



The Institute of
Chartered Accountants
of Pakistan

CA
PAKISTAN

TEXTILE INDUSTRY

PROFESSIONAL ACCOUNTANTS IN BUSINESS (PAIB) COMMITTEE

JUNE 2019



111-000-422

icap.org.pk/paib

ICAP.CA







TABLE OF CONTENTS

01	OVERVIEW OF TEXTILE INDUSTRY IN PAKISTAN
	Page 01

02	ACCOUNTS AND FINANCE
	Page 04

03	VALUE CHAIN
	Page 10

04	SALES AND MARKETING
	Page 16

05	BUSINESS MODELS
	Page 18

06	HEALTH SAFETY AND ENVIRONMENT
	Page 19

07	GLOSSARY
	Page 20

01 OVERVIEW OF TEXTILE INDUSTRY IN PAKISTAN

Textile sector is a major contributor to Pakistan's total exports, representing approximately 57% of country's total exports in FY 2017-18^[1]. The textile sector contributes nearly one-fourth of industrial value added products and provides employment to 40% industrial labor force^[2]. This value added sub sector of textile industry is a made up sector which in addition to meeting local needs, exports products under different categories including garments, hosiery, bed wear, towels and tents/canvas.

In addition, various other subsectors within textile industry in Pakistan includes Spinning, Weaving, Processing and Stitching. Certain textile companies are vertically integrated units i.e. all or a combination of two or more textile subsectors. The capacities of these subsectors are^[3]:

Spinning: 11.3 million spindles and 03 million rotors.

Weaving: 350,000 power looms and 18,000 knitting machines.

Processing: 5.2 billion square meters.

All Pakistan Textile Mills Association (APTMA) being the major representative association of textile sector in Pakistan, has 396 member textile mills out of which 315 are spinning units, 44 are weaving units and 37 are composite units. Total installed capacity of APTMA members is over 9.5 million spindles in spinning, over 10,000 shuttleless/airjet looms and 1,897 conventional looms in weaving. The major cities representing textile industries include Karachi, Faisalabad and Lahore.

^[1] As per the export data of Trade Development Authority of Pakistan (TDAP)

^[2] As per Pakistan Economic Survey FY 2016-17

^[3] As per textile policy 2014-19 by the Ministry of Textile Industry

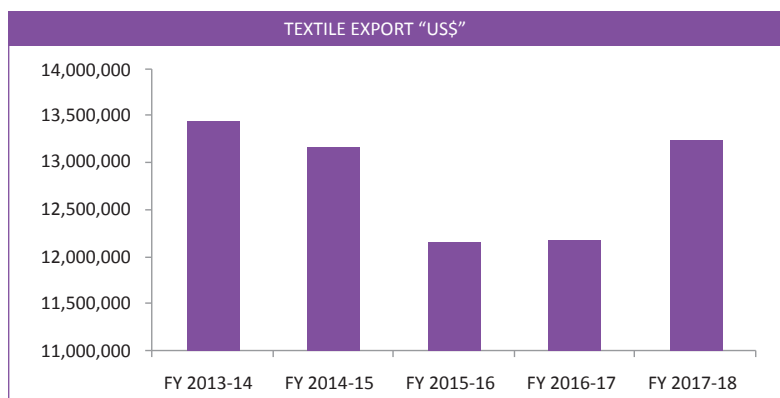
Similarly, All Pakistan Textile Processing Mills Association (APTPMA) is representative association for textile processing which has 373 members.

Many textile companies are listed on Pakistan Stock Exchange. As on April 30, 2019 aggregate market capitalization of textile spinning, textile weaving and textile composite was approximately Rs. 40.88 billion, Rs. 2.62 billion and Rs. 257.18 billion respectively. Top ten textile companies with the highest market capitalization as on April 30, 2019 are as under:

COMPANY	TYPE	TRADING SYMBOL
Nishat Mills Limited	Textile Composite	NML
Feroze1888 Mills Limited	Textile Composite	FML
Interloop Limited	Textile Composite	ILP
Sapphire Textile Mills Limited	Textile Composite	SAPT
Gul Ahmed Textile Mills Limited	Textile Composite	GATM
Ibrahim Fibres Limited	Synthetic and Rayon	IBFL
Sapphire Fibres Limited	Textile Composite	SFL
Dawood Lawrencepur Limited	Textile Composite	DLL
Gatron (Industries) Limited	Synthetic and Rayon	GATI
Kohinoor Textile Mills Limited	Textile Composite	KTML

Source: Pakistan Stock Exchange Limited

In recent years, growth in textile industry has been dull and stagnant due to multiple factors. Exports have been depressed in previous years and slight recovery has been witnessed in the FY 2017-18^[4]. The contributing factors for dismal performance of textile industry have been discussed in textile policy 2014-19, some of those factors are summarized later in the section for ready reference:



Source: Trade Development Authority of Pakistan (TDAP)

^[4] As per TDAP FY wise export data



- Distorted international price competitiveness due to provision of subsidies by the participating countries at different levels of textile value chain.
- In Pakistan, tariffs on imported textile materials are applied to provide protection to domestic industry which has built inefficiencies in the manufacturing process.
- Stagnant domestic cotton production.
- Limited number of value added products.
- Low usage of manmade fibers.
- Failure to benefit from cost efficiencies through cluster development & growth.
- Absence of modern management practices.
- Lack of skilled labor.



