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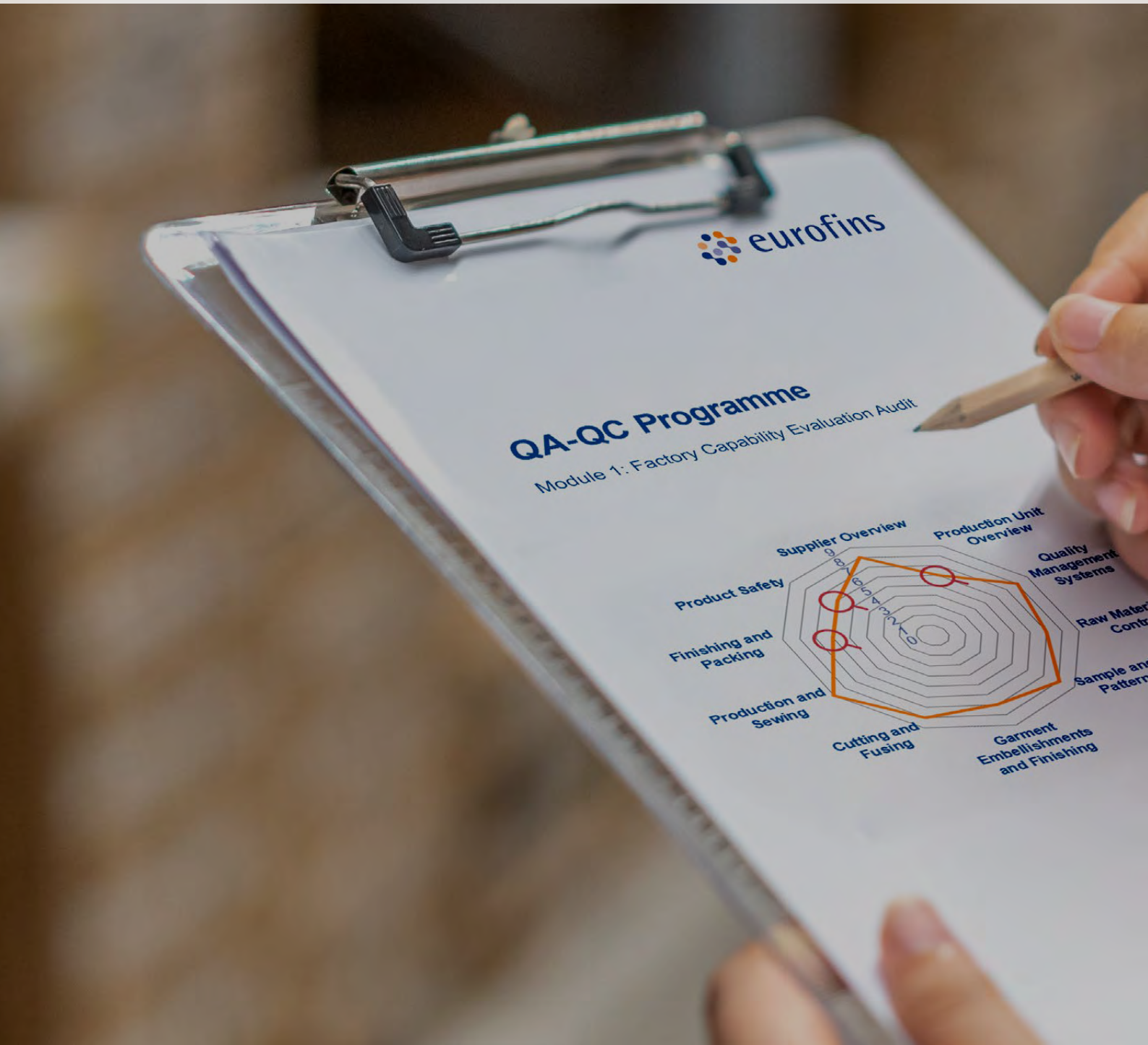
Eurofins CPA QA-QC Programme for Apparel

Programme Factsheet – A step-by-step guide to implement the programme.



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Introduction

Whether you are a sizeable fashion retailer or a new brand establishing a footprint in the industry, the continuous and reliable quality of your apparel is paramount. The QA-QC Programme developed by the Eurofins CPA network of companies is a highly cost-effective way to manage product quality from point zero, especially if you need to expand production quickly, lack internal resources or run into quality issues.

In this programme factsheet, we will detail the criteria or processes under the QA-QC Programme. If you are interested in finding out more or hoping to have a dedicated session to discuss how the programme can be tailored for your current needs, don't hesitate to reach out to us anytime!

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Programme Modules

In the Programme, there are 12 established modules to thoroughly cover each step of your apparel production.

