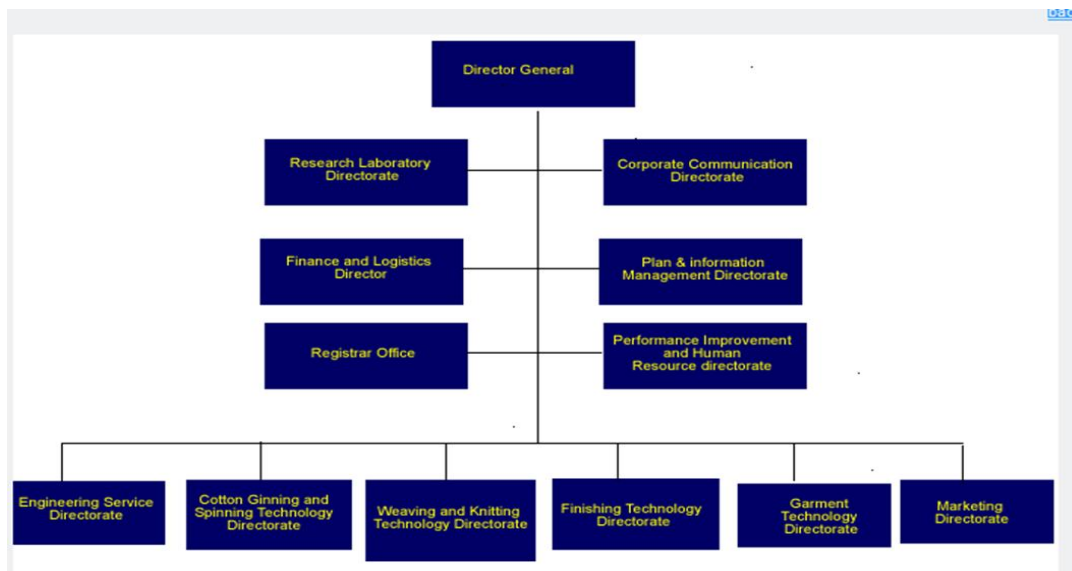


Ginning and Spinning Operation

LEVEL – I

Based on March 2022, Curriculum Version 1



Module Title: - Production Process and Organizational Structure in Textile Industry

Module code: IND GSO1 M01 0322

Nominal duration: 60Hour

Prepared by: Ministry of Labour and Skill

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Addis Ababa, Ethiopia

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Introduction to the Module

Organizations are set up in specific ways to accomplish different goals, and the structure of an organization can help or hinder its progress toward accomplishing these goals. Organizations large and small can achieve higher sales and other profit by properly matching their needs with the structure they use to operate.

This module covers the units:

- the organizational structure within the industry
- legislation and guidelines
- production processes and supply chains
- workplace processes
- skills for productive work
- Manage own work

Learning Objective of the Module

- Identify the organizational structure within the industry
- Identify relevant legislation and guidelines
- Identify production processes and supply chains
- Describe workplace processes
- Learn skills for productive work
- Manage own work

Module Instruction

For effective use this modules trainees are expected to follow the following module instruction:

1. Read the information written in each unit
2. Accomplish the Self-checks at the end of each unit
3. Perform Operation Sheets which were provided at the end of units
4. Do the “LAP test” giver at the end of each unit and
5. Read the identified reference book for Examples and exercise

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Unit one: organizational structure within the industry

This unit is developed to provide you the necessary information regarding the following content coverage and topics:

- Relevant organizational positions in textile industry
- Industry representatives and personnel roles

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Determine organizational positions in textile industry
- Understand Industry representatives and personnel roles

1.1 Relevant organizational positions in textile industry

1.1.1 Organizational structures:

Organizational Structure may define in different ways;

- They define the levels of management in organizations.
- Organization structures define relationships between jobs.
- They define the centers of decisions in any organization.
- They help to achieve organizational goals by grouping jobs, defining relationship between positions as well as who takes the responsibility in organization.

Every business needs to be organized for effective and efficient performance.

To start and run the business, the essential requirements are:

- Men

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- Materials
- Machines
- Money

Organization is the back bone of management that establishes relationship between people, work and resources.

Every factory needs a good organization structure for the following reasons:

- Increase size of manufacturing plant
- Tough competition
- Solve Labor problems
- Produce require quantity in required quality at the required time with minimum cost.

1.1.2 Types of Organizational Structure

Organizations are set up in specific ways to accomplish different goals, and the structure of an organization can help or hinder its progress toward accomplishing these goals.

There are three main types of organizational structure:

- A. Functional
- B. Line, military or scalar organization
- C. Line and staff organization

Functional Structure

Authority from top to down to is delegated according to the function. In this type of organization, specialist like production engineer, quality control manager, maintenance engineer, cost accountants are employed.

A. Line, military or scalar organization

- Earliest
- Simplest

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- Also called Military type or departmental organization

In this organization structure, superior employees directly control their subordinates and are fully responsible to the commanding superiors. The authority directly flows from the top to bottom.

B. Line and staff organization

It is an organization structure where the line heads are assisted by specialist staff.

