

Entrepreneur India

106-E, Kamla Nagar, New Delhi-110007, India.

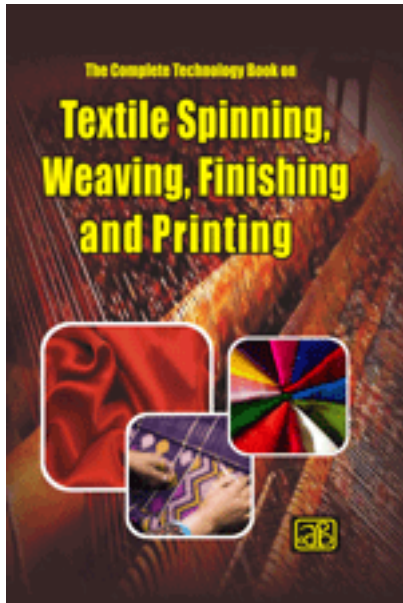
Tel: 91-11-23843955, 23845654, 23845886, +918800733955,

Mobile: +91-9811043595.

Email: npcs.ei@gmail.com ,info@entrepreneurindia.co

Website: www.entrepreneurIndia.co

The Complete Technology Book on Textile Spinning,
Weaving, Finishing and Printing



Code:	ENI107
Format:	Paperback
Indian Price:	1675
US Price:	150
Pages:	540
ISBN:	9788178331638
Publisher:	Pacific Business Press Inc. Asia

Textile industry is one of the few basic industries, which is characterised as a necessary component of human life. One may classify it as a more glamorous industry, but whatever it is, it provides with the basic requirement called clothes. Spinning is the process of converting cotton or manmade fibre into yarn to be used for weaving and knitting. Weaving is a method of textile production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Finishing refers to the processes that convert the woven or knitted cloth into a usable material. Printing is the process of applying colour to fabric in definite patterns or designs.

The textile industry occupies an important position in the total volume of merchandise trade across countries. Developing countries account for little over two-third of world exports in textiles and clothing. It is the second largest employer after agriculture, providing employment to over 45 million people directly and 60 million people indirectly. The future for the textile industry looks promising, buoyed by both strong domestic consumption as well as export demand.

This book is based on the latest technology involved in textile industry, which describes the processes available at the spinning and fabric forming stages coupled with the complexities of the finishing and colouration processes to the production of wide ranges of products.

The major contents of the book are dyeing of textile materials, principles of spinning, process preparatory to spinning, principles of weaving, textile chemicals, yarn preparation, weaving and woven fabrics, knitting and knit fabrics, nonconventional fabrics, cellulose, mixed fibers, printing compositions, printing processes, transfer dyes, transfer inks etc. It describes the manufacturing processes and photographs of plant & machinery with supplier's contact details.

It will be a standard reference book for professionals, entrepreneurs, textile mill owners, those studying and researching in this important area and others interested in the field of textile industry.

Content:

1. The Dyeing Of Textile Materials

Mordants

Assistants

Dyestuffs

Indigo

The Ingrain Dyes

Water Used in Dyeing

Interdependence of Processes

Processes Preliminary to Dyeing

Wool Scouring

“Boiling-off” Silk

Cotton Bleaching

Wool Dyeing Processes

Dyeing of Loose Wool

Slubbing (Silver)

Yarn Dyeing

Piece Dyeing

“Woaded Colours”

Blacks on Wool

Dark Blues, Greens, and Browns on Wool

Cotton Dyeing Processes

Fast Blacks on Cotton

Fast Colours on Cotton

Basic Colours on Cotton

Dyeing of Mercerized Cotton

Union Dyeing Processes

Silk Dyeing Processes

The Dyeing of Artificial Silk

Colour Matching

Fastness Properties of Dyes

2. The Principles Of Spinning

Long Fibre Spinning

Short Fibre Spinning

3. Process Preparatory To Spinning

Four Methods of Preparing Vegetable Fibres for Spinning

Four Methods of Preparing Animal Fibres for Spinning

Two Methods of Silk Preparation

Typical Example of the Method of

Preparing and Spinning

A Textile Material (China-grass or Ramie)

