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| Title | **Perform shaper machine operations** | | |
| Level | **2** | **Credits** | **9** |

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| Purpose | This competency standard identifies the competencies you need to perform shaping operations on shapermachine in accordance with approved procedures. You will be expected to perform Facing, Step cutting, Squaring, slotting, V shape cutting with point cutting tool.You will be required to operate the shaper machine safely by complying the organizational safety policy and approved procedures.  Your underpinning knowledge regarding shaper machine operations will be sufficient to provide you with the basis for your work. |

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| Classification ISCED | 0715 Mechanics and metal trades |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Unit of Competency** | **Performance Criteria** | **Knowledge and Understanding** | **Tools & Equipment** |
| **I1. Produce a squared shape work piece** | *You must be able to:*  **P1**. Identify safety hazards related with shaping operations and take appropriate steps to avoid any injury or accident.  **P2**. Dial the machine vice according to job requirement.  **P3**. Select point cutting tool and set machine as per requirements.  **P4**. Mount cutting tool and work piece in the machine.  **P5**. Check quality of the component at suitable intervals.  **P6**. Shut down the machine at safe position after finishing the work. | ***You must know and understand:***  **K14.** List safety hazards related with the shaper machine operations.  **K15.** Use of Dial indicator  **K16.** Method of mounting of cutting tool  **K17.** Checking of right angle with the tri square.  **K18.** Explain square facing procedure.  **K19.** Safety guidelines and procedures.  **K20.** Safety checks for operating shaper machine.  **K21.** Interpreting information given in the engineering drawings and job specifications. | **T1**. Shaper machine **T2**. Machine Vice **T3**. Tri square  **T4**. Vernier Caliper  **T5**. Dial indicator with magnet stand  **T6**. Point cutting tools  **T7**. Personal Protective Equipment |

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| **Unit of Competency** | **Performance Criteria** | **Knowledge and Understanding** | **Tools & Equipment** |
| **I2. Produce V shaped work piece** | ***You must be able to:***  **P1**. Identify safety hazards related with shaping operations and take appropriate steps to avoid any injury or accident.  **P2**. Dial the machine vice according to job requirement.  **P3**. Select point cutting tool and set machine according to job requirements.  **P4**. Mount cutting tool and work piece in the machine.  **P5**. Check quality of the component at suitable intervals.  **P6**. Shut down the machine in safe position after finishing the work. | ***You must know and understand:***  **K1**. List safety hazards related with the shaper machine operations.  **K2**. Use of Dial indicator  **K3**. Method of mounting of cutting tool  **K4**. Checking of angle with the bevel protector.  **K5**. V-Shape cutting procedure.  **K6**. Safety guidelines and procedures.  **K7**. Safety checks for operating shaper machine.  **K8**. Interpreting information given in the engineering drawings and job specifications. | **T1**. Shaper machine  **T2**. Machine Vice  **T3**. Tri square/bevel protector  **T4**. Vernier Caliper  **T5**. Dial indicator with magnet stand  **T6**. Point cutting tools  **T7**. Personal Protective Equipment |