ICTQual AB

Qualification Specification

ICTQual AB Level 3 Diploma in Quality Control Textile

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ICTQual AB's

Level 3 Diploma in Quality Control Textile

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Qualification Specification about

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About ICTQual AB's

ICTQual AB is a distinguished awarding body based in the United Kingdom, dedicated to fostering excellence in education, training, and skills development. Committed to global standards, ICTQual AB's provides internationally recognized qualifications that empower individuals and organizations to thrive in an increasingly competitive world. Their offerings span diverse industries, including technical fields, health and safety, management, and more, ensuring relevance and adaptability to modern workforce needs.

ICTQual AB's delivers high-quality educational solutions through a network of Approved Training Centres worldwide. Their robust standards and innovative teaching methodologies equip learners with practical knowledge and skills for personal and professional growth. With a mission to inspire lifelong learning and drive positive change, ICTQual AB's continuously evolves its programs to stay ahead of industry trends and technological advancements.

Course Overview

The ICTQual AB Level 3 Diploma in Quality Control Textile is a vocational qualification designed to equip individuals with the essential knowledge and skills required to perform quality control tasks in the textile industry. This qualification covers the entire textile production chain, from raw materials to finished products, and focuses on the practical application of quality standards and testing procedures. It's suitable for those who are currently working in or aspire to a career in textile quality assurance and control. The course provides a solid foundation in the principles of textile science, inspection techniques, and the use of relevant testing equipment.

Objectives and Aims

The primary objective of this qualification is to develop competent and knowledgeable quality control professionals who can effectively implement quality management systems within a textile manufacturing environment.

The aims of the course are to enable learners to:

- **Factual Knowledge:** Gain a comprehensive understanding of the different types of textile fibers, yarns, and fabrics, and their properties.
- **Procedural Knowledge:** Learn and apply standard testing methods for assessing textile quality, including tests for colourfastness, tensile strength, and shrinkage.
- **Theoretical Knowledge:** Understand the underlying principles of quality management, international standards (e.g., ISO), and the importance of quality control in a global supply chain.
- **Problem-Solving:** Interpret and evaluate test results to identify and address quality issues. Learners will be able to diagnose problems that, while well-defined, may be complex and non-routine, and propose effective solutions.
- **Awareness of the Field:** Become aware of the nature of the textile industry, including production processes, common defects, and the impact of quality control on business success and customer satisfaction.
- **Different Perspectives:** Be aware of different perspectives and approaches to quality control, such as lean manufacturing and Six Sigma principles, and how they can be applied to textile production.

Targeted Audience

The Actual AB Level 3 Diploma in Quality Control Textile is intended for a diverse group of individuals, including:

- **Aspiring Professionals:** Individuals with no prior experience who are looking to start a career in textile quality control.
- **Existing Employees:** Current textile workers who want to formalize their skills, gain a recognized qualification, and advance their careers.
- **Quality Inspectors:** Those already working as quality inspectors or auditors in the textile or apparel industry who wish to enhance their knowledge of testing procedures and quality standards.
- **Production Supervisors:** Supervisors or managers in textile manufacturing who need a deeper understanding of quality control processes to improve efficiency and reduce defects.
- **Anyone with an Interest:** Anyone with a keen interest in the textile industry who wants to understand the science behind textile quality and how products are assessed.

Certification Framework

Qualification title	Actual AB Level 3 Diploma in Quality Control Textile
Course ID	QC0049
Grading Type	Pass / Fail
Competency Evaluation	Coursework / Assignments / Verifiable Experience
Assessment	The assessment and verification process for ICTQual AB's qualifications involves two key stages: **Internal Assessment and Verification:** ✓ Conducted by the staff at the Approved Training Centre (ATC) to ensure learners meet the required standards through continuous assessments. ✓ Internal Quality Assurance (IQA) is carried out by the centre's IQA staff to validate the assessment process. **External Quality Assurance:** ✓ Managed by ICTQual AB's verifiers, who periodically review the centre's assessment and IQA processes. Verifies that assessments are conducted to the required standards and ensures consistency across centres

Entry Requirements

To enrol in ICTQual AB Level 3 Diploma in Quality Control Textile, applicants must meet the following entry requirements:

- **Age Requirement:** Learners must be 16 years of age or older at the time of enrolment.
- **Educational Background:** Completion of Secondary School Education (Matric / O-Level or equivalent). Preferably with a prior Level 3 Certificate in a related field (optional)
- **Work Experience:** 6 months to 1 year of work experience in textile, garment, or manufacturing industries preferred
- **English Proficiency:** Applicants must have a good command of the English language to understand course materials and complete assessments.
- **Basic IT Skills:** Familiarity with basic computer applications for documentation and reporting purposes is recommended.

