



The Institute of Cost Accountants of India

ICMA Bangladesh Members Training Program

Webinar Workshop series on “COST AUDIT”
Technical Session-II

“Cost Audit in Textile Industry”

Tuesday, 12th January, 2021 at Pune

Webinar By

CMA Neeraj D. Joshi

Partner, Dhananjay V. Joshi & Associates, Cost Accountants
&
Central Council Member, ICAI

Presentation Flow

- **Overview of Textile Industry in Bangladesh**
- **Textile Manufacturing Process**
- **Basic Concepts Relevant for Cost Audit**
- **Annexures to the Cost Audit Records**
- **Proforma to Cost Records**
- **Proforma to Cost Audit Report**
- **Cost Audit Process**
 - **Critical Points**
 - **COVID 19 impact**

Overview of Textile Industry in Bangladesh

Overview of Textile Industry in Bangladesh

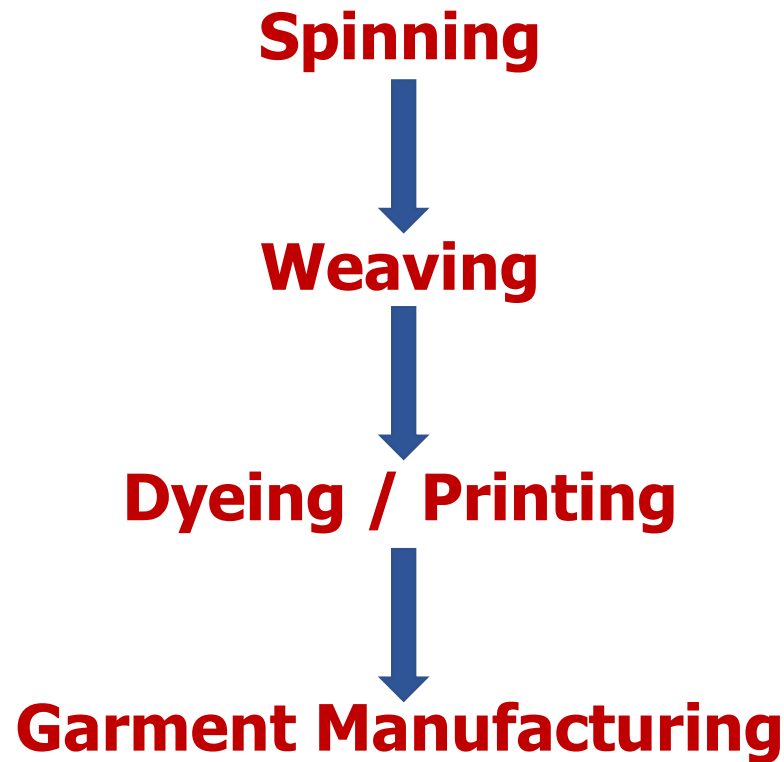
- Bangladesh ranks second in the world as the largest apparel producer with major contribution coming from exports.
- Bangladesh has advantage in availability of cheap labor, natural gas and energy.
- The opportunities in Textile sector are also supported by the government policies such as FDI, Quota Free Textile Rules, Institutional help, etc.
- The Spinning Capacity is increased 4 times in 10 years.
- Textile Industry employees more than 4 million people which is around 45% of industrial employment.
- Textile sector contributes to more than 80% of total exports.

Textile Manufacturing Process



Textile Manufacturing Process

- Following are the main manufacturing levels in the Textile Industry –



Spinning Process Flow

- Following is the brief manufacturing process for Spinning in the Textile Industry –

Blowroom

The compressed bales of cotton are opened, cleaned and blended/mixed according to particular length to form a specific size of lap.

Carding

Carding is known as heart of spinning process as it defines the concluded features of yarn. Here the bales processed will open up in single fiber.

Combining

As yarn is arranged in parallel manner, it is straightened again in stage of combining. This will result in stronger and smoother staple fabric.

Drawing

It is a process of attenuating the loose assemblage of fibers by passing it through a series of rollers. It straightens the individual fibers & makes them more parallel.