- supervisor or team leader
- production staff and operators
- management and specialist support staff
- unions or industry associations or representatives
- OHS representatives

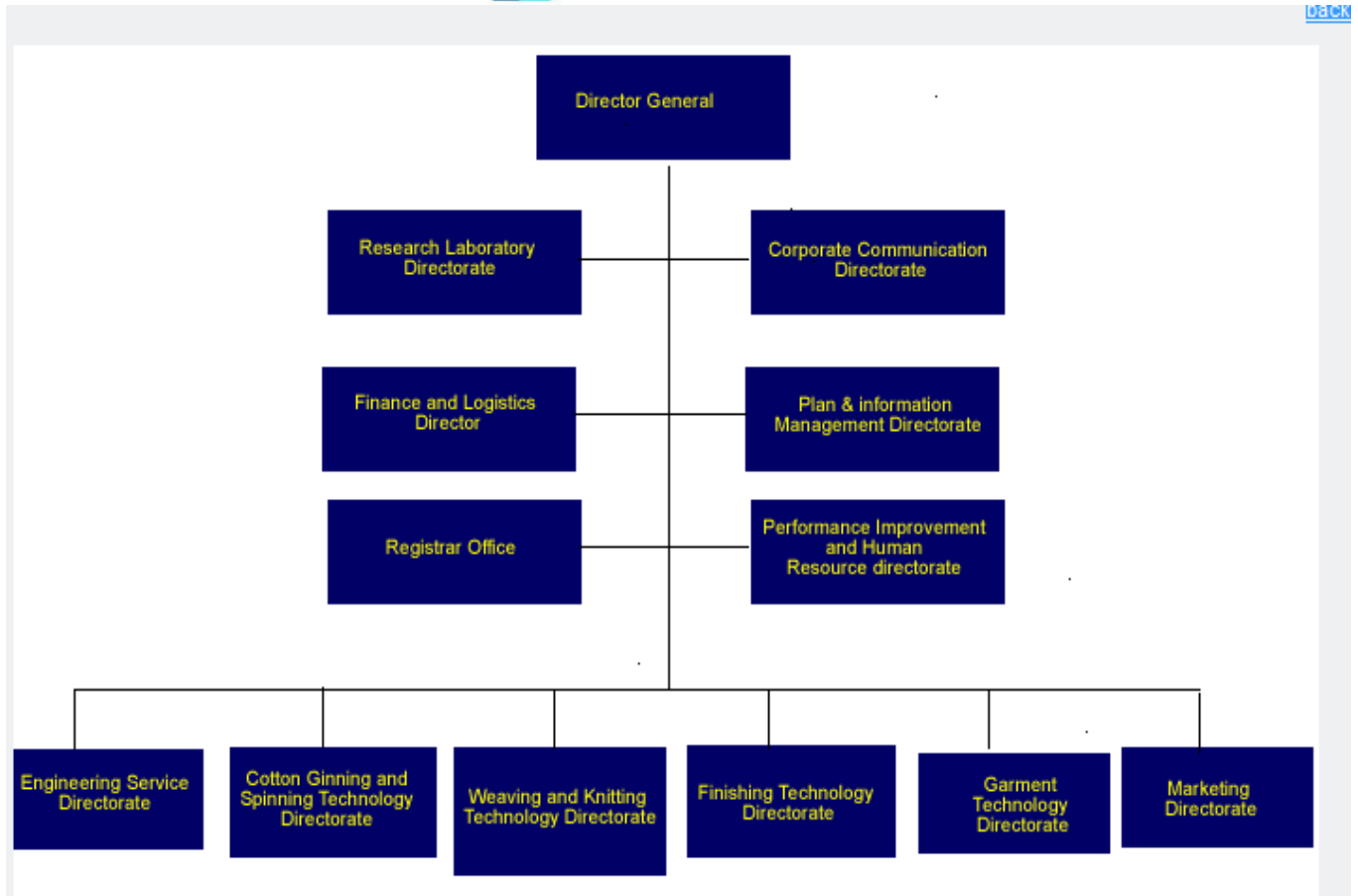


Figure 1 hierarchy of textile industry

1.2 Industry representatives and personnel roles

1. General manager

The managers are strict in controlling the working time and efficiency of workers.

Production Manager/Shift In charge

- Ability to oversee plant operations
- Problem solving skills, good communication skills to manage shop floor workers who are mostly minimally educated

- Technical competence Very strong understanding of all aspects of the spinning, weaving and chemical process. Technical knowledge is a must as spinning; weaving and chemical sector is technology intensive in nature.

2. Supervisor

- In-depth knowledge of production process.
- Knowledge about the various spinning, weaving, knitting and chemical processing machines used across the shop floor.

3. Operator

- Operating knowledge of the spinning, weaving and chemical processing machines.
- Ability to ensure that machine stoppage time is minimal
- Should be able to read gauges, dials, or other indicators to make sure a machine is working properly.

4. Quality Control Supervisor/Manager

- Understand the quality requirements of the yarn in terms of “count”, breakage during weaving etc.
- Understanding of the quality parameters across the various stages of assembly line.
- Knowledge of the cause of various defects. For example, the Supervisory should know that a particular defect (like black dots) in the yarn is due to improper quality of cotton or particular manufacturing process.

5. Quality Control executive

- Understanding of the quality parameters.
- Ensure that the quality parameters are adhered to by diligently checking the product. For e.g. Yarn marked as count 40 should not be 38/39 which will significantly affect the fabric manufacturers.

6. Sales Manager

- Detailed product knowledge in terms of type of fiber and other technical parameters.

- Good negotiation skills are a must as the yarn market is very cost sensitive. Minor quality issues tend to result in high discounts.
- Good communication skills to interact with the team as well as with the important clients.
- Knowledge of English is important in case of international clients.

7. Sales Executives

- Awareness of competitor actions and provide feedback to the management.
- Understanding of customer requirements in terms of quality of yarn.
- Good communication skills to interact with the team as well as with the important clients.

Roles of industry representative:

- Industry representatives and their roles are identified.
- roles and responsibilities of key representatives

1. Department of Labor and Employment:

Conciliation:

Resolving industrial disputes

Enforcement:

Ensuring protection to labor in working conditions, health, safety and welfare in establishments other than factories

Quasi-Judicial:

Deciding claims for non-payment, underpayment, delayed payment of wages, non-payment of minimum wages and equal wages, deciding claims under Workmen's Compensation Act, Payment of Wages Act and Minimum Wages Act

Trade Union Registration:

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1 Registration of workers associating themselves into trade unions
Social Security to Organized and Un-organized workers: Labor Welfare Board provides various social security measures to the workers engaged in different employments.

