UKFT Production Sewing Machinist Programme A training programme designed to support the growing demand for industrial sewing skills

WORKBOOK 5: Quality and Quantity



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Production Sewing Machinist Programme





Lesson 5: Quality & Quantity

Welcome to Course 5 of the UKFT Production Sewing Machinist Programme, all about quality standards and quantity requirements when working as a production sewing machinist. The lessons cover how these requirements are communicated,

checked, and controlled, how to identify, avoid and deal with manufacturing faults and your own responsibilities in relation to quality and output rates.

The Quality and Quantity Course consists of four lessons

- 5.1 Quality standards
- 5.2 Quantity requirements
- 5.3 Manufacturing faults & tolerances
- 5.4 Work records and documentation

The table below details the overall learning aim, what you should know and what you should be able to do once you have completed the course.

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Learning Outcomes The learner will	Assessment Criteria The learner can
1. Understand quality standards and acceptance levels, know how quality requirements are communicated, implemented, and controlled and realise own responsibilities in relation to quality	 1.1 Understand the origins of quality standards 1.2 Know how quality standards and acceptance levels are derived 1.3 Identify how quality requirements are communicated 1.4 Know how quality standards are implemented and controlled 1.5 Identify own responsibilities in relation to quality 1.6 Understand the consequences of not meeting quality standards 1.7 Know how to work to acceptable quality levels
2. Understand quantity and performance requirements, know how performance is measured and how performance relates to cost	2.1 Understand quantity requirements and efficiently levels2.2 Understand performance ratings and characteristics of different performance level

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Learning Outcomes The learner will	Assessment Criteria The learner can
	2.3 Know how performance relates to costs and pay
	2.4 understand production costs and targets
	2.5 Know the consequences of not meeting targets and deadlines
3. Identify and deal with faults, and know acceptable tolerances	3.1 Understand manufacturing faults and tolerances
	3.2 Know the procedure and own limits of responsibility dealing with manufacturing faults
	3.3 Identify common manufacturing faults
	3.4 Know the consequences of manufacturing faults
4. Understand work documentation systems and the importance of recording work	4.1 Understand how work date is collected and used
	4.2 Know about different work recording systems

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Learning Outcomes	Assessment Criteria
The learner will	The learner can
	4.3 Understand the importance of completing accurate work documentation

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ESTIMATED LEARNING TIME 42 HOURS



About your online workbook

To make the most of this online learning experience it is important that you fully understand the structure and format of your course and online workbook.

The course is split into thirteen lessons and your workbook is made up of five key elements that include technical information and activities as detailed below:

1. Course Introduction: A brief introduction that explains the subject covered and how it relates to your job. (In text and video format). The introduction includes the overall aims of the course and will tell you what you will know and be able to do when finished.

2.Key words: A set of key words and their meanings is provided at the beginning of the unit. These words are essential to your understanding of the subject area.



3.Subject: The bulk of the workbook is made up of technical information. The information is broken down into sections, each section contains, text, images and in some cases, videos.

4.Knowledge and Skills Challenges: These are self- assessments designed to help you with your learning. They are scattered across the lessons to encourage bite size learning. These challenges need to be completed correctly to be awarded your UKFT digital badge and can be repeated as required.

5.Groundwork: These are recommended optional activities. Completing them will help you to better understand your role, your company, and internal processes and procedures. We recommend you create a folder to record and keep your groundwork activities in, this will provide you with a reference tool that will help inform your learning and job role responsibilities. Also, for those undertaking an apprenticeship these activities will help you gather information relevant to the End Point Assessment. Alternative groundwork activities suitable for independent learners, are also included.

Online learning is a very flexible way to study, it is important however to structure your learning, so you get the most out of it. Think about the following:

Plan: Set aside the time to study and try and get into a regular routine. But don't overdo it, keep your sessions short and sharp (max 30 minutes)

Set targets: Set yourself realistic targets and stick to them **Where:** You need to be able to concentrate, find some where quiet where you won't be distracted

Prepare: Organise your work area, have a pad and pen to hand for notes and keep a file for print outs

Be active: Learning using this workbook does not simply mean reading content. You must be active in your study, watch the videos a few times, make notes, enjoy the activities, and apply your learning in the workplace



Keep going: Don't be disheartened if you get the knowledge challenges incorrect, keep trying and remember the answers are in the content.

Here are some words, and their meanings that you will across within this unit. They are specific to the subject area, and you may not have heard them before.

Word	Meaning
Quantity	The number of items/operation you make/do in a working hour/day/week
Acceptable Quality Level	The acceptable level of quality you must achieve when making a product
Quality Standards	A set of good management practices, methods, systems, requirements, and/or specifications established by industry
Standard Performance Rate (SPR)	The rate of outputs that a qualified and motivated worker can across the normal working day. 100% performance means the required number of outputs has been achieved without over exertion.
Price point	The selling price for a product defined by a manufacturer to remain competitive in the market while generating a profit.
Standard Operating Procedure (SOP)	Step-by-step instructions compiled by an organisation to guide and help workers carry out routine operations.
Target market	A group of people that have been identified as the most likely potential customers for a product because of their shared characteristics such as age, income, and lifestyle.



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Word	Meaning
Brand	A name, term, design, symbol, or any other feature that gives a product an identity that distinguishes it from those of other sellers
End user	The ultimate consumer of a finished product
Revenue	The money generated from normal business operations
Communication protocol	A set of formal rules describing how to transmit or exchange information
Tolerance	The amount of acceptable variation from a specified measurement. Tolerance is measured in + or - mm.
Sub-standard product	A product that does not meet the required quality standard
Flat rate	A set wage, regardless of the number of outputs achieved
Piece rate	Payment for each item produced. Piece-rate pay can also be referred to as a "payment by results system"
Incentive payment	A motivational payment awarded when specific results are achieved.
Critical defect	Product faults that could result in unsafe or hazardous conditions for the end user
Components	Parts required to make a product such as cut parts to be assembled, thread, fastening, labels or trimmings



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Word	Meaning
GSD (General or Garment Sewing Data).	A technique, using soft wear to analyse method, set timings and provide relevant production data
Specifications	Technical information relating to a product, these may include construction details, fabric sample, a technical diagram, measurements, tolerances, stitch class and seam type and quality standards
Overheads	The operating expenses /cost of running a business e.g. rent, insurance, and utilities.





Quality versus Quantity

Quality versus quantity is an ageold discussion across the fashion and textile industry.

Your company may prefer top quality workmanship at a slower pace rather than fast production or they may just uphold basic standards but expect work at a faster rate.

Either way all companies adhere to at least a base level of acceptable quality levels. These usually depend on the market they are making for and the cost point of the products. So, the higher end the product the more demanding the quality standard.

The majority of manufacturers aim to strike a balance between quality and quantity. Most companies will not completely forsake quality for the sake of quantity. But at the same time, it makes sense to lower quality standards so that a larger volume of products can be manufactured. Sustainability also has an impact on quality and quantity, as this influences the way products are made, where they are made and what they are made from. Sustainable production means that items are produced in a way that affects the environment as little as possible, for example using organic and natural materials, ensuring work practices produce minimal waste and pollution emission are as low as possible.

The video below is designed to support the lessons in this course. The video provides an introduction to the course and content linked to Lesson 5.1. It can be watched in entirety and then referred to as you work though the course. Reference points that link the lessons to the video timings are provided.





Module 5.1 Quality Standards

https://vimeo.com/585799104/a5eaf5902e

It is now time to get started, work through your online workbook and complete the challenges, enjoy your learning!