346.5	225.9	120.6	65.2	31.3	

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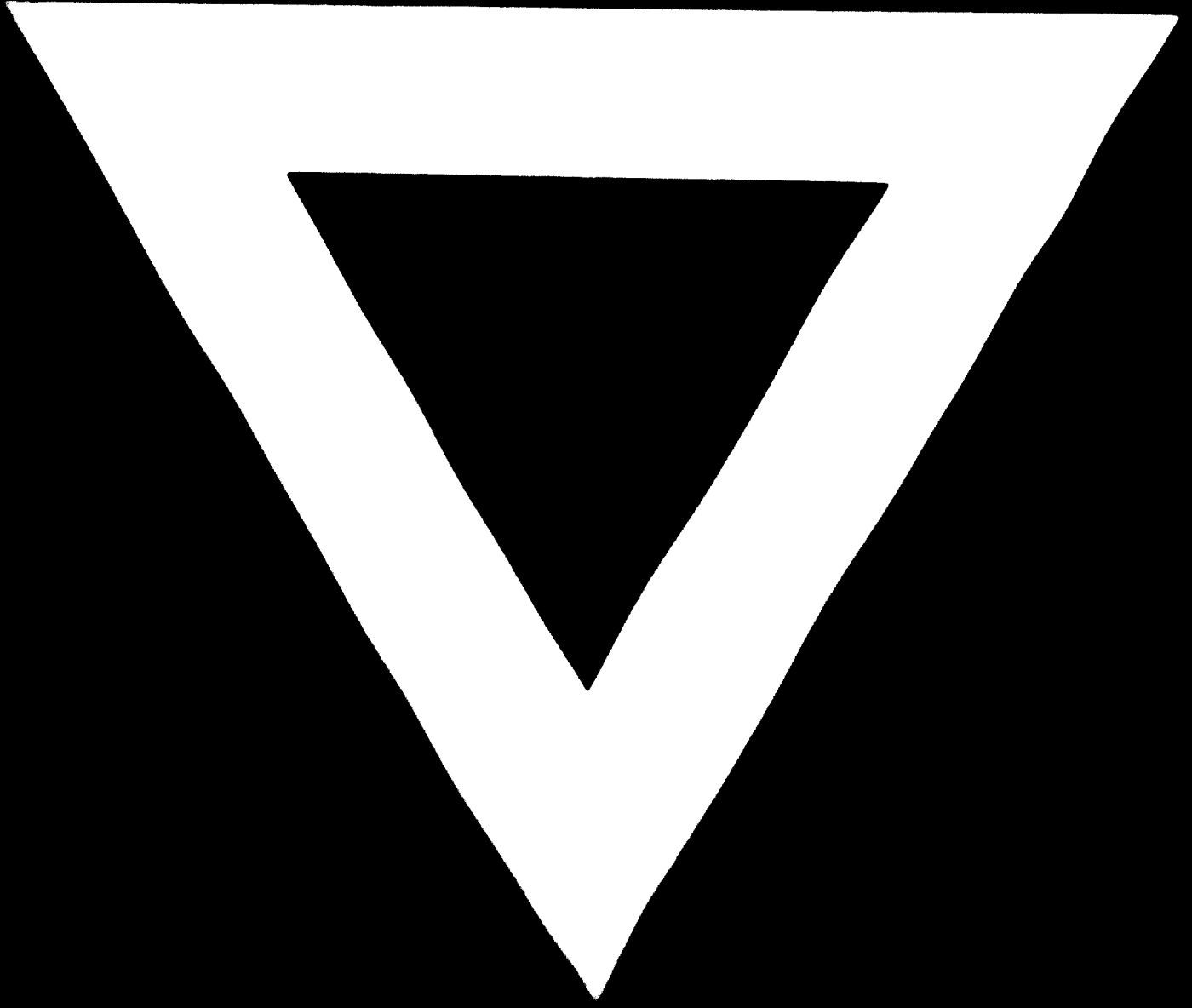
**MANUFACTURING
INDUSTRIES**

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital	As % of total capital
			In thousand dollars					
37. Electrical Machinery (Cont'd)								
Centrifugal Pumps	Valves n.a.	820 pumps 1,900 valves 50. units 4,750 units	757.8	645.0	112.8	85.1	14.9	
Cold Storage for meat & bakery	n.a.		205.0	106.0	99.0	51.7	48.3	
Conveyors & Portable Elevators	n.a.		150.0	97.0	53.0	64.7	35.3	
Cooking & Heating Stoves	l.m.	25,000. units	177.0	121.0	56.0	68.4	31.6	
Electrodes for neon lights	n.a.	800. th. units	27.0	15.5	11.5	57.4	42.6	
Heaters, kerosene Abbotts type	l.m.	25. th. units	84.0	59.0	25.0	70.2	29.8	
Centrifugal Blowers	n.a.	300. units	124.0	95.0	29.0	76.6	23.4	
Portable Cooking Stoves	n.a.	25,000. stoves	53.0	30.0	23.0	56.6	43.4	
Pumps, small-hand power driven	n.a.	1,800. pieces	185.0	89.0	96.0	48.1	51.9	
Compressors 1/4h.p. sealed	n.a.	12,000. units	201.0	137.0	64.0	68.2	31.8	
38. Transport Equipment								
Auto Truck Leaf Springs	100. th. autos		610.0	420.0	190.0	68.9	31.1	
Bicycles	2. m.	72. th. springs 12. th. bikes	129.7	39.5	90.2	30.5	69.5	
Truck Mufflers	n.a.	54,000. units	382.9	305.0	77.9	79.7	20.3	
Automobile mufflers	n.a.	40. th. units	119.5	125.0	34.5	78.4	21.6	
39. Miscellaneous Industries								
Plastic mouldings	n.a.	648. th. lbs	186.0	73.5	109.5	41.8	58.2	
Adhesive tape	n.a.	30. th. yds (36" wide)	50.0	40.0	10.0	80.0	20.0	
Brooms	l.m.	150. th. pieces	44.8	20.3	24.5	45.3	54.7	
Gold Jewelry	n.a.	8,000. pieces	12.7	6.6	6.1	52.0	48.0	
Lead Pencils	20. m.	125,000. gross	127.8	64.0	63.8	51.1	49.9	
Paint & Varnish Brushes	n.a.	4,200. units	83.5	45.0	38.5	53.9	46.1	

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MANUFACTURING
INDUSTRIES

	Size of market (in terms of population) ^{1/}	Plant Capacity ^{2/}	Total Capital (Excl. land)	Fixed Capital	Working Capital	Fixed Capital	Working Capital
			in thousand dollars		As % of total capital		
39. Miscellaneous Industries (Cont'd)							
Shell Buttons	3.M.	150,000 gross	140.5	70.0	70.5	49.8	50.2
Surgical Instruments	n.a.	7,500 units	65.0	63.0	13.0	82.9	17.1
Unbreakable Watch Crystals	n.a.	2.5 m. pieces	94.7	80.1	14.6	84.6	15.4
Artificial Teeth	n.a.	1 m. teeth	252.0	181.0	72.0	71.5	28.5
Plastic Eyeglass Frames	n.a.	120,000 frames	82.0	66.0	16.0	80.5	19.5
Specular Reflectors	n.a.	75,000 pieces	151.0	99.0	52.0	65.6	34.4



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