Financial reporting and taxation frameworks, as applicable for other companies in Pakistan, are also applicable to textile companies. Hence, finance executives in textile companies have similar roles and responsibilities in standard operations of accounts, finance and tax. These roles (including but not limited to) are as follows:

- Budgeting and forecasting
- Financing and treasury operations
- Working capital management
- Costing
- Financial statement closing process
- General accounting
- Legal compliances including those relating to taxation, corporate and labor laws





However, there are certain aspects and areas which ask for sector-specific knowledge application and skills. These are discussed as follows:

2.1. Financing for Export Oriented Sectors

To facilitate export oriented sectors, State Bank of Pakistan (SBP) introduced certain financing schemes at low markup rates. Such schemes include Export Refinancing Scheme (ERF) and Long Term Finance Facility (LTFF) for meeting exporter's short term and long term financing needs respectively. Textile sector, being the leading export sector of Pakistan, is the beneficiary of such schemes.

Export Refinancing Scheme (ERF)

The ERF scheme has two parts.

ERF Part-I facilitates transaction based export refinancing i.e. against each export shipment, the exporter may seek finances for 180 days up to the amount of export shipment on pre-shipment basis or post shipment basis.

In part II, exporters may apply for financing of 180 days' period on the basis of overall export performance for the previous year i.e. on the basis of export shipments in an annum, exporters may apply for export refinances for next 180 days up to 50 per cent of export shipments made in the previous year. However, exporter has to show performance at least equal to amount of export refinances in the next 180 days. Moreover, there are benefits in the form of lesser interest rates in case the amount of exports exceeds the amount of finances obtained^[5].

Long Term Finance Facility (LTFF)

Under LTFF, exporters meeting the criteria, may obtain long term financing for procurement of imported or locally manufactured new plant and machinery. Textile companies with annual turnover of US\$ 5 million or exports constituting 50 per cent of total turnover of the company whichever is lower, may benefit from this long term financing facility to purchase plant and machinery. The duration of financing periods may be 3, 5 or 10 years and single exporter may obtain finances up to Rs. 1.5 billion^[6].

^[5] For more details, ERF guideline is available on SBP's website: <http://www.sbp.org.pk/incen/BookGuidlines-EFS.pdf>

^[6] LTFF instructions are available on SBP's website: <http://www.sbp.org.pk/MFD/2018/Instructions-LTFF.pdf>

2.2. Basic Textile Concepts Used in Costing and Production Efficiency

There are certain sector specific terms and concepts that are used in order costing and stock valuations. To understand the formula, one should have understanding about the textile products.

The finished product of spinning operation is yarn for which one detriment of the yarn type is 'count'. Count specifies the fineness or coarseness of the yarn and is measured in the ratio of length to weight, therefore, the greater the count, the finer should be the quality of yarn. To measure count, weight is measured in pounds (lbs) and length is measured in hanks (840 yards). To put into a perspective, 1 pound of 20/s count contains 16,800 yards (840 x 20) of 20/s yarn.

One yarn bag generally weighs 100 lbs (24 yarn cones) with each yarn cone weighing approximately 4.16 lbs. These weight calculations are generally used to reconcile production input with outputs and consumption of cotton/polyester in finished products.

Ounces Per Spindle (OPS) is used for measuring/monitoring capacity and efficiency of spinning plant. It represents ounces of yarn produced per spindle worked and it varies with count i.e. the finer the count, lesser the standard OPS. Standard OPS are defined for each quality and then actual OPS are compared with standard OPS for measuring efficiency of spinning operations. The OPS are also used to calculate equivalent production in 20/s count which is a useful measure to determine the capacity utilization of spinning plant.

Following are useful formulae in costing and stock valuations of yarn and cotton:

Standard Yield Formula

In case of imported cotton

$$\text{Yield} = 100 - (\text{Trash}\% \times (1.6 + 3)) + (\text{Moisture difference of cotton \& yarn})$$

In case of local cotton

$$\text{Yield} = 100 - (\text{Trash}\% \times (1.7 + 3)) + (\text{Moisture difference of cotton \& yarn})$$

Alternatively,

$$\text{Yield} = (\text{Total Yarn Produced}) / (\text{Raw Cotton Issued})$$

Standard OPS:

$$\text{OPS} = (\text{Spindle Speed} \times 60 \times 8) / (\text{Yarn Count} \times 840 \times 36 \times \text{TPI}) \times 16$$

Where;

60 is number of minutes in an hour

8 is number of hours per shift

840 is number of yards in a hank

36 is inches per yard

TPI is Twist Per Inch

16 factor is applied for conversion of pounds into ounces

Production (Yarn Bags):