Qualification Structure

This qualification comprises 6 mandatory units. Candidates must successfully complete all mandatory units to achieve the qualification.

Mandatory Units	
Unit Ref#	**Unit Title**
QC0049-01	Advanced Fabric Testing and Evaluation
QC0049-02	Statistical Quality Control in Textiles
QC0049-03	Process Control in Textile Manufacturing
QC0049-04	Garment Inspection and Quality Auditing
QC0049-05	Documentation and Record Keeping in QC
QC0049-06	Communication and Team Coordination in QC

Centre Requirements

To ensure quality training delivery, centres must adhere to the following standards:

1. Centre Approval

- ✓ Centres must be formally approved by ICTQual AB's before delivering this qualification.
- ✓ Approval involves a review of facilities, policies, and staff qualifications.

2. Qualified Staff

- ✓ **Tutors:** hold a relevant qualification in Textile Engineering, Textile Technology, or Quality Control (minimum Level 6 or equivalent) along with appropriate industry experience (minimum 3 years in textile quality control).
- ✓ **Assessors:** Must hold a recognized assessor qualification (e.g., CAVA, AVRA) or equivalent)
- ✓ **Internal Quality Assurers (IQAs):** Must hold a recognized IQA qualification (e.g. Level 4 Award in the IQA and Level 4 Certificate in Leading the IQA) and experience to oversee assessment standards.

3. Learning Facilities

Centre must offer:

- ✓ Private study areas and internet-enabled workspaces (for blended or physical delivery)
- ✓ Academic and pastoral support for learners
- ✓ Administrative support must be available to manage enrolment, tracking, and learner queries efficiently

4. Health and Safety Compliance

- ✓ All training facilities must comply with health and safety regulations.
- ✓ Centres must conduct regular risk assessments for practical activities.

5. Learning Resources

- ✓ **Course Materials:** Approved textbooks, study guides, and digital content must align with the qualification standards.
- ✓ **Assessment Tools:** Templates and guidelines must be provided to ensure standardized evaluation processes.
- ✓ **E-Learning Support:** Centres offering online or blended learning must implement an effective Learning Management System (LMS).

6. Assessment and Quality Assurance

- ✓ Centres must ensure assessments meet ICTQual AB's competency standards.
- ✓ Internal quality assurance (IQA) must be conducted to maintain consistency.
- ✓ External verifiers from ICTQual AB's will review assessment and training practices.

7. Learning Support

- ✓ **Qualification Guidance:** Support for coursework and assignments.
- ✓ **Career Pathway Assistance:** Information on progression opportunities in sustainability and energy sectors.
- ✓ **Accessibility Support:** Accommodations for learners with disabilities or language barriers.

8. Policies and Compliance

Centres must uphold the following policies in accordance with ICTQual AB's standards:

- ✓ Equality, Diversity, and Inclusion Policy.
- ✓ Health and Safety Policy.
- ✓ Safeguarding and Learner Protection Policy.
- ✓ Complaints and Appeals Procedure.
- ✓ Data Protection and Confidentiality Policy.

9. Reporting Requirements

- Centres must provide ICTQual AB's with regular reports on learner registrations, progress, and certification outcomes.
- Assessment records must be maintained for external auditing and quality assurance purposes.

Support for Candidates

Centres should ensure that materials developed to support candidates:

- ✓ Facilitate tracking of achievements as candidate's progress through the learning outcomes and assessment criteria.
- ✓ Include information on how and where ICTQual AB's policies and procedures can be accessed.
- ✓ Provide mechanisms for Internal and External Quality Assurance staff to verify and authenticate evidence effectively.

This approach ensures transparency, supports candidates' learning journeys, and upholds quality assurance standards.

Assessment

This qualification is competence-based, requiring candidates to demonstrate proficiency as defined in the qualification units. The assessment evaluates the candidate's skills, knowledge, and understanding against the set standards. Key details include:

1. **Assessment Process:**

   - ✓ Must be conducted by an experienced and qualified assessor.
   - ✓ Candidates compile a portfolio of evidence that satisfies all learning outcomes and assessment criteria for each unit.

2. **Types of Evidence:**

   - ✓ Observation reports by the assessor.
   - ✓ Assignments, projects, or reports.
   - ✓ Professional discussions.
   - ✓ Witness testimonies.
   - ✓ Candidate-produced work.
   - ✓ Worksheets.
   - ✓ Records of oral and written questioning.
   - ✓ Recognition of Prior Learning (RPL).

