



**merSETA**  
MANUFACTURING, ENGINEERING  
AND RELATED SERVICES SETA

# TRAINING SCHEDULE FOR TIMEBASED APPRENTICES

## TOOL, JIG AND DIE MAKER

|  |   |     |
|--|---|-----|
| Introduction to the Industry:              | Responsibilities, appearance and attitude in work situation.  | 28  |
| Safety:                                    | Basic safety precautions applicable in the trade to be practised throughout apprenticeship, with special reference to safe handling and care of hand tools, noxious and flammable gases, liquids and gases under pressure, electrical installations, machine protection, machine and pneumatic tools, grinding wheels, moving and overhead machinery and use of portable fire extinguishers. Theory and practice of first aid.  | 50  |
| Knowledge of:<br>Hand and workshop tools:: | Care and use of tools. Making of work pieces and/or parts using the techniques of chipping, drilling, filing, reaming, sawing, scraping, screwing and tapping. Sharpening of cutting tools. Use of pullers and presses. Dressing, trueing, checking and mounting of wheels on grinding machine. Use of securing, locking and sealing devices.   | 280 |
| Brazing, soldering and welding:            | Knowledge and use of gas and electric welding, lead and silver soldering processes. Knowledge of physical properties of various materials used in the motor industry.   | 120 |
| Drawings:                                  | Reading and interpretation of drawings.   | 350 |
| Measuring:                                 | Advanced knowledge of care and use of measuring instruments commonly used in the motor industry.  | 220 |
| Basic work:                                | Knowledge of simple centre lathe work. The correct use of feeds and speeds for different materials and operations. Operating shaping and drilling machines. Preparation of dies and machine drawings, including instruction in types of presses and ancillary equipment which influence die design. Operating tool grinding machines, lathes, milling and manual or automatic copying the milling machines (including use of dividing head). Knowledge of heat treatment and the cleaning and/or polishing of dies. | 900 |

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| Document Title                     | Time Based Training Schedule-Tool, Jig and Die Maker |                     |                |
| Document Number                    | LPM-TS-008   | Date Compiled       | 01 August 2009 |
| Page Number                        | Page 1 of 2  | *Last Revision Date |                |
| Revision Number                    | Rev 00   | Access              | Controlled     |
| Review: Learning Programme Manager |  | Approved: CEO       |                |