1. Factory Capability Evaluation Audit
2. Pre-production Meeting
3. Size Set Review & Pre-production Audit
4. Incoming Quality Control
5. Pilot Review
6. Initial Production Inspection
7. Production Monitoring
8. During Production Inspection
9. Pre-final Audit
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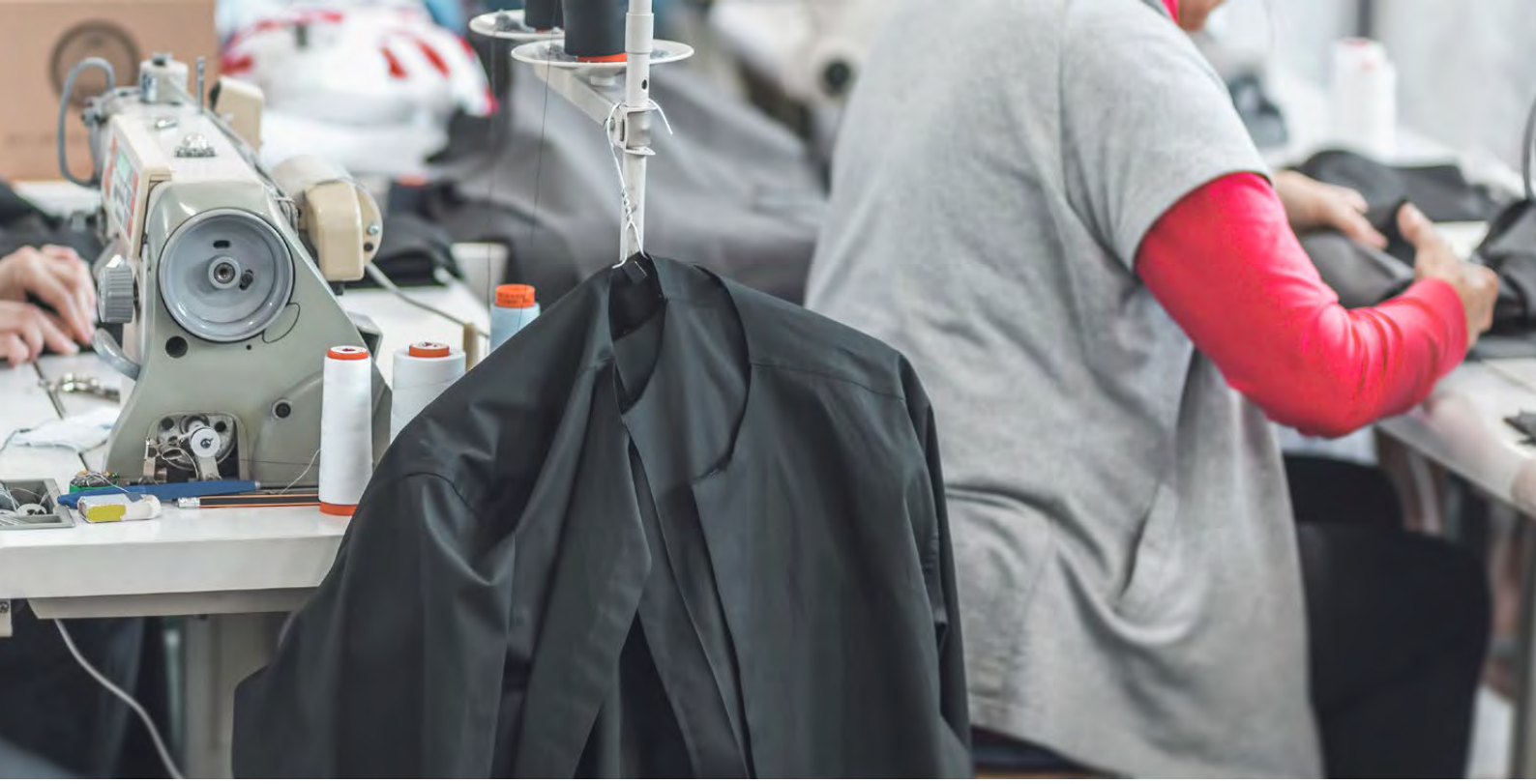
12. Troubleshooting



1

Factory Capability Evaluation Audit

In Module 1, ten areas at the production site will be evaluated to clearly understand the current capability and capacity of the factory and thus devise corresponding improvement plans.

Evaluation Area 1: Supplier Overview

The below items/ documents are reviewed to gain a general understanding of a supplier's background:

- Year supplier was established
- Head office address & main contacts
- Production unit name, address and contact person
- ISO9001 certification status
- Product categories and type (e.g., men's apparel, blazer)
- External outsourced processes (external process, facility name and address)

Evaluation Area 2: Production Unit Overview

The below items/documents are reviewed for the production facility:

- Date of factory establishment
- Factory size (no. of buildings at site, no. of floor)
- Total production area
- Number of production lines
- Average monthly output (PCs)
- Average operators per line
- Product categories and type (e.g., men's apparel, blazer)
- Production unit contact
- Number of employees per department
- Relevant machine inventory

Evaluation Area 3: Quality Mangement Systems

This is to evaluate if there is a proper documentation system at the factory to keep track of quality processes, procedures, responsibilities and policies.