Roving

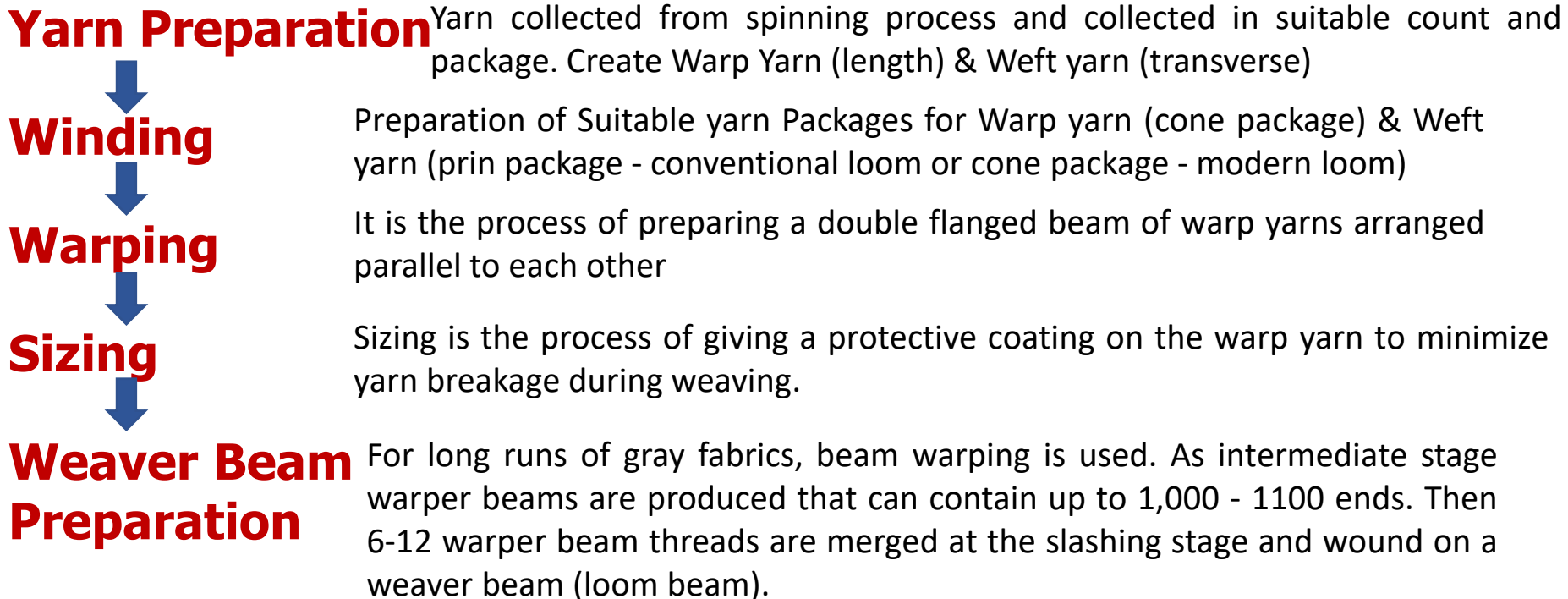
Intermediate process in which fibers are converted into low twist lea called roving. Thick sliver is reduced in its linear density.

Cone winding

It is a simple packaging process functioning as a link between last stages of yarn manufacturing and initial stages of fabric manufacturing process.

Weaving Process Flow

- Following is the brief manufacturing process for Weaving in the Textile Industry –



Weaving Process Flow

- Following is the brief manufacturing process for Weaving in the Textile Industry –

Drawing



Denting



Looming



Weaving

Drawing is done to pull the threads of the warp through the heald wire's eye.

Drawing the warp thread through the dent as reed plan requires, and this more reliably specifies the fabric width and ends per inches.

At the start of the new warp, the tail end of the warp from the exhausted weaver beam is attached. it is called tying-in. Therefore, the drawing mechanism may be excluded if each end of the new beam is attached to its consequent end on the old beam. All knots are pulled through the drop wires, heddles, and reeds after the tying-in process. The loom is ready for use now.

