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INDUSTRY PROFILE #2

MEN'S WORK SHIRTS

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**[C]1987, Volunteers in Technical Assistance****INDUSTRY PROFILES****Introduction**

This Industry Profile is one of a series briefly describing small or medium-sized industries. The Profiles provide basic information for starting manufacturing plants in developing nations. Specifically, they provide general plant descriptions, financial, and technical factors for their operation, and sources of information and expertise. The series is intended to be useful in determining whether the industries described warrant further inquiry either to rule out or to decide upon investment. The underlying assumption of these Profiles is that the individual making use of them already has some knowledge and experience in industrial development.

Dollar values are listed only for machinery and equipment costs, and are primarily based on equipment in the United States. The price does not include shipping costs or import-export taxes, which must be considered and will vary greatly from country to country. No other investment costs are included (such as land value, building rental, labor, etc.) as those prices also vary.

These items are mentioned to provide the investor with a general checklist of considerations for setting up a business.

### IMPORTANT

These profiles should not be substituted for feasibility studies. Before an investment is made in a plant, a feasibility study should be conducted. This may require skilled economic and engineering expertise. The following illustrates the range of questions to which answers must be obtained:

\* What is the extent of the present demand for the product, and how is it now being satisfied?

\* Will the estimated price and ys  
steamirons  
(with generators) (6) (8)

Support equipment & parts  
furniture fixtures  
chairs & workbenches  
work tables  
storage shelves  
spare parts & tools  
work bask (50) (60)

truck/van (1) (1)

**\*TOTAL ESTIMATED COST**

of equipment & machinery only \$ 84,000 \$97,000

\*Based on \$US 1987 prices. The costs provided are estimates and are given only to provide a general idea for machinery costs; they are not intended to be used as absolute prices. Costs still need to be determined on a case by case basis.