Evaluation Area 4: Raw Materials Control

This is to evaluate if there is a proper SOP on raw materials control, which includes:

- Inventory control/management to maintain a high enough stock level for production
- Raw materials quality inspection to ensure the purchased raw materials comply with purchasing specifications
- Nonconforming materials storage and supplier corrective action
- Trackability requires all supplier raw materials (conformance and nonconformance) and documentation to be traceable, and detailed audit trails for raw materials, work in progress or finished goods

Evaluation Area 5: Sample and Pattern

This is to evaluate if there is a proper SOP on sample and pattern control, which includes:

- Workers (skilled CAD pattern makers and responsible manager)
- Sample and pattern room conditions. (e.g., cleanliness, lighting level, etc.)
- Pattern creation system (computerized CAD pattern system)
- Sample and pattern archiving system
- Approved sample and pattern control
- Sample and pattern approval process
- Product safety/risk assessment process

Evaluation Area 6: Garment Embellishments and Finishing

This is to evaluate if there is a proper SOP garment embellishments and finishing control, which includes:

- Facilities (e.g., panel printing, laundry for washing and dying, embroidery and embellishment)
- Outsource process control
- Garment embellishments and finishing approval process (SOPs)
- Workers (skilled technicians)
- Quality control on semi-finished goods
- Semi-finished goods storge & control
- Chemicals control & storage

Evaluation Area 7: Cutting and Fusing

This is to evaluate if there is a proper SOP on cutting and fusing, which includes:

- Standard operating procedures for cutting and fusing process
- Cutting capability
- Fabric relaxation control
- Cut panel size checking against master pattern
- Panels labelling/ numbering to avoid mixed plies in production
- Personal Protective Equipment (PPE)
- Technical datasheet record for fusing
- Cutting equipment & fusing machine maintenance
- Cutting room layout and conditions (e.g., distance between cutting tables, light source)

Evaluation Area 8: Production and Sewing

This is to evaluate if there is a proper SOP on production and sewing, which includes:

- Production planning
- SOPs, approved sample, trim cards for every production operation
- Pre-production meeting records
- Production machine maintenance (e.g., sewing machines)
- Production environment conditions (e.g., clean, tidy, enough lighting…etc.)
- Production line in charge, quality control and technicians
- A clear segregation of acceptable product & defective product
- Line end/ inline inspection records
- Sharp article/ needle control policy

Evaluation Area 9: Finishing and Packing

This is to evaluate if there is a proper SOP on finishing and packing, which includes:

- Finished goods inspection process (workmanship & size measurement)
- Pressing process & procedure
- Fishing and packing environment control (e.g., humidity, light source…etc.)
- Stock storage management
- SOPs for packing process
- Metal detection process & procedure
- A clear segregation of acceptable product & defective product

Evaluation Area 10: Product Safety

This is to evaluate if there is a proper SOP on product safety, which includes:

- Sharp object management
- Needle and hazardous metal detection policy
- Stud and rivet attach policy
- Attachment machines (no manual mechanism machines allowed)
- Lockstitch button attaching machine must be used with auto thread trimmers, thread wipers and air blowers
- Production safety control sheet record to record the garments
- Passed the product safety assessment
- Product safety testing procedure

Grading System

After evaluation, factories will be graded per the below system so continuous monitoring can be conducted systematically.

Grade	Evaluation Result	Recommendations
A	Overall score ≥ 85%	1-year exemption
B	Overall score 76 – 84%	Re-evaluation within 9 months
C	Overall score 66 – 75%	Re-evaluation within 6 months
D	Overall score ≤ 65%	Re-evaluation within 3 months

2

Pre-production Meeting

Pre-production meetings take place before production begins to discuss issues that could arise from production and work out solutions to prevent issues from happening.

Expected participants in the meeting

From the supplier, the below shall attend:

- Production manager/assistant manager
- Factory merchandiser
- Responsible quality controller
- Quality manager
- Production supervisor
- Line supervisor
- Cutting master
- Sewing head/representative from that section
- Finishing head/representative from that section
- Responsible personnel from IE (Industrial Engineering) department

From Eurofins CPA, the below shall attend:

- QA Manager/Supervisor
- Apparel QC

Expected materials in the meeting

- Tech pack
- Approved samples
- Size set samples
- Bill of Materials
- Before wash and after wash sample
- Care instruction
- Lab test reports
- Pattern templates
- How to measure manual
- Quality controls and factory evaluation report

Expected outcomes from the meeting

- Production completion date: dependent on total lead time of all manufacturing processes involved and production capability
- Time and action plan: to decide actions for Module 3, 4, 5 and 6 (if applicable)
- Date of inspection: to decide frequency and types of inspections for Module 7, 8, 9, 10, 11 and 12
- Shipment date: estimation based on production completion date and vessel schedule
- Different precautionary measures: different measures e.g., safety regulations compliance, no sharp articles/broken needles at garments, proper use of PPE by workers