2. Directorate of Industrial Safety and Health

Health, safety and working conditions in factories: Responsible for ensuring safety, health, welfare and working conditions of workers working in factories and in construction works by effectively enforcing the provisions of the Factories Act,.

Inspections: Responsible for conducting inspections in the supply chains of textile industry in the state. Also responsible for inspecting cases of child labor, bonded labor or any forms of malpractice in their social audits.

3. Department of Social Defense: Protection of women and children: Ensuring protection and development of children and women from significant harm through institutional (e.g. shelter-based), no institutional and outreach programmers .

Co-ordination and networking with allied systems like Police, Judiciary, Civil society, NGOs, Corporate sector, to ensure protection and development of children and women living in vulnerable condition.

Running and Maintaining of child care institutions like Observation Homes, Special Homes, Shelter Homes, drop in centers, children's homes etc., either on its own or in collaboration with NGOs.

Running and Maintaining of other institutions like Rescue Shelters, Vigilance Institution / Protective Homes etc. either on its own or in collaboration with NGOs.

Linking vulnerable rescued children to various schemes

such as the marriage scheme, the SC/ST education schemes, vocational training and NCLP of the state government to ensure their proper rehabilitation.


4. Labour Welfare Board:

The Board implements various welfare schemes for the benefit of the workers who contribute to Labor Welfare Fund.

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1. **Anti-Human Trafficking Units:**

The primary objective of the unit is to monitor railway stations, bus stands, factories, industrial units, eateries and places with scope for bonded labor and child labor, alms-seekers to prevent trafficking of children and to monitor and prevent trafficking of girl children and woman to prevent sex trafficking.

 **It may include: Industry associations** Association plays a lead role in all the textile policy making bodies of Central Government and State Governments.

The Association focuses on:

- growth of the industry and exports;
- development of infrastructure in the area;
- cooperation with the workforce;
- Improvement of quality of life.

Unions The classic definition of a trade union is “a continuous association of wage earners for the purpose of maintaining or improving the conditions of their employment” (Webb and Webb 1920).

Union rights are a key issue. Registering a trade union could be made easier. Public authorities should guarantee the implementation of union rights, including the protection of union leaders from persecution. Moreover, they could guarantee respect for workers' internationally recognized rights of freedom of association and collective bargaining, by ratifying and implementing ILO conventions on freedom of association. Regular work should be the norm and not the exception. This not only enhances workers' rights, but for instance, in case of accidents, entitles victims and their families to compensation. This implies more checks by public authorities on safety and social rights compliance.

Suitable systems of labor inspection should be set up, and be staffed by adequate numbers of properly trained inspectors.

Most trade union membership is limited to workers who possess employment documents.

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There is a strong need for unions to reach out to workers to increase their membership.

Also, as some of these are national unions, they might also be in a better position to reach out to inter-state migrant workers.

Relevant legislative bodies governing OHS, environmental protection, anti-discrimination

Relationship between Rights of Association and Representation and Occupational Safety and Health

Joint consultation and participation can be effective only in an environment where there is adequate recognition of and respect for the right of employers and workers to associate freely and for their organizations to be able to represent their interests effectively.

In a very real sense, therefore, respect for the right to organize can be seen to be an essential precondition of an effective occupational safety and health strategy at both the national and international level and at the workplace.

Legislation

- Much of Europe's legislation for protecting the safety and health of workers is based on a common structure.
- This is a series of directives made up of council directive 89/391 (the “framework directive”) and its “daughter directives” on a range of more specific subjects such as noise, chemical agents, and manual handling.

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Self-check-1

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

Part one: Choose the best answer (2 mark each)

1. Which one of the following true about organization structure
 - A. level of position
 - B. task of personnel's
 - C. centers of decisions in any organization
 - D. all
2. Which one of the following top level of management
 - A. supervisor B. operator C. general manager D. production manager
3. The role of production managers
 - A. controlling spinning process
 - B. controlling weaving process
 - C. controlling chemical process
 - D. all

Part two:

1. Define Organizational Structure in different ways? (4 marks)
2. Explain the role of human resource in textile organization?(5 marks)
3. who are the highest level of position in hierarchy of organization?(1 mark)
4. describe industrial associations?(2 marks)
5. Describe union? (2 marks)

Unit Two: Identify relevant legislation and guidelines

This unit to provide you the necessary information regarding the following content coverage and topics:

- Relevant legislation and guidelines common to employment within the sector
- Rights, responsibilities and legal obligations.
- Concepts of product quality in workplace.
- Instructions and procedures are identified in a quality system
- Employability skills for workplace production

This guide will also assist you to attain the learning outcomes stated in the cover page.

Specifically, upon completion of this learning guide, you will be able to:

- Identify relevant legislation and guidelines common to employment within the sector
- Identify Rights, responsibilities and legal obligations.
- Measure Concepts of product quality in workplace.
- Instructions and procedures are identified in a quality system
- Identify Employability skills for workplace production

2.1 Relevant legislation and guidelines common to employment within the sector

2.1.1 Legislation and guidelines

- anti-discrimination

it refer to the law on people's right to treated equally some countries mandate that in employment, in consumer transaction and in political participation people may be deal with on an equally basis regardless of sex, race, ethnicity, nationality, sexuality and sometimes religion and political views.

- equal employment opportunities

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It is about ensuring that all employees have equal access to the opportunities that are available at work by:

- making sure that workplace are free from all form of unlawful discrimination and harassment
- providing program to assist member of equal employee opportunity groups to overcome past or present disadvantage
- work place diversity

It is a people issue, focused on the differences and similarities that people bring to an organization.

- freedom of information

Comprises laws that guarantee access to held by state, they establish a “right to know” legal process by which request may be made for government held information to be received freely or at minimal cost.

- environmental guide lines and industrial relations awards

Every product impacts the natural environment. Decisions made during the design phase determine the level and type of impact a product will have.