### **\*3. Materials & Supplies Small Plant Medium Plant**

#### **Raw Materials**

work-shirt chambray 400,000 yards 600,000 yards

lining 8,000 yards 10,000 yards

thread (12,000 yd. cones) 3,000 cones 4,000 cones

buttons 15,000 gross 20,000 gross

tags & labels 1,800 gross 2,400 gross

#### **Supplies**

factory & office supplies

#### **Packaging**

shirt boards/paper 15,000 dozen 22,000 dozen

pins 10,000 gross 15,000 gross

boxes (6 shirts/box) 2,500 dozen 3,750 dozen

shipping cartons

(3 doz./carton 5,000 7,500

### **4. Labor Small Plant Medium Plant**

**Skilled**

cutters 2 3

operators 26 36

pressers 6 8

floor help 6 8

**Semiskilled****Unskilled 4****Indirect**

manager 1

office 1

supervisor 2

**5. Distribution/Supply flow Small Plant Medium Plant**

Amount in/out per day 60 dozen 75-85 dozen

**6. Market Requirements Small Plant Medium Plant**

Shirts only: 1 million 1.5 million

If plant is diversified,

to include other products: 500,000 750,000

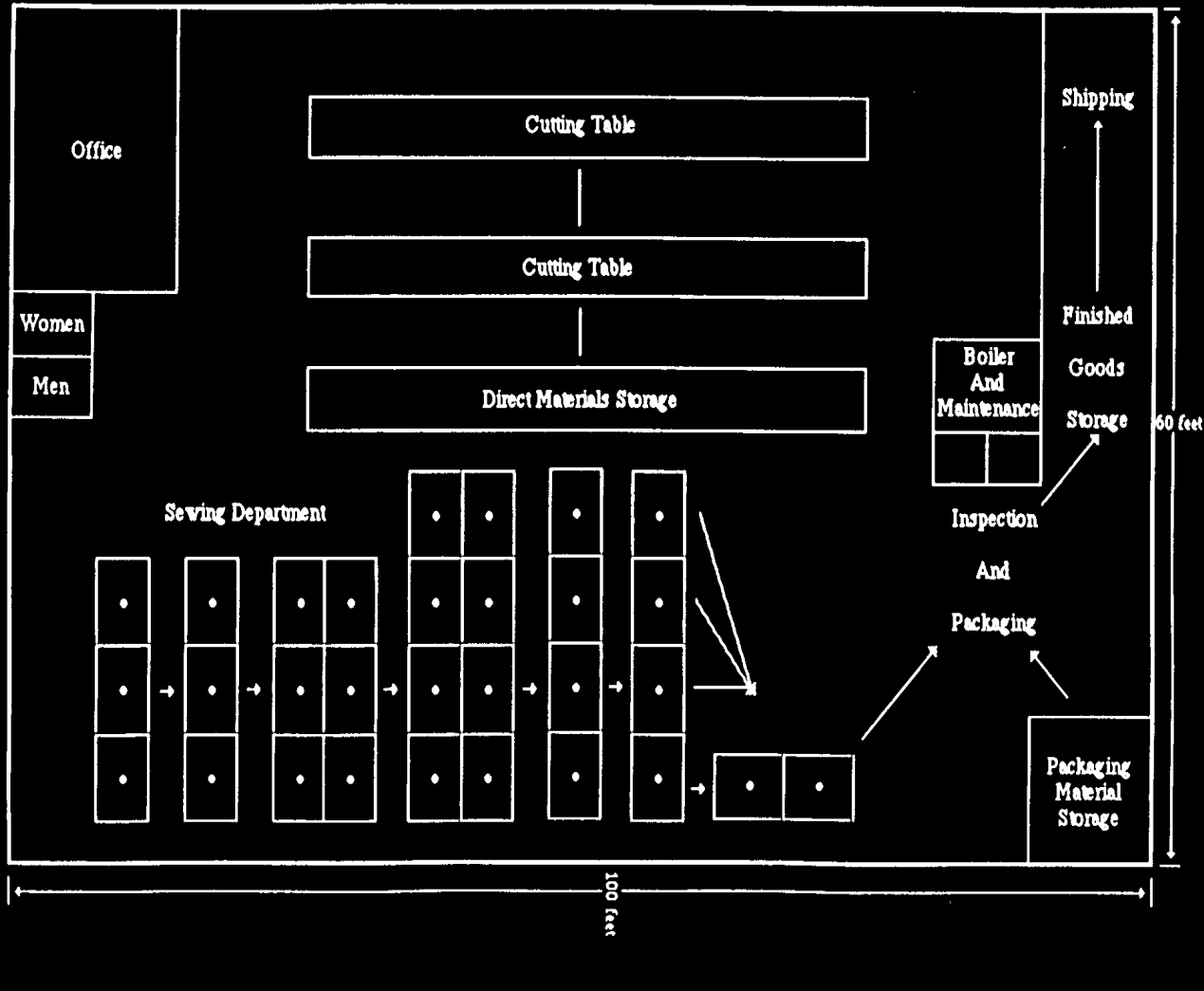
**\*This section includes an approximate amount of materials used over a period of a year. This amount does not have to be stored on the premises.**

**PROCESS DIAGRAM <see plant layout and work flow>**

**mwsx6.gif (600x600)**

### MEN'S WORK SHIRTS PLANT LAYOUT AND WORK FLOW

The diagram indicates the efficient flow of work. Machines and operators should be placed in such a manner so as to achieve optimum results. An area is needed for design/patternmakers. Management should be able to locate the building for maximum light and ventilation.



### REFERENCES

Unless otherwise stated, these addresses are in the United States.

## 1. Technical Manuals & Textbooks

Fashion Institute of Technology 7 Ave. & 27 St.

New York, New York 10001

Library and Bookstore with full listing of books on design and pattern-making, marketing, etc.

## 2. Periodicals

Women's Wear Daily,

Daily News Record

Fairchild Publications

7 E 12 Street

New York, New York 10003

Bobbin Magazine

Bobbin International, Inc.

P.O. Box 1986

1110 Shop Road

Columbia, South Carolina 29202

Apparel World

366 Park Avenue, South

New York, New York 10016

Apparel Industries Magazine



180 Allen Street  
Atlanta, Georgia 30328

### 3. Trade Associations

American Apparel Manufacturing Association  
2500 Wilson Blvd.  
Arlington, Virginia 22201  
(703) 524-1864

National Knitwear & Sportswear Association  
366 Park Ave., South  
New York, New York 10016

### 4. Equipment Suppliers, Engineering Companies

Hudson Sewing Machine Co.  
109 Johnston St.  
Newburgh, New York 12550  
(dealer in all types of equipment)

The Singer Company  
135 Raritan Center Parkway  
Edison, New Jersey 08837  
(sewing equipment, cutting room equipment)

Kurt Salmon Associates  
350 Fifth Avenue  
New York, New York 10118

(manufacturing consultant, consulting services)

### 5. Directories

#### Buyers Guide:

A Sourcing Guide for the Apparel Industry

produced by:

The Associate Member Congress

American Apparel Manufacturers Association

2500 Wilson Boulevard

Arlington, Virginia 22201

### 6. VITA Resources

VITA has on file a number of documents related to the textile industry. For example: Selected Information Resources on Textiles. Compiled by J.A. Feulner, National Referral Center, Library of Congress, May, 1980. 17 pp. XII-E-1, P. 1, 022470, 12.

### 7. VITA Venture Services

VITA Venture Services, a subsidiary of VITA, provides commercial services for industrial development. This fee-for-service includes technology and financial information, technical assistance, marketing, and joint ventures. For further information, contact VITA.

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