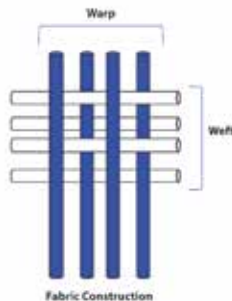
$$= (\text{OPS} \times \text{No of Spindles per frame} \times \text{No of frames} \times \text{No of shifts}) / 1600$$

To put the above formulae into prospective for yarn count of 40/1, the standard OPS may be computed as 5.08 at a spindle speed of 20,000 RPM and 25 TPI. Similarly, standard production (yarn bags) for the 40/1 count may be computed as approx. 57 yarn bags, using aforementioned standard OPS and assuming 7,000 spindles and three (3) shifts.

To understand finished product (weaved/greige fabric) of weaving operations, understanding of fabric construction is essential. The yarn threads along the length of fabric are called 'warp' whereas the yarn threads along the width of the fabric are called 'weft'. The number of warp per inches and number of weft per inches are called ends and picks respectively. The fabric construction of an assumed fabric quality is written as under:

30-80/100-90/110", where

30	80	100	90	110
Warp	Weft	Ends	Picks	Width
Count	Count			



To calculate the yarn required for the given construction following formulas are used:

Warp Weight (lbs/yard)=(((Ends*Width)+Selvedge*(1+Contraction %)))/(840*Warp Count)

Warp Weight (kgs/mtrs)=(((Ends*Width)+Selvedge*(1+Contraction %)*1.0936)/(840*Warp Count*2.2046)

Weft Weight (lbs/yard)=(((Picks*Width)+Tape Length*(1+Contraction %)))/(840*Weft Count)

Weft Weight (kgs/mtrs)=(((Picks*Width)+Tape Length*(1+Contraction %)*1.0936)/(840*Weft Count*2.2046)

Where,

Selvedge is extra threads used in finishing of width edges of fabric

1.0936 is factor for conversion of yards into meters

2.2046 is factor for conversion of pounds into kgs

Contraction % is the contraction of fabric during the weaving process and its percentage varies from product to product.

The aforementioned formulae are used for various purposes including calculation of yarn requirement for production, order costing and stock valuation purposes.

It is an industry practice to also get the yarn converted into greige fabric from greige conversion vendors on 'as and when required' basis. In this regard, yarn is provided to greige conversion vendors by the company seeking greige conversion. For calculation of yarn requirement to vendors, there is general industry norm to give count margin to greige conversion parties instead of warp and weft contraction percentages. To apply the count margin, the warp and weft counts are generally lowered by 1" and/or 1.5" so that some extra yarn is provided to weavers to compensate them for factors including warp/weft contractions. These count margins may vary depending upon the negotiation between the two parties.

2.3. Quality Specific Payment Deductions

Payment processing in textile specific procurements involve certain parameters which are linked with quality parameters of the received items. In cotton procurement, the rate is negotiated with cotton ginner/cotton brokers on 'per maund (37.3242 kg) basis'. However, there is industry practice to make deductions if certain cotton quality parameters are lower than agreed standards. Such quality parameters include moisture and trash percentage in cotton. Percentage differences between agreed and received parameters of moisture and trash are applied individually to total weight of received cotton to determine the amount of deductions and same are deducted by Finance Executives on the advices of concerned quality/procurement personnel.

Similarly, in case of greige fabric conversion by provision of yarn or greige procurement from vendors, there are certain deductions agreed on the basis of quality of fabric received. Such quality parameters include quality grading and rejections using standard 4-point system, as discussed in section 3, lesser width and ends. Moreover, if the fabric piece length (average length of fabric) is found to be below agreed piece length, then deductions are made as per the agreed terms with vendors. Such deductions are also made by Finance Executives on the advice of concerned quality/procurement personnel.

2.4. Piece Rated Payments

For stitching operations (both for garments and made ups), salaries or wages of workforce are generally based on per piece or operation rate, agreed with workforce. To determine the piece rate for workers, the industrial engineering department conducts time studies for different operations or pieces. The time study provides the stitching operation adequate time required which is summed up to calculate per piece rate. Once time required is calculated, different models are used in industry to calculate rate per piece per stitching operations. These models operate on different underlying objectives such as:

- Calculating and offering such rates to ensure no worker exceeds the maximum per month wage or salary
- Offering extra incentives for meeting production targets to increase productivity of stitching plant

On periodic (weekly, bimonthly, monthly) basis, production of each worker is calculated by the stitching unit and agreed piece rates are applied to determine and pay wages or salaries to workers. Different controls are exercised so that the system is not exploited to claim additional wages or salaries. Such controls include linking total production claimed by the workers with respect to a customer order with total items dispatched/produced with respect to a given customer order. Finance Executives are responsible to ensure that payments to piece rated workers are in accordance with rates agreed, items produced and/or dispatched.