2.2 Rights, responsibilities and legal obligations

An obligation is a requirement to a course action, whether moral or legal.

Add value: Organizations exist to create value or benefit to their owners, other stake holder, customers and clients.

Adequate control: Present if management has planned and organized in a manner that provides reasonable assurance that the organizations risk have been managed effectively and that organization goals and objective will be achieved efficiently and economically.

- Risk assessment and reduction

Proper handling including the collection, transport, processing recycling or disposal of waste materials produced by human actively in order to reduce their negative effect on the environment.

Risk assessment step by step:

The legal requirement for risk evaluation or assessment applies to all employers. The process for carrying out a risk assessment can be broken down into a series of steps:

Step 1 Identifying hazards and those at risk

Step 2 Evaluating and prioritizing risks

Step 3 Deciding on preventive action

Step 4 Taking action

Step 5 Monitoring and reviewing

2.3 Concepts of product quality

A quality textile product is one that been well designed and well produced to meet the purpose for which it was intended.

Product quality depend on several factors

- The design features built in to the product to make it fit for its intended purpose.
- The quality of material used
- The quality of finishing techniques
- The quality of assembly process
- The quality control checks under taken at all stage a in production process

Concept of product quality includes:

- consistency in quality
- producing to specification, including time requirements
- meeting customer requirements

2.4 Instructions and procedures in a quality system

There are two areas to consider when evaluating a textile product for quality

1. How well it has been design for its purpose
 2. How well it has been made to meet that purpose.
- Textile industry is the mechanical facilities that convert filament, fiber or yarn that can be made into fabric and cloth and the resulting material.

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- The work environment in the textile mills is dominantly harmful or dangerous due to noise, dust and heat.
- The production uses a vast quantity of water and variety of chemicals.
- These generate liquid waste containing substantial pollutions in the form of organic and suspended matter, such as fibers and grease.
- Floor are usually dirty, the pre spinning stage extremely dust and the finishing stage toxic with highly concentrated odors.
- Hazard is any substance or agent that can cause potential health effect and it can be biological, chemical, physical substances.
- During textile processing the worker are exposed to various hazards and risks, hazards are classified into chemical, physical, ergonomic and computer hazards.

2.5 Employability skills for workplace production

hazard identification and control

- Textile industry is the mechanical facilities that convert filament, fiber or yarn that can be made into fabric and cloth and the resulting material.
- The work environment in the textile mills is dominantly harmful or dangerous due to noise, dust and heat.
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- Hazard is any substance or agent that can cause potential health effect and it can be biological, chemical, physical substances.
- During textile processing the worker are exposed to various hazards and risks, hazards are classified into chemical, physical, ergonomic and computer hazards.

Types of hazards

- Physical hazard, for example heat, dust, noise, physical characteristics of material.

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- Chemical hazard, for example chemical used in fabric processing. Eg sulphuric acid.
- Ergonomics, for example increased repetitious, seated for long period of time, poor arrangement of machine, lifting large load, squatting position.
- Psychosocial factor ergonomics include boring ,stress, low pay ,lack of recognition ,production pressure and repetitious task
- Risk assessment and reduction

Proper handling including the collection, transport, processing recycling or disposal of waste materials produced by human actively in order to reduce their negative effect on the environment.

Risk assessment step by step

The legal requirement for risk evaluation or assessment applies to all employers. The process for carrying out a risk assessment can be broken down into a series of steps:

Step 1 Identifying hazards and those at risk

Step 2 Evaluating and prioritizing risks

Step 3 Deciding on preventive action

Step 4 Taking action

Step 5 Monitoring and reviewing

Self-Check 2

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Discuss hazard (OHS practice) and control mechanism in textile industry?
2. List type of hazards in textile industry?
3. List and discuss legislation, guidelines and their requirements in textile industry?
4. Define concept of product quality and discuss the factors of quality product?
5. Write steps of risk assessment?

Unit Three: Identify production processes and supply chains

This unit to provide you the necessary information regarding the following content coverage and topics:

- Workplace materials.
- Workplace production processes for converting materials into products.
- Workplace supply chains for products

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Determine Workplace materials are.
- Identified Workplace production processes for converting materials into products.
- Use Workplace supply chains for products

3.1 work place material

It includes

- Textile production and early stage wool processing
- Cotton ginning and textile fabrication
- Clothing production
- Technical textiles and non-woven
- Footwear and leather production
- Laundry and dry cleaning operations
- Fashion design and technology
- Natural and synthetic fibers and fabrics
- Animal hides
- Components such as buttons and zips

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3.2 production processes

Most textile companies are ageing while the technology changes rapidly. These companies own machines of different ages and production characteristics, such as processing speed, changeover possibilities and facilities, etc.

