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

1. Describe the safety hazards in the moulding production environment
2. List the steps in a moulding cycle in the correct order
3. Describe the function of each stage in the moulding cycle
4. Explain mould terms such as draft angle, parting lines, the sprue, runner, gate, mould vents.
5. Install an injection mould into a moulding machine
6. Remove an injection mould from a moulding machine
7. Demonstrate how to set up mould cooling pipes to ensure even flow of cooling water around a mould.
8. Select appropriate injection unit nozzle diameter/ radius to match a new mould’s sure bush diameter and radius
9. Set up mould opening and closing/ clamping speeds, pressures and distances from a blank programme
10. Set up ejection forward and reverse speed, pressure and distances from a blank programme
11. Set up the injection, holding, plasticising and decompression settings from a blank programme.
12. Start up a moulding machine and adjust the shot size/ holding pressure to produce cosmetically acceptable parts
13. Purge out the screw and barrel and shut down a moulding machine
14. Re-start a moulding machine after an interruption such as an emergency stop being pressed or guard door being opened
15. Describe the root cause of basic troubleshooting defects – Flash, Burn Marks, Short Shots, Sink Marks, Weld Lines.