3. **Learning Outcomes and Assessment Criteria:**

   - ✓ **Learning Outcomes:** Define what candidates should know, understand, or accomplish upon completing the unit.
   - ✓ **Assessment Criteria:** Detail the standards candidates must meet to demonstrate that the learning outcomes have been achieved.

This framework ensures rigorous and consistent evaluation of candidates' competence in line with the qualification's objectives.

Unit Descriptors

QC0049-01- Advanced Fabric Testing and Evaluation

This unit delves into advanced laboratory techniques for assessing fabric performance and quality. It covers specialized tests beyond routine procedures, such as colourfastness to various agents, pilling resistance, and dimensional stability after repeated laundering. Learners will interpret complex test data, compare it against international standards and evaluate the suitability of fabrics for specific end-uses. The unit also emphasizes understanding the causes of fabric defects and the appropriate corrective actions.

Learning Outcome:	Assessment Criteria:
1. Understand the principles and standards of advanced fabric testing techniques.	1.1 Explain the purpose of different fabric tests, such as tensile strength, tear strength, and abrasion resistance. 1.2 Describe the key international standards (e.g., ASTM, ISO) used in textile testing. 1.3 Identify the main principles behind at least three advanced fabric testing methods. 1.4 Relate the results of fabric tests to real-world fabric performance and quality.
2. Conduct physical and chemical testing on fabrics, including strength, shrinkage, colourfastness, and pilling.	2.1 Perform a fabric strength test using a standard testing machine. 2.2 Measure and calculate fabric shrinkage after a washing cycle. 2.3 Evaluate fabric colourfastness to light or washing. 2.4 Assess pilling on a fabric sample according to a visual standard. 2.5 Record all test data accurately and completely.
3. Analyse test results to evaluate fabric performance and compliance with quality standards.	3.1 Compare test results to specific quality standards or specifications. 3.2 Identify whether a fabric sample passes or fails a quality standard based on test data. 3.3 Interpret the meaning of test results, such as what a low tear strength value indicates. 3.4 Create a simple report summarizing the analysis of test results.
4. Interpret international testing methods (e.g., ASTM, ISO) applicable to textiles.	4.1 Explain the purpose of a specified ASTM or ISO testing method. 4.2 Describe the key steps involved in performing a given international test. 4.3 Identify the required equipment for an international textile test.

	4.4 Explain how test results from an international standard are reported. 4.5 Translate technical terms from an international test standard into simple language.
5. Apply laboratory-based and in-line testing procedures in real-time quality control settings.	5.1 Perform a quality check on a fabric roll using an in-line testing method. 5.2 Explain the difference between laboratory testing and in-line testing. 5.3 Describe how test results are used to make quick decisions on a production line. 5.4 Identify one advantage of in-line testing over laboratory testing.

QC0049-02- Statistical Quality Control in Textiles

This unit provides a practical understanding of how to apply statistical methods to textile quality control. Learners will use tools like control charts and sampling plans to monitor production processes, identify variations, and ensure product consistency. The focus is on using statistical data to predict and prevent quality issues rather than just reacting to them. Topics include Acceptance Sampling, statistical process control (SPC), and the interpretation of statistical data for continuous improvement.

Learning Outcome:	Assessment Criteria:
1. Understand the fundamentals of statistical quality control (SQC) in textile production.	1.1 Define what statistical quality control is in a textile context. 1.2 Explain why using statistics helps improve textile quality. 1.3 List three common statistical tools used in textile quality control. 1.4 Identify the difference between random and assignable causes of variation.
2. Apply statistical tools such as control charts, histograms, and process capability analysis to monitor production quality.	2.1 Create a simple control chart from given production data. 2.2 Interpret a control chart to identify if a process is in or out of control. 2.3 Construct a histogram to show the spread of a measurement, like fabric weight. 2.4 Explain what a process capability index shows. 2.5 Use a histogram to identify the most common measurement value.
3. Identify trends, deviations, and non-conformance in textile processes using data-driven approaches.	3.1 Recognize a trend on a control chart, such as a continuous rise or fall in data points. 3.2 Identify a point on a control chart that signals a process deviation. 3.3 Use data to pinpoint a source of non-conformance in a textile production process. 3.4 Explain how using data helps to find problems before they become serious.
4. Implement corrective actions based on statistical analysis to improve quality performance.	4.1 Suggest a corrective action based on a specific out-of-control signal on a chart. 4.2 Explain how a change in a production step could fix a quality issue shown by data. 4.3 Propose a plan to monitor the effect of a corrective action. 4.4 Describe how a process capability analysis can guide quality improvement.