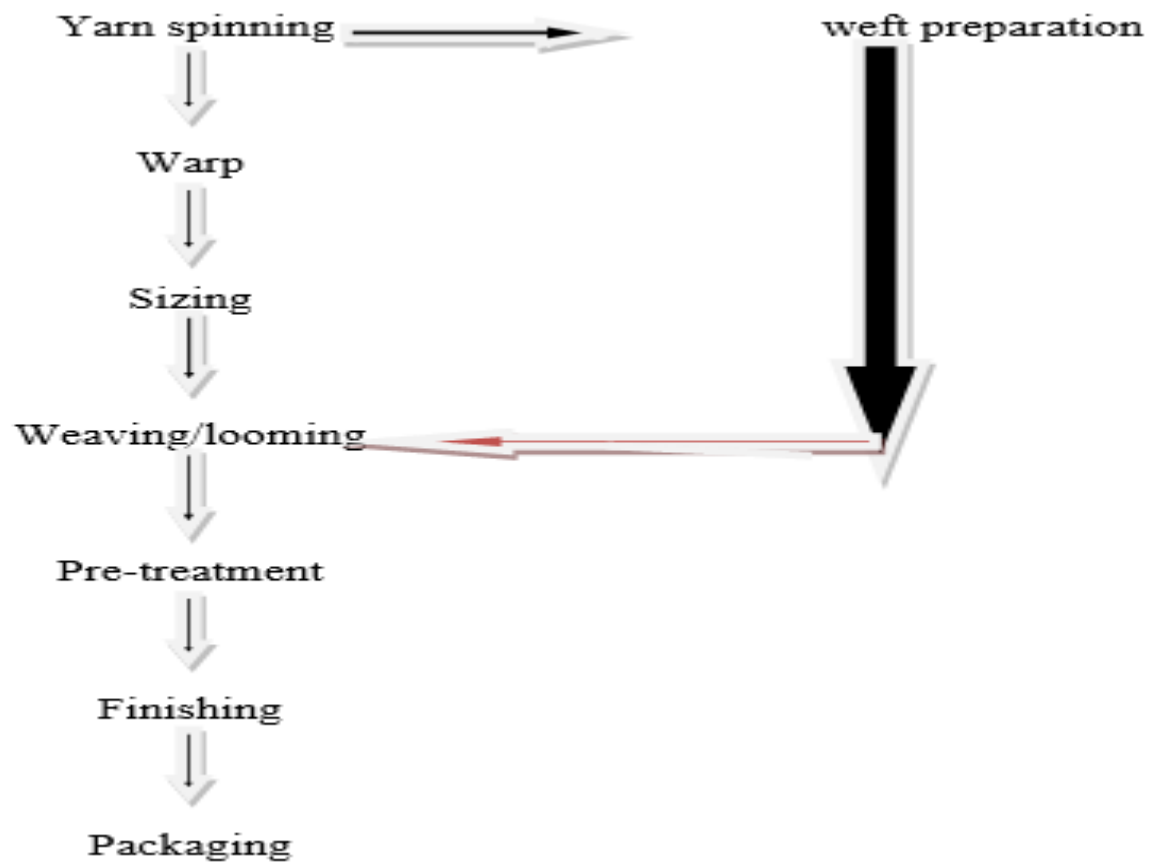


Figure 2 the textile manufacturing process.

3.3 production process and supply chains

Supply Chain:

- A supply chain is characterized by the flow of goods, services, money, and information both within and among business entities including suppliers, manufacturers, and customers.
- It also includes all types of organizations engaged in transportation, warehousing, information processing, and materials handling.
- Sourcing, procurement, production scheduling, manufacturing, order processing, inventory management, warehousing, and, finally, customer service are the functions performed throughout the supply chain.
- The ultimate goal of SCM (supply chain management) is to meet customers' demand more efficiently by providing the right product, in the right quantity, at the right location, on the right time, and in the right condition.
- The major component of the Textile Industry that is Cotton, Yarn, Grey fabric, Dyes & Chemicals, Spare parts, Packing Material, Stitching Accessories, General Items etc.
- Cotton is normally a very specific material and the cotton are trade and fluctuate on daily basis so the forward purchasing is done from the suppliers to avoid any stock out position.
- Cotton on the basis of the orders received from the export and the Local retail shops.
- The same procedure applies to the Yarn and the Gray procurement.
- Dyes & Chemicals are mainly imported

Self-Check 3

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. List work place materials?
2. Define and explain supply chain?
3. Show the diagram textile manufacturing process?

Unit four: Describe workplace processes

This unit to provide you the necessary information regarding the following content coverage and topics:

- OHS practices
- Key activities of workplace
- Key personnel and their roles
- Departments and their role in the production process

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Determine OHS practices.
- describe Key activities in workplace
- Determine personnel and their roles
- departments and role in the production process

4.1 OHS practices

- Systemic hazardous conditions represent a common feature of many factories in this sector.
- The rapid expansion of the industry has led to the adaptation of many buildings, built for other purposes – residential, for instance – into factories, often without the required permits.
- Other plants have had extra floors added or have increased the workforce and machinery to levels beyond the safe capacity of the building.

- Lack of appropriate protective equipment, old and outdated wiring at risk of short circuit (a major cause of fires), and non-existent or outdated fire extinguishing facilities are often reported in these overcrowded workplaces.
- Fire exits are often deliberately blocked by factory owners, and windows even barred, thus increasing the death toll in accidents.

Worker Participation in Health and Safety

Framework law: The Working Environment Act creates “the basis on which the undertakings themselves will be able to solve questions relating to safety and health under the guidance of the employers’ and workers’ organizations and under the guidance and supervision of the Labour Inspection Service”.

Safety groups: The safety representative and the department supervisor form the safety group.

Its functions are to:

- monitor working conditions
 - inspect equipment, tools, materials
 - report any risk which cannot be avoided immediately
 - halt production where necessary to avert an imminent serious danger
 - ensure that work is performed safely and proper instructions are given
 - investigate industrial accidents and occupational diseases
 - participate in prevention activities
 - cooperate with the occupational health service
 - act as link between workers and the safety committee
- describe key activities of workplace
 - spinning
 - weaving
 - knitting
 - chemical processing

- identify work place areas and departments and their roles

Integrated cotton mills were “designed to move cotton through a precise series of production processes that separated, straightened, and twisted cotton fibers, combined them into yarn, then wove the yarn into cloth.

1. spinning

- The processes of spinning fibres change in to yarns or threads.
- Yarn manufacture

2. Weaving

- The process of Yarns change into woven fabrics/clothes.
- Fabric manufacture

3. Chemical processing

- The finished woven fabrics treated by different chemicals and auxiliaries.
- Processing of textile

4.2 Key activities of workplace are described.

The caretaker and cleaning team as a whole are responsible for maintaining high standards of cleanliness throughout the school. Each cleaner will be responsible for an area and will be expected to clean to the frequency and standard set out. At the direction of the Head teacher, Deputy Head teacher or Site Manager, cleaning staff will clean other areas as required The Head teacher will delegate the monitoring of the cleaning to the Site Manager and it is his responsibility to ensure that high standards of cleanliness are reached and maintained. From time to time the Head teacher or Deputy Head teacher also will carry out spot checks on any aspect of cleanliness he feels is appropriate.