2.5. Benefits in Sales Taxes and Import Duties

As per SRO 1125(I)/2011, all textile products are subject to sales tax at zero rate. Hence, textile companies apply for sales refunds; however, delays are generally faced in realization of sales tax refunds.

Federal Board of Revenue (FBR) has introduced different SROs to facilitate export oriented companies to save import duties on items which are to be exported as part of finished products. Such SROs also include SRO 450(I)/2001 and SRO 492(I)/2009. All these SROs have different rules and applicability criteria as to import items and other compliance requirements.

In general, all these SROs strictly require that items which are imported under these SROs should be exported within the timeline prescribed in the relevant SROs, otherwise, the company would be liable to pay penalties in addition to paying the exempted import duties. Security in the form of Post Dated Check (PDC) and guarantees are provided to FBR to take exemption from import duties. Such securities may be liquidated by the FBR if the applicant commit any violation under the respective SRO. Finance Executives are responsible to arrange issuances of such PDCs and guarantees and keeping track of timely release of such securities so that relevant departments are timely prompted about upcoming expiry of PDCs/the last release dates of such securities. Moreover, such exemptions from import duties are also taken into account in order costing and are also important factors in procurement decisions such as whether to source it locally or through import channels.



3.1. Raw Material Sourcing (Cotton & Polyester)

Primary raw materials used in the textile industry are cotton, polyester and viscose. Cotton is a natural fiber grown as industrial product in Pakistan within which Punjab and Sindh are the major cotton growing provinces. The other two raw materials are manmade fibers which are both locally produced and imported.

Local cotton from the fields reaches textile spinners through cotton ginners. Cotton ginning is a process in which cotton fibers are separated from the seeds and wastes such as leaves. The raw material for cotton ginners is seed cotton (phutti) and its finished product is cotton bale. Cotton ginners, represented by Pakistan Cotton Ginners Association (PCGA), are located in cotton growing areas of Punjab and Sindh. Most of the cotton ginners are not registered as corporate entities and operate sale channels with the help of cotton brokers. Demand and supply dynamics of cotton ginners is affected by various factors including weather conditions, import duties on imported cotton, exchange rates and general economic conditions of the country.

Textile spinners and textile composites seek services of brokers to source cotton from cotton ginners. The agro economics largely derives the local crop pricing, however, for high quality cotton, textile industry is dependent on import channels.

Cotton is being imported from around the world majorly from USA and India while other import regions include Middle East, Europe and Asia as well^[7]. In FY 2016-17, 10.671 million bales were produced in Pakistan whereas 2.706 million bales were imported^[8]. Moreover, as per APTMA's data of district-wise cotton arrival in FY 2016-17, Punjab and Sindh are represented by major cotton growing districts with province-wise aggregate cotton arrival of 6.94 million bales and 3.71 million bales respectively.

Ibrahim Fibers and ICI Polyester are major polyester manufacturers in Pakistan. The polyester is also being imported, however, unlike cotton, the decision to import polyester is largely derived from price competitiveness. One of determinant for price competitiveness is exemption of import duties subject to certain legal compliances (discussed in detail in section 2). Polyester is majorly being imported from China and Korea whereas other import regions include other Asian countries^[9].

Viscose is being sourced through import channels. Major import countries for viscose include China, Indonesia and Korea.

3.2. Procurement of other items

Procure to pay cycle in textile industry operates on same model prevailing in all industries. However, for packing and stitching accessories, customer sometimes nominates suppliers and binds the company to procure accessories from nominated suppliers only. Moreover, for procurement of accessories, order based dynamics, as discussed in section 4, applies. Store and spares are both locally sourced and imported as well.

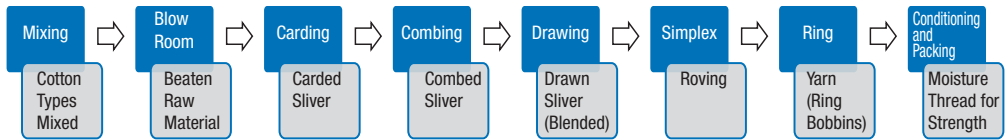
^[7] By analyzing the import data for FY 2016-17 as published by Pakistan Bureau of Statistics

^[8] As per the "Supply and Distribution Data FY 2016-17" of APTMA

^[9] As per import data for FY 2016-17 published by Pakistan Bureau of Statistics

3.3. Spinning

Spinning is a process in which raw materials including cotton and polyester are converted into yarn in a climate controlled facility. For planning purposes on subunit levels, a 'spin plan' is prepared for planning the yarn types to be produced as well as for backward planning of input requirement for each subsection of spinning process. Input is determined backward from auto cone to mixing process keeping in view the waste percentage in each process. The capacity of spinning unit is denominated in 'number of spindles' in ring section, a front end sub unit in spinning process. Brief about the sub units in yarn manufacturing are bulleted as under:

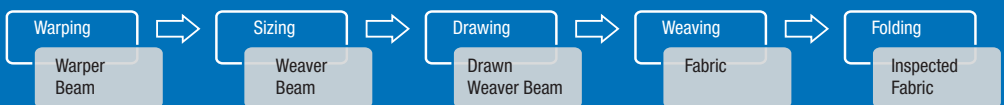


- **Mixing:** The bale formation of cotton/manmade fibers is opened. As per the yarn type, different cotton types are mixed to reach the desired quality specs of mixed cotton as a whole. Recipes are prepared for determining the mixing ratios of different types of cottons. The mixed cotton is stored for certain time to ensure that it gains desired moisture percentage before feeding it in the next production step.
- **Blow room:** Mixed cotton is fed in blow room where it is cleaned and beaten for feeding in the next production step.
- **Carding:** The mixed cotton from the blow room is disentangled, cleaned and intermixed to produce a continuous web or sliver, a formation of long cotton ropes which is normally 1 to 2 inches thick.
- **Combing:** The combing process is applied only for combed variety of yarn. In this phase, the quality of medium staple fibers is upgraded by extracting the short fibers to produce smoother, finer, stronger and more uniform yarns.
- **Drawing:** The prime purpose of this process is to blend the sliver of cotton and/or manmade fibers as per the requirement of desired yarn type. This phase also improves the quality of sliver by making the fibers parallel and uniform, hence, making it finer.
- **Simplex:** In this phase, the simplex machines draft and twist the sliver, converting it into thick strands of cotton and manmade fibers called roving.
- **Ring:** In this process thick strands of cotton are further drafted and twisted to make yarn which is wound on comparatively smaller formation, called ring bobbins (also known as doffs).
- **Auto cone:** This is where the final form of thread/yarn is made and wounded on cones. Several ring bobbins are placed in auto cone magazine to wind it in the formation of yarn cone (finished product). There are sensors installed which identify defects and remove them and join the yarn again through auto splicing.
- **Conditioning and Packing:** Yarn cones are taken off the machines and sent into the packaging room. Final product is conditioned, as per standards, so that the thread can gain some moisture for strength. For conditioning, moisture rooms and conditioning plants are used alternatively. The conditioned yarn cones are packed in the form of cartons, polyester bags, polythene bags and/or other packing forms as per the requirements.



3.4. Weaving

In weaving, yarn thread from the spinning department is weaved to form greige fabric. Weaving is a process in which longitudinal threads i.e. threads along the length of fabric (warp) and lateral threads i.e. threads along the width of fabric (weft) are interlaced to manufacture fabric. The quality and type of fabric is determined by several factors i.e. yarn quality, number of warp per inch (ends), number of wefts per inch (picks), fabric width and weaving pattern. There are different patterns of weaving such as plain weave, satin weave and twill. Loom plan or weave plan is prepared for production planning which generally includes allocation of looms to production of desired type of weaved fabric, loom speed, target production and tentative completion date. The capacity of weaving unit is determined by number and type of looms and is denominated in square meter equivalent to 50 picks. The sub units in weaving manufacturing are described below:



- **Warping:** It is a process of making a sheet of yarn threads in the form of warping beam. The yarn cones are installed on creels in warping section which are warp in the form of sheet of longitudinal yarn threads. There are different types of warping such as direct / beam warping, sectional / pattern warping and ball warping.
- **Sizing:** In this process, the number of ends required for a given fabric quality are taken from multiple warping beams to the weaving beam. Moreover, sizing chemicals are applied on yarn thread to cover the yarn surface to withstand friction in weaving process.
- **Drawing:** It is a process of preparing weaver's beam for the purpose of weaving fabric on the loom according to design of the fabric.
- **Weaving:** It is a process of making fabric by interlacement of warp and weft on looms. The warps are installed in looms in the form of weaving beams and yarn cones are installed to take form of weft. The weft from yarn cones are weaved in threads from weaving beam to manufacture fabric of desired quality. There are different types of looms available varying in weaving speed and production efficiencies such as shuttle looms, air jet, shuttle less looms and power looms.

Moreover, the maximum width of fabric also varies with looms. Additionally, a jacquard head is used to make special weave fabrics.

- **Folding:** Weaved cloth from loom shed is brought into folding section for inspection, mending, grading and packing of fabric. Inspection of fabric is generally done on basis of 4 Point system (American system). Maximum 4 penalty points can be given to one fault. If points per 100 sq. yards are less than 20, fabric will be graded as 'A-Grade Fabric', however, criteria is generally agreed with customers for quality of fabric. After inspection, packing is done in form of bales, rolls or thaans as per the requirement.