Finally Weaving is started and others process will be followed for delivery

Dyeing / Printing Process Flow

- Following is the brief manufacturing process for Dyeing / Printing in the Textile Industry –

Singeing



It is the first step of pre-treatment. Loose, hairy and projecting fiber are removed from surface of fabric..

Desizing



It is the second steps of pre- treatment. Gummy materials and size materials are removed by this process.

Scouring



It is the third steps of pre-treatment. Removing impurities of the textile materials

Bleaching



Bleaching is another important step which is used to reduced natural color of the raw materials. Dyeing performance depends a lot on this process.

Mercerizing



It is a special treatment carried out as per customer requirements. It increases the strength and luster of the material.

Dyeing

It is the main process where a white material is converted into coloured material. Quality of Dye & Textile is critical in Fixing of the colours.

Dyeing / Printing Process Flow

- Following is the brief manufacturing process for Weaving in the Textile Industry –

Printing



Finishing

It is also called as localized dyeing. Different types of textile printing are done for giving special appearance on colored or white fabric.

It is the last treatment of wet processing. Finishing is also required or important for dyed textile materials. Different types of properties can be added to the textile materials by different finishing effects.

Garment Manufacture Process Flow

- Following is the brief manufacturing process for Garment Manufacture in the Textile Industry –

Design

Design is provided by the customer. It is the technical sheet and art-work of an order.

Pattern Making

Based on technical sheet and art-work, a pattern of each garment style is prepared.

Fit Sample Making

Objective is to follow the detailed instruction about the style of that garment. After sample is created, it's sent to the customer for review.

Production Pattern

For bulk production, allowance is added here with net dimension.

Marker Making

Marker is a very thin paper that contains all the parts of a particular garment. It is required to make the cutting process easy.

Fabric Spreading

To cut the fabric properly fabric is spread inlay form.

Garment Manufacture Process Flow

- Following is the brief manufacturing process for Garment Manufacture in the Textile Industry –

Fabric Cutting

Fabrics are cut according to the marker of garments.

Sewing

All the parts of a garment are joined to make a complete garment.

Inspection

Inspection is done to identify the fault in the garments, if any.

Ironing & Finishing

Garments are treated by steam. Any other required finishing is completed here.

Packing

Completed garments are packed as per the Customer requirements.

Basic Concepts Relevant for Cost Audit



Basic Concepts Relevant for Cost Audit

- Raw Material – Identify the Raw Materials that are used. This will depend upon the type of Textile Industry that is handled.
- Soft Waste – The waste which is in fibers form are called as the soft waste. They are reusable for producing a low quality of yarn.
- Hard waste – The waste which is not reusable is called as hard waste.
- Sizing Material – Material such as starch, maize, tallow, gum, etc. used in the different types of sizing solution used for sizing the warp yarn.
- Dyes and chemicals – Items of dyes and chemicals used for dyeing and printing various yarns and or cloth manufactured and processed.
- Process materials/chemicals – De-sizing, souring scouring, bleaching, finishing, mercerizing and other materials.

Basic Concepts Relevant for Cost Audit

- Major Utilities Used in the Textile Industry –
 - Water, Steam, Electricity, Humidification
- Design Studio
- Screen Making
- Packing Cost
- Export related Costs
- Self Consumption

Annexures to the Cost Record

Annexures to the Cost Record

Annexure I - Statement showing the cost of water treated & consumed

Annexure II - Statement showing the cost of steam raised & consumed

Annexure III - Statement showing the cost of power generated /purchased & consumed

Annexure IV - Statement showing the quantity and value of total cotton /Man-made Fiber issued for the manufacture of carded or combed yarn manufactured, composition Mix-wise and corresponding production

Annexure V - Statement showing the input, wastage and output in each processing Cost Centre upto yarn stage, for carded and combed yarn production

Annexure V (A) - Statement showing the input, wastages and output in the spinning department for yarn Production

Annexures to the Cost Record

Annexure VI - Statement showing the net Mix-wise cost

Annexure VII - Statement showing waste for each cost centre Mixing wise in Spinning Department

Annexure VIII - Statement showing the production in Kg. per Machine shift / spindle shift for each Mixing and the respective conversion cost per Kg.