Preparatory Machines

The Cotton Gin

The Washing or Scouring Machine

The Dryer

The Cotton Scutcher

The Flax Scutcher
The Backwasher
The Preparing Gill-box
The Carder
The Dresser
The Comb
The Drawing-box
The Cone Drawing-box.
The French Drawing-box

4. The Principles Of Weaving

Group-unit Weaving
Shedding
Picking
Beating-up
Letting-off and Taking-up
The Boxing Mechanism
The Stop-rod and Loose-reed Mechanism
The Weft-fork Mechanism
The Warp-stop Mechanism
The Spooling or Shuttling Mechanism

5. The Principles Of Designing And Colouring

Materials
Interlacing
The Use of Point-paper
Colour
Figure Designing

6. The Principles Of Finishing

Finishing Processes and Machines
Mending, Knotting and Burling
Scouring
Milling
Crabbing
Steaming
Dyeing
Washing-off
Drying
Tentering
Brushing and Raising
Cropping or Cutting
Singeing
Pressing
Calendering
Schreincring
Filling
Conditioning

Waterproofing

General Notes

7. Textile Chemicals

Indian Demand

Demand for Bleaching Agents

Textile Bleach Formulation

Industry Trends and Success Factors

Outlook and Opportunities

Fluorescent Whitening Agent

Sector of Applications

Usage Pattern

Industry Trends and Success Factors

Outlook and Opportunity

Flame Retardants

Halogenated Compounds

Non Halogenated Compounds

Application

Sector of Applications

Bleaching Agents

Use of Various Bleaching Agents on

Textile Fibres

Hydrogen Peroxide

Sodium Hydrosulphite (Hydros)

Sodium Hypochlorite

Application and Formulations

Bleaching Assistants

Chelating Agents

Fatty Alcohol Ethoxylate

Carboxy Methyl Cellulose

Demand

Acrylates

Industry Trends and Success Factors

Pattern of Use and Formulation - Starch/

Modified-Starch

The Spin Finish Compositions for Polyester and Polyamide Yarn

White Oil

Industry Trends and Success Factors

Warp Sizes

Sector of Applications for Sizing Agents

Filament Yarns

Staple or Spun Yarn

Starch/Modified Starch

Demand

Polyvinyl Alcohol

Operations Involved in the Use of the

Textile Chemicals

Classification of Textile Chemicals
Classification Based on Use Pattern
Group Classification
Yarn Lubricants
Spin Finishing Agent

8. Global Scenario For Textile Chemicals

Consumption Pattern of Textile Chemicals
Estimated Global Market for Textile
Chemicals
Estimated Markets for Textile Chemicals in the Asia-pacific Region (2001)
Estimated Consumption of Textile Chemical in Different Regions
Categories of Textile Chemicals Value
(In Millions of Dollars)
Us Market for Textile Chemicals
Industry Trends and Success Factors
Outlook and Opportunities
Oxalic Acid
Polyethylene Glycol
Applications in Textile Industry
Silicone Oil/ Silicone Emulsion
Indian Demand for Silicone Oil/ Emulsion in
Textile Sector
Industry Trends and Successful Factor
Outlook and Opportunities
Emeu/Dmdheu
Industry Trends and Success Factors
Sulphur Black
Industry Trends and Outlook
Textile Enzymes
Cellulase/Amylase
Classification of Thickening Agent
Pigment Binders
Guar Gum
Sodium Alginate
Sodium/Zinc Formaldehyde Sulphoxylate
Styrene Butadiene Rubber - Lattices
Formaldehyde Based Resins
Industry Trends and Outlook
Indian Scenario
Consumption Pattern of Flame Retardent
Printing Auxiliary