3.5. Processing

In processing, greige fabric is converted into processed fabric i.e. fabric is bleached, dyed and/or printed. As per the desired quality of processed fabric, fabric route is determined for applying different processing operations which are summarized below:

- **Singeing:** Singeing is designed to burn off the surface fibers the fabric to invoke smoothness in it. The fabric passes over brushes to raise the fibers, then passes over a plate heated by gas flames.
- **De-sizing:** De-sizing is the process of removal of sizing material on fabric (greige fabric is sized as part of weaving).
- **Scouring:** Scouring, is a chemical washing process carried out on fabric to remove natural wax and non-fibrous impurities from the fabric including soiling and dirt. At this stage even the most naturally white fabric is in yellowish tone.
- **Bleaching:** Bleaching improves whiteness of fabric by removing natural coloration and impurities from the fabric through a washing process. The degree of necessary bleaching is determined by the required whiteness and absorbency of fabric.
- **Dyeing:** Dyeing is the process of adding color to the bleached fabric as per requirement.
- **Printing:** Printing is the process of applying color designs and patterns to the fabric. There are different kinds of printing such as digital printing and printing through engraving screens.
- **Finishing:** In finishing, different processes are applied to improve the look, performance, shrinkage, or 'hand' (feel) of the fabric. Such finishing processes include raising, calendaring and sanforising.
- **Folding:** It is consistent with the one in weaving, however, processing faults are also inspected during this process.

3.6. Garment Manufacturing

Garment manufacturing is labor intensive section of textile industry. This section is further divided into three major categories: woven, knitted and home textiles. In manufacturing, fabric is cut and stitched as per requirement and design of desired product. Design and cutting phase of stitching operation varies with complexity of the product involved. Hence, for garment designing and cutting, automated CAD, automated fabric spreading and automated cutting methods are applied; whereas for home textile, manual operations are applied from designing to cutting of fabric. Stitching production lines and stitching operations are designed keeping in view the product being stitched. Therefore, different models are applied in stitching operations such as stitching of complete unit by one person to specific stitching task by specialized workers. Garment manufacturing process is summarized below:

- **Cutting:** First, fabric is spread for bulk cutting and is cut using the manual or automated machines. Cutting methods vary from hand held cutting machines to laser cutting as per the design fed in the automated machines.
- **Stitching:** After cutting, the cut pieces along with stitching accessories such as threads, buttons, hooks and zips are forwarded to stitching section where workers sew the cutting pieces into required product. Generally, inline inspections are performed in the stitching section to detect and remove stitching faults instantly.
- **Laundry:** Laundry is a major value addition part of garment manufacturing both in woven and knits products but especially in denim woven. Here the production is washed for cleaning and de-sizing to give it the required final look and feel. Dyeing garments made out of RFD (Ready for Dyeing) fabrics is also done in this stage.
- **Finishing:** After laundry, units are forwarded to Trimming and Pressing section where trained staff removes unnecessary threads from products and press the stitched articles. The pressed articles along with packing accessories such as insert cards, stickers, branding hashtags and labels are packed into cartons or polythene bags as per requirement.

3.7. Quality Controls and Quality Audits

Parallel with all production operations from spinning to final product, quality controls are being exercised to ensure prevention of production faults and to rectify defects on spot, rather than waiting for the manufactured product. Hence, in sub operations of main textile operation, different quality control tests are designed and performed to rectify production errors through machine adjustment and reworks. Quality control also incorporates all fabric and garment testing such as tearing, tensile and appearance after wash tests to make sure the product meets the performance requirements.

Moreover, in-house quality audits are performed before sending shipment to final customer. These quality audits are generally performed by independent team. However, department structure may vary from organization to organization. For sample selection and passing criteria, different Acceptable Quality Limits (AQLs) are being applied. For example, AQL 4 means that there should not be more than 4% defective pieces of sample selected. These quality audits are generally applied to ensure that shipped goods are not rejected at customer's quality audit.

3.8. Shipment and Logistics

The last part of value chain is arranging shipments for customer. For local customers, both ex-mill and ex-party terms are agreed with customer. In ex-mill terms, arranging transportation is the responsibility of the customer, whereas in ex-party terms, the company is responsible for transportation. For export suggested terms for customer, including Free On Board (FOB) and Carriage Insurance and Freight (CIF) are generally agreed with. These terms are generally called incoterms. Sometimes, due to delays in supply chain process, air shipments have to be made by textile companies to avoid penalties.

However, this is the least preferable mode due to involvement of hefty air freight cost.



04 SALES AND MARKETING



There are different sales and marketing channels in textile industry such as export markets, local markets and retail network.

Highly specialized marketing staff, having knowledge and experience of dealing with specified export market and export products, are being employed. Marketing activities include international exhibitions, trade fairs, product samples and personal inquiries. The top five export markets along with percentage share for each kind of Pakistani value added textile products are as under ^[10]:

- Ready Made Garments (US\$ 2.451 billions):**

USA (23%)	Spain (14%)	United Kingdom (13%)	Germany (13%)	Belgium (6.97%)
-----------	-------------	----------------------	---------------	-----------------
- Bed ware (US\$ 1.768 billions):**

USA (27%)	Germany (14%)	Netherlands (10%)	Belgium (8%)	Italy (7%)
-----------	---------------	-------------------	--------------	------------
- Textile Made-up other than Bed ware & Towels (US\$ 0.57 billions):**