5. Communicate findings and quality trends using visual and written reports.	5.1 Prepare a simple report that presents quality data clearly. 5.2 Present quality data using a chart or graph. 5.3 Write a summary of quality trends for a manager. 5.4 Explain findings from a quality report in a clear and easy-to-understand way.

QC0049-03- Process Control in Textile Manufacturing

This unit focuses on implementing quality control at every stage of the textile manufacturing process, from fibre preparation to finishing. It teaches learners to monitor key process variables, identify potential sources of defects, and establish control limits. The unit emphasizes the importance of in-process checks and their role in minimizing waste and rework. Learners will develop a proactive mindset, understanding that quality must be built into the process rather than inspected at the end.

Learning Outcome:	Assessment Criteria:
1. **Understand the key stages of textile manufacturing processes (spinning, weaving, dyeing, finishing, etc.).**	1.1 Describe the main steps in the textile manufacturing process, from raw fiber to finished fabric. 1.2 Explain the purpose of each key stage (e.g., spinning, dyeing, finishing) in the process. 1.3 Identify the potential quality problems that can occur at the weaving stage. 1.4 List the different types of finishing processes and their effects on fabric.
2. **Monitor and control critical process parameters to maintain consistent quality output.**	2.1 Identify at least three critical process parameters in dyeing (e.g., temperature, time, chemical concentration). 2.2 Explain how controlling these parameters ensures fabric color consistency. 2.3 Describe the role of a process control operator in a textile factory. 2.4 Explain what happens to quality when a critical parameter goes out of its normal range.
3. **Identify sources of variation and implement control measures to reduce defects.**	3.1 List three common sources of variation in a textile process (e.g., machine issues, human error, raw material differences). 3.2 Explain a control measure that can be used to prevent machine-related defects. 3.3 Propose a simple solution to reduce defects caused by human error. 3.4 Describe how a change in raw material quality can affect the final product.
4. **Apply process control tools and techniques to improve productivity and minimize rework.**	4.1 Explain how a standard operating procedure (SOP) helps in controlling a process. 4.2 Describe how regular equipment checks can reduce defects and rework. 4.3 Suggest a process control tool that can help improve the efficiency of a dyeing process.

	4.4 Explain the link between good process control and increased productivity.
5. Collaborate with production teams to establish quality checkpoints and ensure process integrity.	5.1 Explain the importance of working with production teams to set up quality checks. 5.2 Identify suitable places in the manufacturing process to set up quality checkpoints. 5.3 Describe how a quality checkpoint helps in catching problems early. 5.4 Suggest a method for sharing information about quality issues with the production team. 5.5 Explain how checking quality at each step ensures the final product is good.

QC0049-04- Garment Inspection and Quality Auditing

This unit covers the specific procedures for inspecting finished garments and conducting comprehensive quality audits. It includes detailed methods for checking dimensions, stitching, trimmings, and overall garment appearance. Learners will conduct both in-line and final inspections, prepare audit reports, and use an understanding of common garment defects to provide feedback to production teams. The unit also touches on the ethical aspects of quality auditing and the importance of supply chain management.

Learning Outcome:	Assessment Criteria:
1. Understand the principles and procedures of garment inspection at various production stages.	1.1 Explain the purpose of quality checks at different stages, such as cutting, sewing, and finishing. 1.2 Describe the standard procedure for conducting a final garment inspection. 1.3 Identify the key documents needed to perform a garment inspection. 1.4 Explain what a quality standard is in the context of garment inspection.
2. Identify common garment defects related to stitching, sizing, labelling, finishing, and appearance.	2.1 Identify three common stitching defects, such as skipped stitches or uneven seams. 2.2 Explain how to check for correct garment sizing. 2.3 Describe a defect related to garment labelling. 2.4 Recognize a finishing defect on a garment, like stains or poor pressing. 2.5 Identify three visual defects that affect a garment's appearance.
3. Perform in-line and final inspections following industry standards and buyer requirements.	3.1 Conduct an in-line inspection on a batch of garments, recording any defects. 3.2 Use a measurement tape to check the dimensions of a garment against its size chart. 3.3 Check a garment for compliance with a specific buyer's requirements. 3.4 Fill out a standard inspection report form accurately.
4. Conduct internal quality audits and prepare audit checklists and reports.	4.1 Explain the purpose of an internal quality audit in a garment factory. 4.2 Create a simple audit checklist for a production process. 4.3 Perform a basic quality audit and record the findings. 4.4 Write a clear and simple audit report.