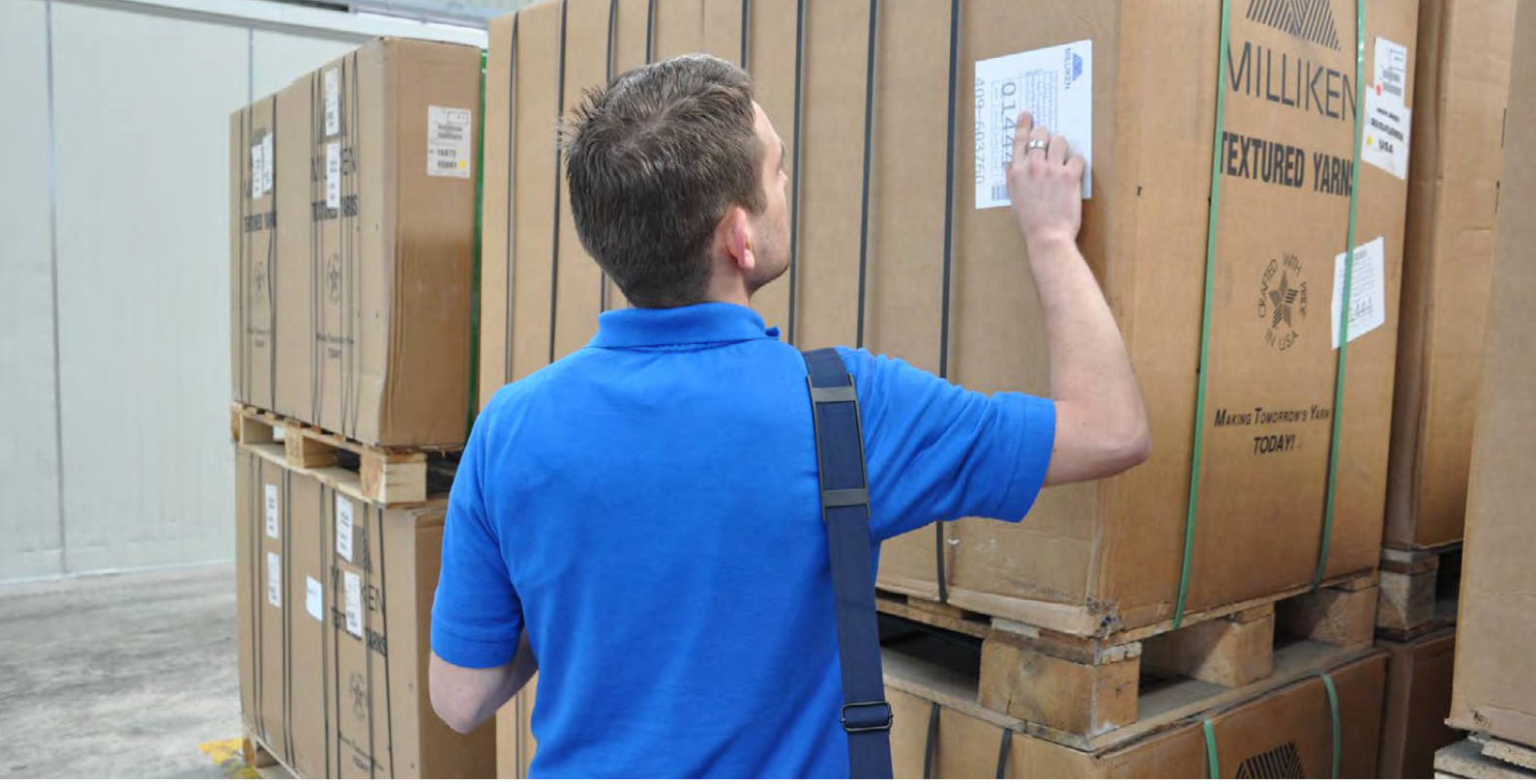
All above outcomes shall be detailed in Pre-production Meeting Report for future reference.

3

Size Set Review & Pre-production Audit

This involves the review of the garments for visual and measurement defects, as well as check factory's capability to make the samples in all sizes prior to pilot runs. and bulk cutting, The processes cover:

1. The samples can be made in the factory's sampling room or actual production floor.
2. The size set samples should be made in the actual fabric and trims.
3. Bulk cutting of fabric for production should start only after size set samples are approved.
4. Normally, review of 1 to 2 samples (or quantity specified by client's sourcing team) of each size is needed.
5. If the size set review is not approved, review the results with the manufacturing management, agree on corrective actions and another size set shall be produced for further review.



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Incoming Quality Control

This is to examine the quality of purchased raw materials based on agreed acceptance criteria at the manufacturing facility. The inspection scope mostly covers:

Fabric

- System: 4-point or 10-point inspection system
- Sample size: 100% fabric inspection or 10% inspection of fabric rolls
- Inspection criteria: various criteria e.g. dye quality, colourfastness, irritability to skin, fabric shrinkage

Trims and accessories

- These materials such as zippers and grippers are checked for correct colours, sizes and performance
- Other specifications such as non-toxic, nickel-free and azo-free are checked as well

Sewing thread

- Tenacity, yarn count, yarn elongation, yarn ply and colours are checked

Buttons

- Colours and other specifications are checked

Raw materials results are indicated clearly for next steps:

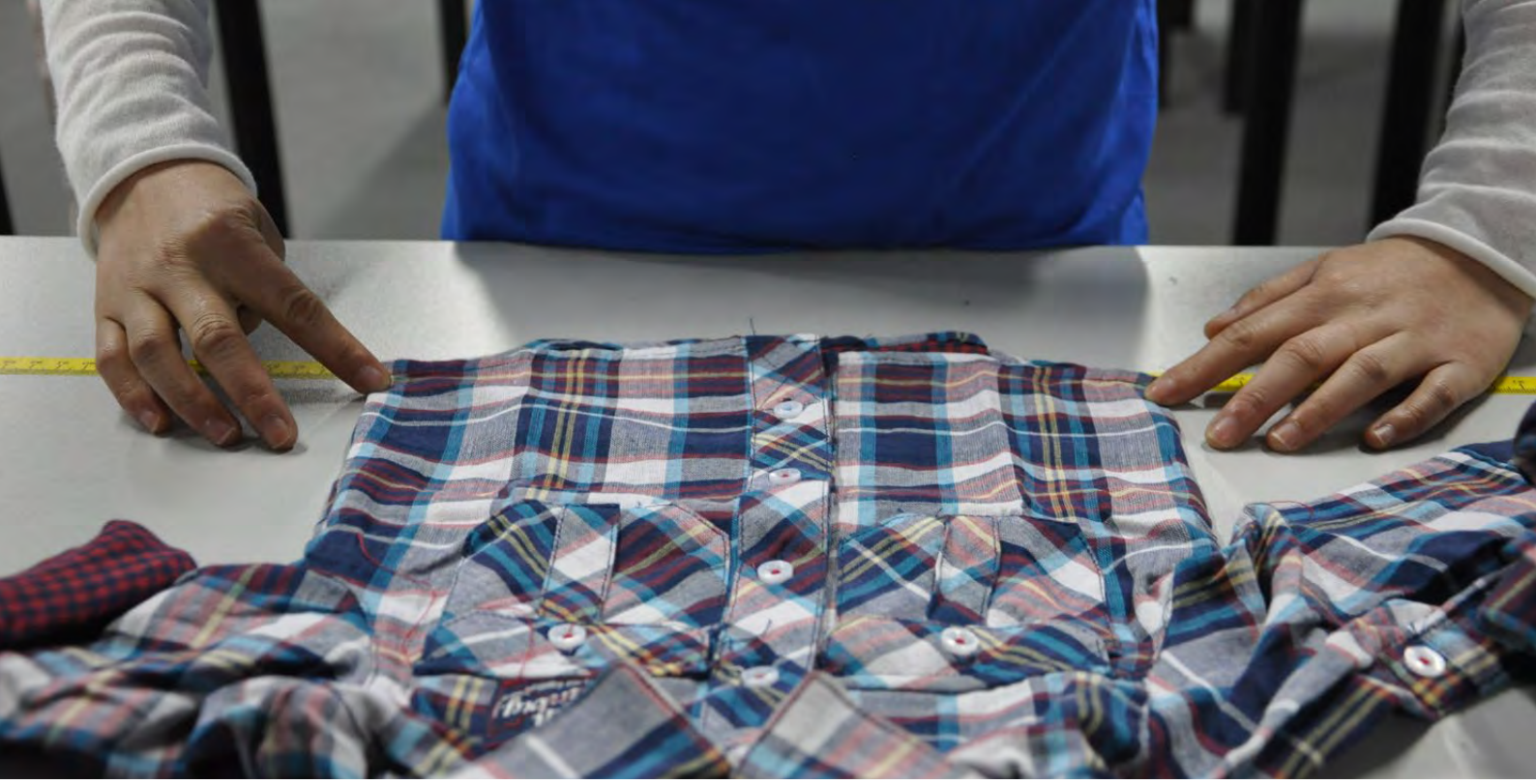
- Accepted: place in stock and can proceed for next operation
- Conditionally accepted: specify conditions and sign agreement between QA Manger and supplier
- Rejected: issue nonconformance report and scrap/ sort/ reassess materials

5

Pilot Review

This is to check the pilot run garments for visual and measurement deficiency and approve for bulk production. The process includes:

1. Review the final approved specification package for changes and recommendations.
2. Examine the pilot run garments with the approved pre-production sample and documentation.
3. Review the minimum construction standards for the appropriate product.
4. Pull out agreed number (e.g., 32 units) of pilot run garments randomly for visual and construction audit.
5. Measure the agreed number of samples (as mentioned in point no. 4 above) for all points of measurement.
6. Report for any visual defects and measurement concerns.
7. If the pilot run garments are approved, review the results of the audit with the manufacturer for additional required corrections.
8. Maintain a pre-production sample for future reference.
9. Obtain the manufacturing management consensus to the corrective actions and endorse the audit report.
10. If the pilot run is not approved, review the results with the manufacturing management, agree on the corrective actions and another pilot will be produced for further review until approval is obtained.
11. Develop a follow-up action plan to monitor concerns observed.