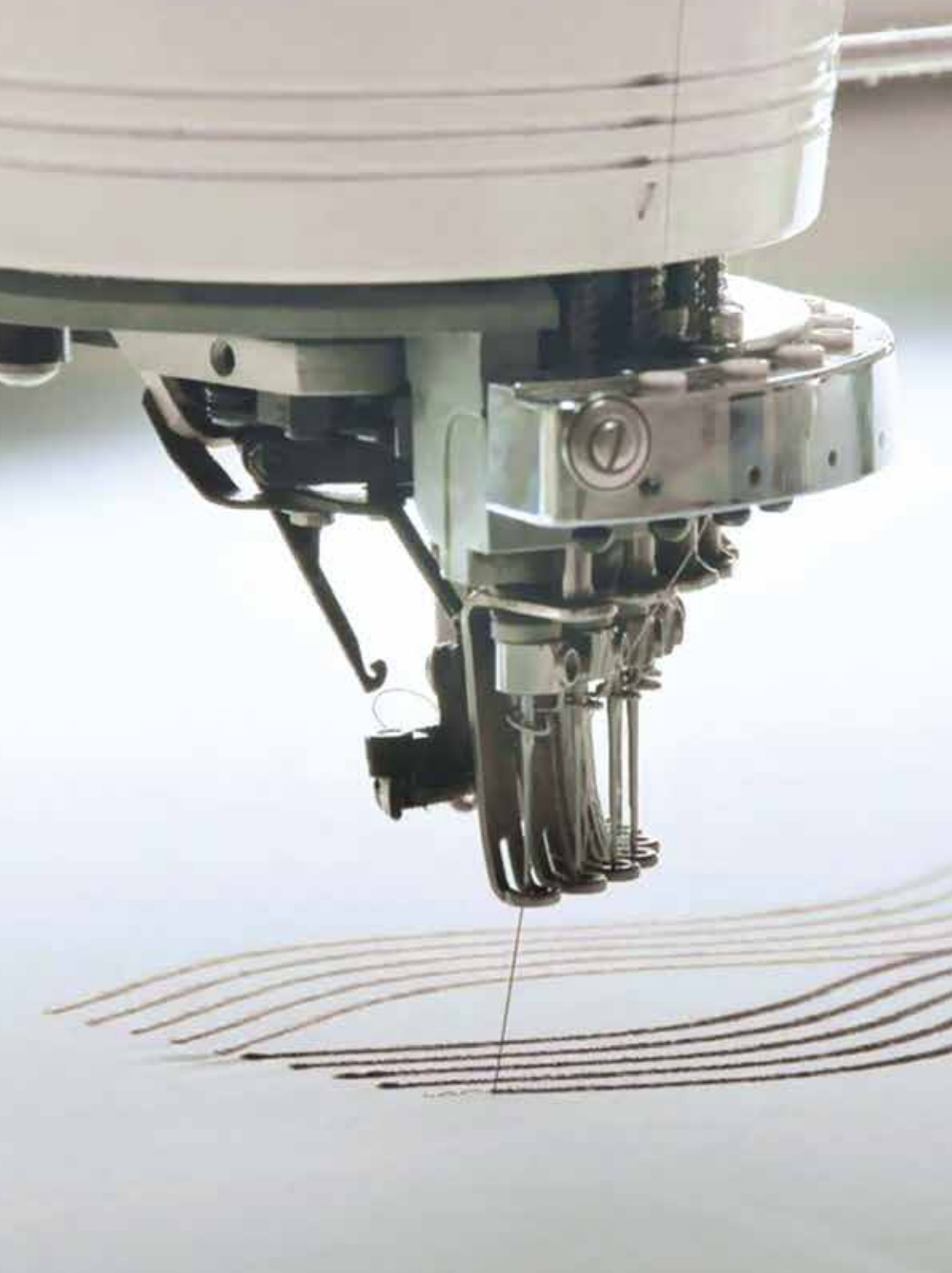
USA (77%)	Germany (7%)	Netherlands (3%)	France (3%)	Canada (2%)
-----------	--------------	------------------	-------------	-------------
- Cotton Fabrics (US\$ 1.438 billions):**

Bangladesh (33%)	Italy (11%)	Turkey (11%)	China (9%)	Portugal (6%)
------------------	-------------	--------------	------------	---------------

Finance Executives are expected to provide support in pre-costing and post costing of orders. For pre-costing, Finance Executives support marketing staff with updated stats for order costing. Post-costing of orders is conducted to review the effectiveness of pre-costing and actual costs incurred with respect to export orders.

In local sales, buyers and sellers generally operate through brokers or agents. Local markets exist in all textile representative cities such as Karachi, Faisalabad, Lahore and Multan. Although market forces determine the pricing of products, however, profits are being monitored by Finance Executives.

^[10] As per TDAP data FY 2017-18





05 BUSINESS MODELS

There are two kinds of business models in textile industry i.e. (1) Order-based model (2) Stock-based model.