5. **Recommend corrective and preventive actions based on audit findings.**

5.1 Suggest a corrective action to fix a specific defect found during an audit.
5.2 Explain the difference between a corrective and a preventive action.
5.3 Propose a preventive action to stop a defect from happening again.
5.4 Describe how you would communicate your recommendations to the production team.

QC0049-05- Documentation and Record Keeping in QC

This unit is centered on the critical role of documentation in a quality control system. Learners will master the creation, management, and maintenance of essential QC records, including test reports, inspection logs, and non-conformance reports. It covers the use of both paper and digital systems for traceability and accountability. The unit highlights how accurate and organized documentation is vital for legal compliance, customer satisfaction, and the continuous improvement of quality processes.

Learning Outcome:	Assessment Criteria:
1. Recognize the importance of accurate documentation in maintaining textile quality standards.	1.1 Explain why it is important to keep accurate records of quality checks. 1.2 Describe how good documentation helps to trace a problem back to its source. 1.3 Identify the consequences of poor or missing quality control documentation. 1.4 Explain how documentation helps to prove that a product meets a specific standard.
2. Prepare and maintain quality control reports, inspection records, test data, and audit logs.	2.1 Complete a quality control report with all necessary information. 2.2 Record test data in a clear and organized table. 2.3 Fill in an inspection record for a batch of garments. 2.4 Maintain an audit log that is easy to understand and use. 2.5 Show how to update a record with new information.
3. Use digital and manual record-keeping systems to ensure traceability and compliance.	3.1 Explain the difference between a digital and a manual record-keeping system. 3.2 Demonstrate how to enter quality data into a digital system. 3.3 Describe how to use a manual logbook to record inspection results. 3.4 Explain how a good record-keeping system makes it easy to find a specific piece of information.
4. Organize and retrieve QC documents for audits, client verification, and internal reviews.	4.1 Organize a set of QC documents in a logical way for easy access. 4.2 Find and retrieve a specific quality report from a filing system when asked. 4.3 Explain how organized documents make an audit easier.

	4.4 Describe how to present QC documents to a client for verification.
5. Ensure confidentiality, accuracy, and consistency in quality documentation practices.	5.1 Explain the importance of keeping quality documents confidential. 5.2 Describe a method for ensuring that all data entered is accurate. 5.3 Explain how to make sure that everyone on the team fills out reports in the same way. 5.4 Identify what to do if an error is found in a previously recorded document.

QC0049-06- Communication and Team Coordination in QC

This unit focuses on the soft skills essential for effective quality control. It teaches learners how to clearly and concisely communicate technical information and quality findings to different stakeholders, including production teams, management, and clients. The unit emphasizes the importance of collaborative problem-solving and conflict resolution. Learners will develop skills in giving constructive feedback, leading quality meetings, and coordinating with other departments to resolve quality issues efficiently.

Learning Outcome:	Assessment Criteria:
1. Develop effective communication skills for reporting quality issues and sharing feedback.	1.1 Write a clear and simple email to a manager about a quality issue. 1.2 Explain a quality problem to a production worker using simple language. 1.3 Provide constructive feedback on a quality issue without causing conflict. 1.4 Demonstrate how to report a defect to the person responsible for it.
2. Work collaboratively with production, inspection, and management teams to resolve quality concerns.	2.1 Describe the role of each team (production, inspection, management) in solving a quality problem. 2.2 Suggest a way to work together with the production team to find the cause of a defect. 2.3 Explain how sharing information with management helps in making decisions. 2.4 Describe how teamwork can help to solve a quality issue faster.
3. Demonstrate conflict resolution and negotiation skills in a team environment.	3.1 Explain a simple strategy for handling a disagreement about a quality issue. 3.2 Describe how to negotiate a solution that works for both production and quality control. 3.3 Give an example of a good way to handle a tense situation with a coworker. 3.4 Explain the importance of listening to other people's views.
4. Participate in quality meetings and contribute to continuous improvement discussions.	4.1 Explain the purpose of a quality meeting. 4.2 Share a finding from a recent inspection during a meeting. 4.3 Suggest a simple idea for how to improve a process during a discussion. 4.4 Listen and take notes during a quality meeting.

5. **Prepare and deliver clear, concise verbal and written communication in a QC context.**

5.1 Create a brief presentation on a quality issue for a small group.
5.2 Write a summary of a quality problem that is easy to understand.
5.3 Explain a technical term related to quality control in simple words.
5.4 Speak clearly and confidently when explaining a quality issue.

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