9. YARN PREPARATION

Introduction
Winding
Quill Winding

Warping

Slashing or Warp Sizing

Drawing-In and Tying-In

10. Weaving AND WOVEN FABRICS

Introduction

Woven Fabrics

Plain Weave

Rib Weaves

Basket Weaves

Twill Weaves

Satin Weaves

Drawing-In Draft, Chain and Reed Plans

Cover Factor

Other Terms Related to Single Fabrics

Weaving

Shedding

Filling Insertion

Beat-up

Warp and Fabric Control

The Weaving Cycle

Woven Fabric Production

Secondary Mechanisms (Motions) In A

Power Loom

Warp Stop Motions

Filling Stop Motions

Warp Protector Motion

Selvage Motion

Box Motion

Automatic Filling Transfer

Shuttleless Looms

Introduction

Rapier Looms

Projectile (Gripper) Looms

Fluid Jet Looms

New Weaving Technologies - Multiple

Shed Looms

Filling Accumulation Systems

Modification of the Salvege

11. Knitting AND KNIT FABRICS

Introduction

Knitting Elements

Needles and Knitting Action

Sinkers

Weft Knitting

Single Knitting

Single Knit Fabrics

- Double Knitting
- Double Knit Fabrics
- Purl Knit Fabrics
- Knit, Tuck and Float Loops
- Weft Knit Design
- Stitch Notation
- Weft Knit Fabrics
- Weft Knitted Fabric Production
- Warp Knitting
- Introduction
- Major Machine Classification
- Knitting Elements
- Warp Knitting Action
- Comparison between Tricot and Raschel
- Warp Knit Design
- Point Paper Notation
- Single Bar Fabric
- Two Bar Fabrics
- Warp Knit Fabric Production

12. NonconVENTIONAL FABRICS

- Introduction
- Nonwoven Systems and Fabrics
- Chemically or Adhesively Bonded Fabrics
- Mechanically Bonded Fabrics
- Tufting
- Flocking
- Laminated and Bonded Fabrics
- Wet Adhesive Bonding
- Foam Flame Bonding

13. Synthetic Substrates

- Anthraquinones
- Diverse synthetic substrates
- Monoazo Dyestuffs
- Water-Insoluble Monoazo Dyestuffs
- Mixture of Monoazo Dyestuffs for Polyesters
- Azo Containing Compounds
- Water-Soluble Disazo Dyestuffs for Polyamides
- Gold and Orange Prints on Polyamides
- Azocoumarinic Dyes for Hydrophobia Synthetics
- Dyestuffs Tolerant to Temperature and pH Variations
- Printing of Nickel-Containing Polyolefins

14. Natural And Synthetic

Substrates

Anthraquinones

Polyfluoro Acid Anthraquinone Dyestuffs for Polyamides

Fibre Reactive Anthraquinone Compounds

Aminoan Thraquinone Reactive Disperse Dyes

Azo Compounds

Naphthylene and Tetrahydronaphthylene- containing Azo Dyestuffs

Monoazo Dyestuff Containing Fiber-Reactive Group

Cold Water soluble Acid Dye Compositions

Polyvalent Metal and Azo-Barbituric Acid

Anionic and Cationic Dyes

Fluid and Stable Dispersions of Anionic Dyes

Heterocyclic Cationic Dyestuffs

Water-soluble Quaternary Ammonium

Phenylazo Cationic Dyes

15. Cellulosics

Reactive Dyes

Organic Dye with Phosphonic Acid

Monofluoride

Aminonaphthyl Azobenzene Vinyl Rective Dyes

Phthalocyanine Reactive Dyestuffs

Water-Soluble Fiber-Reactive Dyestuffs

Disperse Dyes

Fixation with Aliphatic Alcohols, Amines, or Aminoalcohols

Azo Dyes having Substituted 2, 6-Diaminopye Coupling Component

Acylating Cellulose Fibers

16. Mixed Fibers

Polyester and Wool

Tone-in-Tone Dyeing of Polyester-Wool Blend

Cellulosics and Synthetic Polyamides

Marked Reactive Dyestuff

Swellable Cellulosics and Synthetics

Ethoxylated Condensate of Monocarboxylic Acid and Hydroxyalkylamine

Water-soluble Solvent and Swelling Agent

Disazo Dyes Derived from Amino-pyrazole

Unformed Disperse Dye and Swelling Agent
Cellulosics and Synthetics
Unformed Disperse Dye with Reactive Dye
Textile Treated with Epoxy-group-containing
Compounds
Impregnation with an Aqueous
Composition
Blends of Natural and Synthetic Fibers