In stock-based model, goods are manufactured and sold as and when a sale order is received, hence in this model, stock planning and management is of prime importance.

In contrast, in order-based model, goods are manufactured as per the customer's needs, hence in this model, focus is on order management. Processing and stitching sections generally operate on order-based model, whereas a mix of both models is applied in spinning and weaving division. In order-based model, there is great significance of Production Planning and Control (PPC). However, its role changes with maturity of organization. In more mature structure, PPC is integral part of supply chain function which ensures that order management, production operations and procurement functions are well coordinated to ensure timely delivery to customers. It further ensures that all available production capacities are optimally utilized. Late delivery risk is significant in order-based model especially for textile composites which may result in penalties from customer, air shipments to export customer and customer relationship risk.



HEALTH SAFETY AND ENVIRONMENT

Health Safety and Environment (HSE) has great importance in textile industry. To ensure health and safety, employees are trained about operational precautions and self-protection. Awareness sessions are also conducted about HSE internal policies and best practices as per local and international standards. Workers are trained in PPE (Personal Protective Equipment), firefighting and responding in emergency conditions. Moreover, textile companies take different measures for the sake of environment sustainability, such as waste water/effluent treatment, compliance with RSL (Restrictive Substance List) and sourcing prescribed chemicals only. Textile companies are to ensure that hazardous wastes and chemical effluents are treated to remove hazardous materials before discharging these wastes in environment. Moreover, sourcing of chemicals in processing is controlled so that minimum wastes and effluents are discharged.

Especially in export oriented companies, customers specify mandatory certifications such as ISO 14001 & Nordic Swan Ecolabel. In this regard, textile industry designs procedures for continuous compliance with frameworks given in such certification.

Acceptable Quality Limits (AQL): It is the worst tolerable process average (mean) in percentage or ratio that is still considered acceptable; that is, it is at an acceptable quality level.

Air-jet loom: It is a shuttle less loom that uses a jet of air to propel the weft yarn through the warp shed. It is one of two types of fluid-jet looms, the other being a water-jet loom.

All Pakistan Textile Mills Association (APTMA): It is the premier national trade association of the textile spinning, weaving, and composite mills representing the organized sector in Pakistan.

All Pakistan Textile Processing Mills Association (APTPMA): It represents textile processing units of Pakistan and is a registered trade body which is duly affiliated with the Federation of Pakistan Chambers of Commerce & Industry (FPCCI), the apex Trade Organizations of Pakistan.

Cotton gin: It is a machine that quickly and easily separates cotton fibers from their seeds, enabling much greater productivity than manual cotton separation.

Free on Board (FOB): It is a trade term that indicates whether the seller or the buyer is liable for goods that are damaged or destroyed during shipping. "FOB shipping point" or "FOB origin" means the buyer is at risk once the seller ships the goods. This term is only used in sea freight.

Greige fabric: Greige is an unfinished woven or knitted fabric that hasn't been bleached or dyed. It can be used for upholstery, window treatments, clothes and more.

Pakistan Cotton Ginners Association (PCGA): Pakistan Cotton Ginners' Association is working for the betterment of cotton ginning industry in Pakistan since 1958. It is a representative body that takes care of the interest of the ginners and coordinates their problems with the Federal and Provincial Government Agencies to resolve them.

Polyester: Polyester is a generalized term for any fabric or textile, which is made using polyester yarns or fibers. It is a shortened name for a synthetic, man-made polymer, which, as a specific material, is most commonly referred to as a type called polyethylene terephthalate (PET).

Personal Protective Equipment (PPE): It is equipment that will protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. It also includes respiratory protective equipment (RPE).

Spinning: Spinning is the twisting together of drawn-out strands of fibers to form yarn.

Viscose: Viscose is a semi-synthetic fiber.

Weaving: It 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.

Author

Muhammad Waqar Iqbal, ACA
Head Internal Audit, Crescent Textile Mills Limited

Reviewers

Khalilullah Shaikh, FCA
Chief Financial Officer, Pakistan International Airlines

Shaukat Hussain, ACA
Chief Financial Officer, Din Textile Mills Limited

Haroon Asghar, ACA
Senior Accounts Manager, Haji Sheikh Nooruddin & Sons

Approved by

Professional Accountants in Business (PAIB) Committee

Disclaimer

This is the third industry specific guideline issued by the Professional Accountants in Business (PAIB) Committee of the Institute of Chartered Accountants of Pakistan. The objective is to provide guidance and a head start to fresh Chartered Accountants willing to join Textile industry. The information contained in the guideline is based on the professional experience of the author and reviewers as well as the information collected from other professionals in their respective areas of expertise within textile industry. Although due diligence has been exercised in compiling information, the practices may vary across companies operating in the sector. The Institute does not accept any responsibility for any loss to any person arising out of acting on the information contained in the guideline.

The readers are requested to inform the PAIB Committee of the Institute about errors / omissions, if any, in the guideline for correction in future editions.