Main Duties - Daily

1. Toilet and Cloakroom Areas:

- Clean lavatory basins with appropriate cleaner provided.
- Clean inside and outside surrounds of sinks
- Clean taps
- Refill toilet dispensers in all cubicles
- Refill paper towels in each dispenser

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- Wipe tiles
- Polish mirrors
- Wipe paintwork
- Empty black sacks/rubbish bins
- Clean and mop floor with appropriate cleaner and bleach as instructed

2. Classrooms/ Group Rooms / Music Room/ Staff Room/ Offices/ Meeting Rooms and Library Areas:

- Vacuum (spot clean where necessary)
- Hard flooring – dust control sweep or vacuum, damp mop 3 classrooms per day
- Furniture / desks – damp dust (all removable furniture e.g. trolleys must be pulled out and cleaned under)
- Fixtures & fittings – dust and damp wipe (incl. skirting, pipes, window ledges)
- Bins – empty daily and damp wipe monthly
- Clean inside and outside surrounds of sinks
- Doors – remove marks from glass, doors and walls
- Clean telephones

3. Corridors:

- Hard flooring – dust control sweep or vacuum, damp mop 3 classrooms per day
- Furniture / desks – damp dust (all removable furniture e.g. trolleys must be pulled out and cleaned under)
- Fixtures & fittings – dust and damp wipe (incl. skirting, pipes, window ledges)
- Polish brass door handles (weekly)
- Doors – remove marks from glass, doors and walls

4. Stairs:

- Vacuum carpet (spot clean where necessary)
- Hard flooring – dust control sweep or vacuum, damp mop 3 classrooms per day
- Furniture / desks – damp dust (all removable furniture e.g. trolleys must be pulled out and cleaned under)

- Fixtures & fittings – dust and damp wipe (incl. skirting, pipes, window ledges)
- Doors – remove marks from glass, doors and walls

5. Art & Design Centre / Medical Room / Children’s Kitchen:

- clean and disinfect sinks inside and outside with appropriate cleaner
- wipe and disinfect work all surfaces, kitchen units and tiles
- polish mirrors
- wipe windowsill
- clean lavatory basin with appropriate cleaner provided
- clean and mop floor
- clean telephones

4.3 Key personnel and their roles

Information on work should be read interpret and follow. Specifications and production requirements are interpreted to determine machine settings .Documentation relating to machine settings, operation and maintenance is interpreted, referenced and applied according to the needs of the task. Tools appropriate to the task are selected, prepared and used in a safe and effective manner to set up machine for operation. Spinning machines are set up according to required specifications for operation, including fixing of required attachments, and to run at optimum quality and efficiency levels. Raw material is checked and prepared for production and Spinning operators are instructed of any special operating requirements.

4.4 Workplace areas or departments and their role in the production process are identified.

Machinery is stopped or shut down in accordance with all safety and workplace standard operating procedures. Ginned cotton should be baled for transportation purpose and in order to protect the lint from contamination. So operating bale press machine should be according to the standard and work place procedure. Start and stop machines accordingly to the manufacturer requirements. Press machinery is started in accordance with workplace standard operating procedures.

Press operation:-The following procedure is typical of a press without automatic controls, with differences noted for up-packing and down-packing presses:

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Bale Press

The cleaned cotton is compressed into bales, which must then be covered to protect them from contamination during transportation and storage. Three types of bales are produced: modified flat, compress universal density, and gin universal density. These bales are packaged at densities of 14 and 28 lb/ ft³ for the modified flat and universal density bales, respectively. In most gins cotton is packaged in a "double-box" press wherein the lint is initially compacted in one press box by a mechanical or hydraulic tramper; then the press box is rotated, and the lint is further compressed to about 20 or 40 lb./ft.³ by modified flat or gin universal density presses, respectively. Modified flat bales are recompressed to become compress universal density bales in a later operation to achieve optimum freight rates. In 1992, about 90 percent of the bales in the United States were gin universal density bales. Bales should be packaged and tied only in material approved for storage by the Commodity Credit Corporation loan program.

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Self-Check 4

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. discuss OHS in work place process?
2. List key activity of workplace?
3. Discuss work place area and roles in textile industry?
4. Explain framework law of safety and health in workplace process?
5. Discuss the function of safety group in representative in work place process?

Unit five: Learn skills for productive work

This unit to provide you the necessary information regarding the following content coverage and topics:

- Skills for current work role
- Skill limitations in workplace
- Opportunities for further skill development
- Developing plan for learning required skills

This guide will also assist you to attain the unit stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Determine Skills for current work role
- Identify Skill limitations in workplace
- Opportunities for further skill development
- Developing plan for learning required skills

5.1 Skills for current work role

5.1.1 Using technology

- access and understand workplace-specific instructions in a variety of media
- use a range of communication and emergency technology

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5.1.2 Ability to work in team and solve problems

- Work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities.
- Reacting to emergency situations in a coordinated way.

Solve problems

- accurately evaluate the emergency
- identify solutions to preserve life or counteract emergencies

5.1.3 Ability to Communicate and manage self

- Oral, written and IT communication skills are the media for sharing knowledge, interests, attitudes, opinions, feelings, and ideas in order to influence and ultimately lead others.
- Communication skills include the ability to: listen and observe to gain understanding; clearly and effectively relate ideas; use strategies and skills to work effectively with others; and analyze and evaluate the effectiveness of formal and informal communications.
- communicate effectively about prevention of hazardous circumstances which may lead to emergencies
- complete reports, records and other workplace documentation as required to minimize hazards, complete emergency procedures
- effectively and assertively communicate an emergency and call for assistance as required
- effectively communicate with others by using questioning to identify and confirm requirements, share information, listen and understand
- read and interpret documentation from a variety of sources
- use and interpret non-verbal communication, such as hand signals

5.1.4 Ability to produce quality product by applying standards

“Level targeting” for establishing a quality assurance system

From the perspective of preventing recurrence of rolling stock failures, the company has

Identified the current level of quality control for each check item, and set its improvement

Target in frontline operations at development workshops, etc. as internal system for accident recurrence prevention.