17. PRINTING COMPOSITIONS

Printing Pastes with Developing Dyes
Improved Base Printing Process
Formic Acid as Developing Medium for
Azo Dyes
Auxiliary Agents in Print Formulations
Hydroxyalkyl Carboxyalkyl Cellulose
Thickening Agent
Sodium Cellulose Sulfate as Thickening and Acid Fixing Agent
Additive for Pigmentary Printing Pastes
Salts of Diaryl Ether Sulfonic Acids
Carrier for Cationic Dyes
Dye Carrier Comprising Phenyl Cyclohexane and Derivatives

18. PRINTING PROCESSES

Fixation
Fixation with Vapor of Organic Solvent
Dyestuffs for Methylene Chloride Fixation
Processes
Improved Fixation of Reactive Dyes on
Cellulose Fibers
Continuous Dyeing and Printing of Piece
Goods
Printing Heavy Pile Fabrics with Powder
Preparations
Improved Alignment of Printed Patterns
Uniform Heat-setting of Continuous Synthet
Filament Groups
Voluminous Substrate Rolled up with
Foramed Dye
Continuous Printing Process by Direct Liqui
Film Transfer Method for Printing and Flocking
Simultaneously
Sprayed Carriers for Continuous Print
Fixation

19. TRANSFER DYES

Anthraquinones
Anthraquinone Ink Formulation
Anthraquinone Dyes for Synthetics

Deep Yellow Colors on Polyesters
Indolenine Methines for Acid-modified
Synthetics
Heterocyclic Naphthalene Derivatives
Printing Polyacrylonitriles with Disperse
Dyes
Disperse Dyes Containing Carboxylic Acid
Groups
Hydrolyzable Silyl-substituted Dyestuffs
Nitroacridone Dyestuffs
Heat Transfer Black Dyestuff A
Heat Transfer Black Dyestuff B
Dyestuff Combinations for Long-Pile
Fabrics

20. TRANSFER INKS

Organic Base
Cationic Dyes in Organic Solvents
Carbinol Base of Cationic Dyestuff as
Dyestuff Intermediate
These Inks are characterized in that they contain at Least
Sublimable Dyestuff Base on Acid-Modified
Fibres
Aqueous and Oil in Water
Aqueous Preparations of Sparingly Soluble
Dyestuffs
Organic-aqueous Printing Inks
Water-dilutable Transfer Ink Compositions
Dry Preparation
Hot-Melt and Hot-Stamp Inks
Hot-Melt Ink Composition
N-Methoxymethylated Nylon Copolymer for
Hot-Stamp Ink
Production of Transfer Paper by Rotary
Screen Printing
Transfer Inks for Household Use
Inks of High Filler Content
UV-curable Inks For Offset-printing
Transfers

21. PHOTOGRAPHS OF PLANT & MACHINERY WITH SUPPLIER'S CONTACT DETAILS

Sample Chapter:

NIIR Project Consultancy Services (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. Its various services are: Pre-feasibility study, New Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Preparation of Project Profiles and Pre-Investment and Pre-Feasibility Studies, Market Surveys and Studies, Preparation of Techno-Economic Feasibility Reports, Identification and Selection of Plant and Machinery, Manufacturing Process and or Equipment required, General Guidance, Technical and Commercial Counseling for setting up new industrial projects and industry. NPCS also publishes various technology books, directory, databases, detailed project reports, market survey reports on various industries and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by Indian and overseas professionals including project engineers, information services bureau, consultants and consultancy firms as one of the input in their research.

NIIR PROJECT CONSULTANCY SERVICES

106-E, Kamla Nagar, New Delhi-110007, India.

Tel: 91-11-23843955, 23845654, 23845886, +918800733955

Mobile: +91-9811043595

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Website: www.entrepreneurIndia.co