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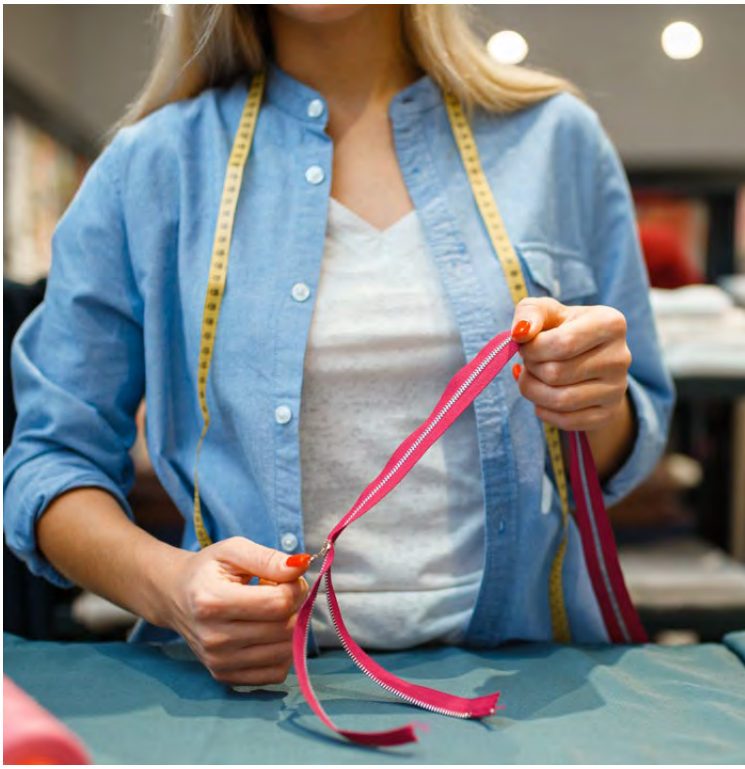
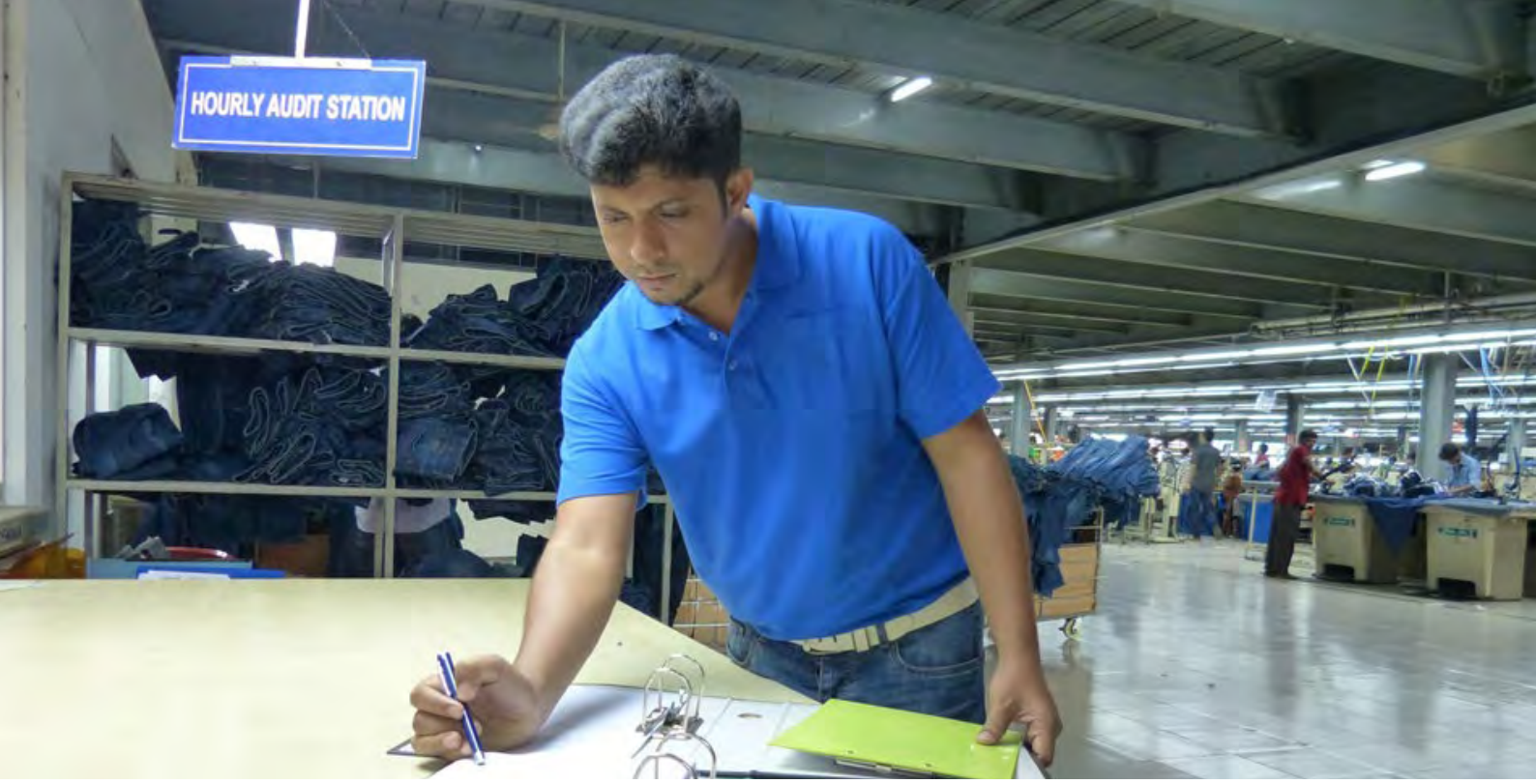
Initial Production Inspection (IPI)

This is to check all production fabric, components, trimming and labels against Bills of Materials. The process includes:

1. Record outstanding recipient of components, trimmings, labels or other materials at the factory and confirm if scheduled materials arrival will meet production schedules or not.
2. Check the testing and inspection records from fabric supplier. Fabric intended for bulk production must be consistent with approved fabric in terms of physical performance, composition, weight, hand feel and colour.
3. Inspect the pre-production sample with comments from client to estimate potential performance in the manufacturing cycle.
4. Discuss and record all potential problems and recommend actions to ensure quality.