Annexure VIII (A) - Statement showing hard waste collected in weaving preparatory and Weaving Departments

Annexure IX - Statement showing conversion cost of yarn per Kg count wise

Proforma to Cost Records

Proforma to Cost Records

Proforma A - Statement showing Cost Centre-wise conversion cost up to and including spinning

Proforma B - Statement showing the cost of production of yarn count-wise

Proforma B1 - State showing the stock account of yarn

Proforma C - Statement showing cost of yarn sold

Proforma D - Statement showing cost centre-wise conversion cost from winding to weaving

Proforma E - Statement showing sort -wise cost of production of grey cloth manufactured

Proforma E1 - Statement showing the sort-wise stock accounting of Grey cloth

Proforma to Cost Records

Proforma F - Statement showing the cost of Sales of cloth sold in grey stage and Sales realisation

Proforma G - Statement showing Cost centre-wise Conversion cost in Bleaching Section

Proforma H - Statement showing the Cost Centre-wise Production cost in the Dyeing Section

Proforma I - Statement showing cost cost centre-wise cost in the printing section

Proforma J - Statement showing Department wise cost in the finishing section

Proforma K - Statement showing the cost of different types of packing made

Proforma to Cost Records

Proforma L – Statement showing the cost of different type of SKU's

Proforma L1 - Statement showing sort-wise stock account of processed cloth manufactured

Proforma M - Statement showing the cost of sale of processed cloth sold and sales realisation

Proforma to Cost Audit Report

Proforma to Cost Records

Proforma A – Statement showing the cost of Utility like Power, Steam, Water, etc., produced and consumed

Proforma B - Statement showing the cost of raw material (mix-wise)

Proforma C - Statement showing input, wastage, output, waste multiplier in each processing centre, mix-wise

Proforma D1 - Statement showing summary cost of sales, sales realization and margin in respect of each type of yarn sold

Proforma D2 - Statement showing summary cost of sales, sales realization and margin in respect of each type of grey cloth sold

Proforma D3 - Statement showing summary cost of sales, sales realization and margin in respect of each type of processed cloth sold

Cost Audit Process



Cost Audit Process

Critical Points

- Quantity Record at Item Level is necessary
- Cost Centers are to be defined at each stage of production
- Correct capture of Cost is necessary. If allocation base is used, then the technically sound basis of allocation shall be used.
- Reconciliation statement between Costing & Financial Profit is critical point of control.
- Imputed Material Cost – self generated usable waste
- Corporate Over Head Allocation – Sales / Production – The unit level cost statements are to be compiled after necessary allocation.
- Inter Unit Revenue – Cost Audit to be done after elimination entries are passed.

Cost Audit Process

Critical Points

- Quantity Record at Item Level is necessary
- Cost Centers are to be defined at each stage of production
- Correct capture of Cost is necessary. If allocation base is used, then the technically sound basis of allocation shall be used.
- Reconciliation statement between Costing & Financial Profit is critical point of control.
- Imputed Material Cost – self generated usable waste
- Corporate Over Head Allocation – Sales / Production – The unit level cost statements are to be compiled after necessary allocation.
- Inter Unit Revenue – Cost Audit to be done after elimination entries are passed.

Cost Audit Process

COVID 19 impact

- Guidelines from ICMAB on COVID 19 treatment
- Capacity Lost due to COVID 19 Lockdown
- Cost Classification into Fixed & Variable Cost
- Absorption of the Cost based on the capacity utilisation – special consideration to Employee Cost, Interest Cost, Loss of Material, etc.
- Costs Specific to COVID 19 and its treatment
- Impact on Inventory Valuation.

Thank You.

CMA Neeraj D. Joshi

“CMA Pride”, Gr. Floor, Plot No. 6, S. No. 16/6,
Erandawana Co-Op Hsg., Soc., Erandawana, Pune 411004.

Mobile No : +91 9822596057

E-mail ID : neeraj@dvjasso.com