

Injection Moulding Module 1



For bookings contact:
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Overview... Injection Moulding Module 1

Introduction

This is an intense 4-day programme which covers in detail all aspects of injection moulding - both theory and practice. Training takes place at our well-equipped training facility in Athlone. No prior experience is required, but all trainees will be expected to complete our free e-learning module in advance of attending training.

On successful completion of the course, trainees will be awarded a QQI Level 5 Component Certificate in Injection Moulding (5N3035)

Learning Outcomes

At the end of the course trainees should be able to:

- Name and understand the function of all parts of an injection moulding machine, and fully understand the injection moulding process
- Install and remove an injection mould into/out of a moulding machine
- From a blank programme, set up mould opening & closing speeds, pressures and distances, as well as injection, holding, plasticising and decompression. Set up the mould cooling/heating system correctly
- Start up an injection moulding machine and adjust the shot size/holding pressure to produce cosmetically and dimensionally acceptable parts
- Re-start a machine after a cycle interruption
- Purge and shut down a machine safely
- Analyse general moulding faults and implement appropriate corrective actions to produce acceptable quality parts
- Follow appropriate safety procedures at all times

Who should attend

The course is suitable for moulding operators, team-leaders, tool setters and technicians - who have not completed formal injection moulding training, and also for engineers who are new to injection moulding, or for anyone who wants to gain a comprehensive understanding of the injection moulding process.

(Note: If required, we can deliver a tailored programme to meet your companies' specific needs)

Course Content

- Detailed understanding of how an injection moulding machine works
- Machine safety features, process hazards, lifting equipment safety and general safe operating procedures
- Analysis of the moulding cycle – detailed explanation of the various parameters using everyday analogies
- Mould installation and removal
Avoidance of damage to moulds
- Machine set-up from a blank programme – clamp unit and injection unit
- Process optimisation. Working systematically and making machine data based decisions
- Analysis of common moulded part defects and how to implement appropriate corrective action

The course is generally about 60% practical and 40% theory, so significant time is spent on practical mould changing, process set-up and troubleshooting activities.