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Check items are as follows:

- Conveying instructions, failure information, etc.
- Ensuring the implementation of countermeasures
- Preventing human error;
- Object checks
- Checklist
- Quantity control of short-circuit lines, etc.
- Quantity control of tools, etc.
- Maintaining technological capacity
- Education on new recruits / reassigned workers.

Quality measures:

Equipment Performance – Significant improvement in (but not limited to) the following Areas:

- Improvement in component or system availability.
- Reduction in percentage of failures identified in tests/ surveillances.
- Reduction in the number of limited condition of operations routinely entered

5.2 Skill limitations in workplace

Young people lack the basic reading, writing and numeracy skills needed in everyday life. Many are emerging from education without these basic skills, making it difficult for them to obtain the technical skills needed to compete in the labor market or transition into secondary school. In addition, they are unlikely to have the knowledge or skills to get good jobs, to fully understand the elements of a healthy lifestyle or to negotiate business and legal systems.

5.3 Opportunities for further skill development

Skills have become increasingly important in the globalized world. Vocational and technical skills are essential, but employers are seeking applicants with more. They want employees who can continue to learn and adapt; read, write and compute competently; listen and communicate effectively; think creatively; solve problems independently; manage themselves at work; interact

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with co-workers; work in teams or groups; handle basic technology, lead effectively as well as follow supervision.

These **core skills for employability** are both important to employers' recruitment and enhance an individual's ability to secure a job, retain employment and move flexibly in the labour market as well as engage in lifelong learning.

Employability entails much more than the ability to get that first job. It is having the capacity to network and market oneself, navigate through a career and remain employable throughout life. It requires the ability to ask questions, acquire new skills, identify and evaluate options, understand rights at work including the right to a safe and healthy work environment, adapt successfully to changing situations and the courage to innovate.

Make plan for skills which are accepted by the supervisor

A development plan will often be part of your employer's appraisal system. This will help you track achievements, areas for improvement, long-term objectives and training plans. In order to be effective, you must consider the following.

- Success criteria must be realistic – if they are not, you are just setting yourself
- You should identify reasonable goals.
- Your action plans should be accessible – consider the resources you have

Available to you in the workplace. Your development plan should take into account so you understand how your competencies are perceived by your colleagues.

5.5 Developing plan for learning required skills

Human resources training and development, which defined employability skills as:

the skills, knowledge and competencies that enhance a worker's ability to secure and retain a job, progress at work and cope with change, secure another job if he/she so wishes or has been laid off and enter more easily into the labour market at different periods of the life cycle. Individuals are most employable when they have broad-based education and training, basic and portable high-level skills, including teamwork, problem solving, information and communications technology (ICT) and communication and language skills.

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Self-Check 5

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Discuss the required skills current work in work team and using technology?
2. Discuss employee additional Skill development for productive work?
3. explain about the ability to Communicate and manage self?

Unit six: Manage own work

This unit to provide you the necessary information regarding the following content coverage and topics:

- Taking responsibility for own work tasks and role
- Initiative to articulate ideas and suggestions for improvements
- Problem-solving strategies
- Identifying, monitoring and acting upon own work against workplace standards
- Working effectively and cooperatively in work team

This guide will also assist you to attain the learning outcomes stated in the cover page.

Specifically, upon completion of this learning guide, you will be able to:

- Identify responsibility for own work tasks and role
- Initiative to articulate ideas and suggestions for improvements
- Determine Problem-solving strategies
- Identify monitoring and acting upon own work against workplace standards
- Work effectively and cooperatively in work team

6.1 Taking responsibility for own work tasks and role

Managing is work. But it is not, by itself, full-time work. The way to design a managerial job is to combine “managing” with “working,” that is, responsibility for a specific function or job of one’s own. As a rule, the manager should be both a manager and an individual career professional.

The Work of the Manager

Each of these tasks and dimensions has its own skills, its own tools, its own requirements.

But the total management task requires their integration. And this too requires specific

Work and its specific tool. The tool is management; and the work is managing managers.

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The tasks—economic performance; making work productive and the worker achieving; managing social impact and social responsibilities; and doing all this in a balance between the demands of today and the demands of tomorrow—are the things in which the public at large has a stake.

The public has no concern with—and only mild interest in what managers have to do to accomplish their tasks. It rightly is concerned with performance. But managers must be concerned with the means to the accomplishment of their tasks. They must be concerned with managerial jobs, with the work of the manager, with the skills he needs, and with his organization.

The fundamental reality for every worker, from sweeper to executive vice president, is the eight hours or so he spends on the job. In our society of organizations, it is the job through which the great majority has access to achievement, to fulfillment, and to community.

- To enable the worker to achieve, he must therefore first be able to take responsibility for his job.
- This requires: (1) productive work; (2) feedback information; and (3) continuous learning.
- It is folly to ask workers to take responsibility for their job when the work has not been studied, the process has not been synthesized, the standards and controls have not been thought through, and the physical information tools have not been designed.
- It is also managerial incompetence.

6.2 Initiative to articulate ideas and suggestions for improvements

Continual improvement may be defined as seeking to establish excellent performance in an Organization. It is imperative, therefore, that the continual improvement projects and teams set the standards in terms of the approaches taken. Therefore, each continual improvement project should reflect methodological approaches such as those advocated in this publication that utilize clear objectives, defined targets, good communication, and effective measurement of results.