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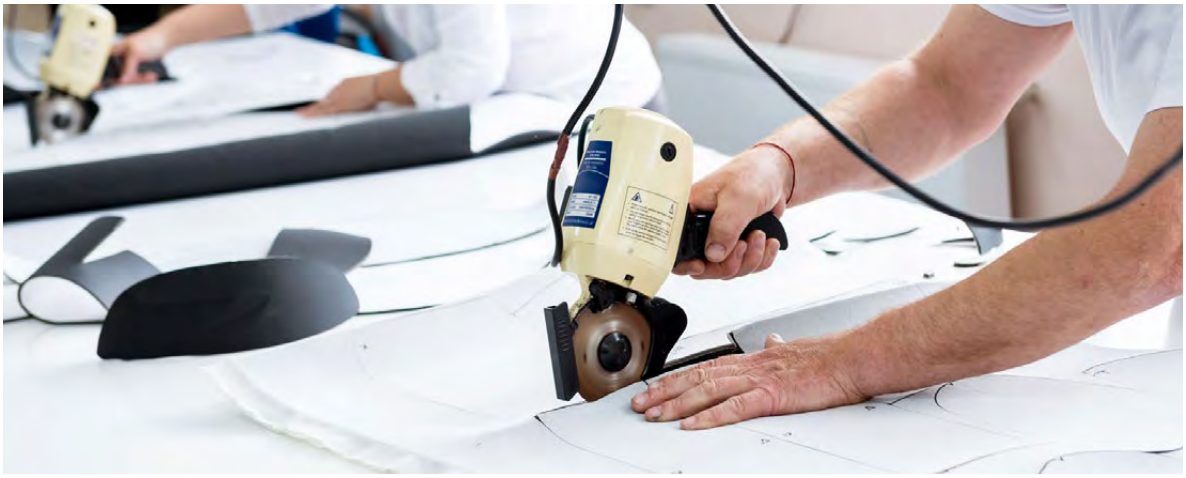
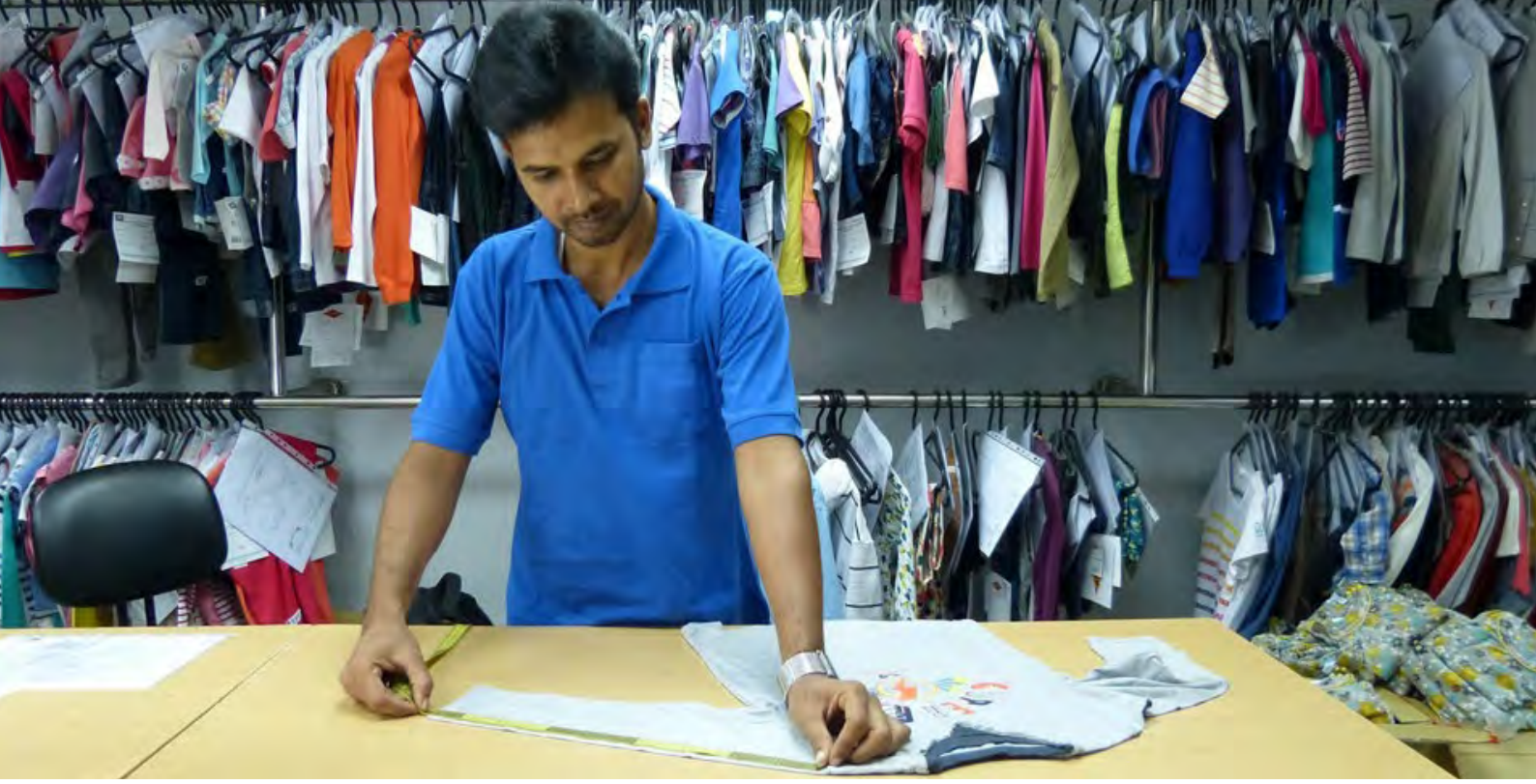
Production Monitoring

Our QA-QC teams at factories will monitor the status and draw up daily production reports on:

- % in Cutting
- % in Loading
- % in Sewing
- % in Finishing
- % in Packing





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During Production Inspection

This is to quantify the visual, functional and measurement defects and better determine the overall product quality of the batch. This is conducted when 20% to 50% of manufacturing processes are finished. The process includes:

1. Review raw materials, marker layout, cut parts, assembly of parts, components, trimmings, labels and partially finished goods are reviewed against IPI report, size specifications and Bills of Materials.
2. Samples are drawn on agreed AQL.
3. Quality aspects are examined:
    - Style: initial production garment matching approved pre-production samples for both styles and design
    - Cutting: checking of top ply and bottom ply of the same cut buddle across multiple cut bundles for acceptable variance. Height of fabric spread is recommended to be below 8 inches.
    - Sewing
    - Measurement audit
    - Components and trims
    - Pressing
    - Packaging
    - Size specifications
    - Carton compliance
    - Availability of materials to ensure production schedule
    - Check semi-finished goods at different operations and record the production status

9

Pre-final Audit

This is to check quality in terms of visual and functional appearance, measurement and packaging prior to the next Module. This is conducted when 80% of the shipment is completed and 20% of finished goods are packed. The process includes:

1. Workmanship inspection on agreed AQL
2. Measurement audit
3. General conformity, including standard of style, hand feel, labelling, hangtag, packing and shipping mark
4. Attachment strength test

10

Final Random Inspection

This serves the same purposes and process of Module 9 but it is conducted when 100% of shipment is completed before shipment.

11

Container Loading Supervision

This is to supervise loading of finished products and confirm shipment at site. The process includes:

1. QA-QC teams contact representatives from loading locations to obtain relevant documents and validate with the information provided by client.
2. If loading has begun, it will be required to suspend and unload it.
3. QA-QC teams will check the conditions inside and outside of every container used for:
    - Cleanliness
    - Stains
    - Infestation
    - Water
    - Holes
    - Tears
    - Proper functioning of doors, handles and latches
    - Other poor conditions
4. QA-QC teams will validate container numbers on the inside and outside walls.
5. QA-QC teams will count and record the number of cartons being loaded during the loading process.
6. QA-QC teams will check 5 random cartons and record the quantity and internal assortment of products.
7. QA-QC teams will take photos of below for records:
    - Export cartons
    - Shipping marks/ side marks
    - Product packing
    - Main labelling on packaging
    - Product appearance
    - Main labelling on products
8. QA-QC teams will record the weather conditions at the time of loading.

9. QA-QC teams will witness the entire loading process and confirm all cartons are loaded properly without damage and overloading.
10. QA-QC teams will take photos of the following loading stages for records:
    - Empty container – with 2 doors wide open
    - Container – ¼ loaded
    - Container – ½ loaded
    - Container – ¾ loaded
    - Container – fully loaded with 2 doors wide open
    - Container – fully loaded with left door open, right door closed
    - Container – fully loaded with 2 doors closed after container is sealed
11. A Closing Meeting will be done between QA-QC team and loading representative to present and explain findings at the end of loading process

Troubleshooting

This is a systematic approach to look for root-cause and solutions effectively. We follow five steps to improve quality issues identified throughout the entire programme:

1. **Identify**: identify what the issue(s) is/are
2. **Go Deeper**: narrow down the scope with fishbone diagram
3. **Review**: dig out the actual cause(s)
4. **Improve**: propose corresponding solutions
5. **Evaluate**: evaluate effectiveness of the solutions

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Allow us to support you as you improve your supply chain!

Unsure whether you should employ all modules or only some of them? We are happy to provide a free consultation session to understand your current situation and provide our professional suggestions.

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