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6.3 Problem solving strategies

In order to succeed in the workplace (and in life generally) individuals need to be able to evaluate information or situations; break them down into their key components; consider various ways of approaching and resolving them; and decide which is the most appropriate. These problem-solving skills include recognizing long-term consequences of solutions to problems and probing, devising, implementing, and evaluating a plan of action for problem resolution.

Problem solving is a tool, skill and a process. As tool is helps you solve a problem or achieve a goal. As skill you can use it repeatedly throughout your life.

- Look for a pattern
- Make an organized list
- Guess and Check
- Make a table
- Work backwards
- Use logical reasoning
- Draw a diagram
- Solve a simpler problem
- Read the problem carefully
- Create problem solving journals

6.4 Identifying, monitoring and acting upon own work against workplace standards

Employees who develop self-monitoring skills tend to be more productive, make better decisions and communicate effectively with co-workers and supervisors, according to My Management Guide, a resource for project management best practices. Self-monitoring or self-management is a tool incorporated by employees looking for career advancement and should be encouraged. While you want to support the efforts of employees who successfully monitor their own progress, you also must develop techniques to manage them without discouraging their initiative

The outcomes of each manual handling risk assessment are the improvements that have been identified in the fourth step of the risk assessment process. A simple way to communicate the improvements or control measures is to develop a safe system of work plan.

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A safe system of work plan is a set of instructions according to which something must be done, which takes account in advance of the foreseeable manual handling risk factors. The purpose of a safe system of work plan is to give instruction on the new way of carrying out a particular work activity which avoids or reduces manual handling and therefore reduces the risk of injury. The safe system of work plan should take account of the handling required from origin of lift to end point of lift and can include a combination of the following:

- Use of handling equipment (how is it used) to eliminate or reduce handling
- Reorganization of work area (what changes are made)
- Instruction and training in safe handling techniques (how is it done)

Ideally safe system of work plans should be incorporated into a manual handling training programmed.

While it is important to conduct individual manual handling risk assessments, it is of more importance to communicate the improvements that are to be implemented. A short safe system of work plan for each manual handling task assessed is a suitable way to manage risk effectively. The duty to provide safe systems of work remains the employer's responsibility. An example of a safe system of work plan is included in the Appendices.

The case study below illustrates the implications of not conducting a risk assessment of a manual handling task and not implementing a safe system of work.

6.5 Working effectively and cooperatively in work team

Teamwork is all about being able to operate smoothly and efficiently within a group. Doing this draws on a number of other skills: the ability to encourage and inspire other team members to perform better; the ability to compromise and ignore one's own ego; and communication and other interpersonal skills such as negotiation, influence, advising and interpreting.

- Promote a team culture in which workers assist each other and provide support when required.
- Promote that differences in workers' ideas and opinions is a positive.
- Create a culture where colleagues trust and encourage each other to perform at their best.
- Encourage good, honest, open communication at all levels in work teams.

- Look for design issues that may negatively affect team communication. For example, minimize isolated work groups and if this is unavoidable, provide additional support to these groups.
- Give group rewards based on the performance of a team or unit rather than any one individual. This can be achieved by linking rewards to the performance of a group as a whole and will both enhance teamwork and avoid potential conflict between workers.
- Provide rewards that reinforce teamwork (for example, a team dinner or a team trip). Ensure that the reward is equitable and accessible to all team members that contributed to the project or task

The employee's skill and knowledge are must be fit the task of a given job. it includes:

- The quality of performance
- The quality of manage your own work effectively
- The quality of time management
- The quality of punctuality
- quality of technological attitude
- quality of satisfied the need of market or customers

Self-Check 6

Instructions: Perform the following tasks. Write your answers in the answer sheet provided:

1. What is problem solving?
2. How to identify problem solving strategy?
3. Define self-management?
4. Discuss work in teams?
5. What is safe system of work plan?

Say true or false

- 1, Promote that differences in workers ideas and opinions are a positive.
- 2, Continual improvement may be defined as seeking to establish excellent performance in an Organization
- 3, Textile industry is the mechanical facilities that convert filament, fiber or yarn that can be made into fabric and cloth and the resulting material.

Reference

- Luu Trong Tuan, Development Strategy for a Textile Firm, 2012
- Addressing Modern Slavery in Tamil Nadu Textile Industry Feasibility Study Report, 2014
- Association for Stimulating Know How (ASK)
- . James Ieloudis and Kathryn Walbert, Work in a textile mill 2014
- Brearley, A. and Iredale, J. A., The Woollen Industry, WIRA/British Textile Technology Group, Leeds, UK, 1977
- . Oxtoby, E., Spun Yarn Technology, Butterworth-Heinemann, Boston, MA, 1987.
- Lord, P. R., Economics, Science and Technology of Yarn Production, North Carolina State University, 1981.
- De Barr, A. E. and Catling, H., Twist insertion in ring spinning and doubling, J. Text. Inst., 50, T239, 1950.
- Grosberg, P., McNamara, A. B., and Molgaard, J., The performance of ring travellers, J. Text. Inst., 2, T24–T37, 1965.
- Stalder, H., A new ring and traveller system as the key to more production from the ring spinning machine, Rieter Machine Works, Ltd.
- Fuchs, H., Rings and travellers in spinning and twisting, part 2, Int. Text. Bull., Spinning, 3, 235–254, 1973.
- Oxenham, W., Developments in short staple yarn manufacture, Textile Progress, The Textile Institute, ITMA '99 Review, 1–67.
- Bowen, D. A., Living ring finds new believers, Text. Ind., February, 77–79, 1980.
- Sonntag, E. and Artzt, P., Spinning ring diameter productivity, Int. Text. Bull., Yarn and Fabric Forming, 2, 29–34, 1994.
- Prosino, C. A., Possible speeds of ring spinning frames, Int. Text. Bull., Yarn Forming, 3, 69–83, 198

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