# Technical Evaluation Record V3 Sept25

NPTC by City & Guilds

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|---|---|---|---|
| **QUALIFICATION:** | Safe Use of Abrasive Wheels | **Qualification/Units:** | 0125-01 – Units 201 & 202 |
| | | **Endorsements: (Please Tick)** | Bench Mounted (Electric) ☐<br>Portable Handheld (Electric) ☐<br>Portable Handheld (Compressed Air) ☐<br>Portable Handheld (Engine Driven) ☐ |
| **Assessor Name:** | | **Technical Verifier Name:** | |
| **Assessor BP No:** **NEW? DOB:** | | **Technical Verifier BP No:** | |
| **Assessor Email:** | | **Start Time:** | |
| **Invoice To:** (Include Centre name if applicable) | | **End Time:** | |

| **CRITERIA: (To be used in conjunction with current Qualification Guidance)** | **PERFORMANCE EVALUATION (Circle):** | | | | | **JUSTIFICATION:** |
|---|---|---|---|---|---|---|
| 1. Knowledge of H&S regulations and industry best practice. Carry out SSRA. | 1 | 2 | 3 | 4 | 5 | |
| 2. Knowledge of operator protection and PPE standards | 1 | 2 | 3 | 4 | 5 | |
| 3. Knowledge of power supply issues (electricity & petrol engines) | 1 | 2 | 3 | 4 | 5 | |
| 4. Knowledge of potential hazards of abrasive wheels (all types) | 1 | 2 | 3 | 4 | 5 | |
| 5. Knowledge of disc/wheel selection & inspection criteria | 1 | 2 | 3 | 4 | 5 | |
| 6. Knowledge of mounting system criteria (all types) | 1 | 2 | 3 | 4 | 5 | |
| 7. Remove and refit appropriate disc/wheel fitting (all types) | 1 | 2 | 3 | 4 | 5 | |
| 8. Identify all controls, adjustments and decals on each machine to be operated | 1 | 2 | 3 | 4 | 5 | |
| 9. Carry out pre-start checks & test starts (all types) | 1 | 2 | 3 | 4 | 5 | |
| 10. Carry out specified tasks | 1 | 2 | 3 | 4 | 5 | |
| 11. Assessment Techniques (new assessors only) | 1 | 2 | 3 | 4 | 5 | |
| **PERFORMANCE EVALUATION COLUMN TOTALS:** | | | | | | **= TOTAL SCORE:** |

| **Result of Technical Evaluation (tick):** | **MET** / **NOT MET** | **TOTAL SCORE REQUIRED TO ACHIEVE ASSESSOR STATUS: (NB. ACHIEVED IN PERFORMANCE EVALUATION COLUMNS 4 & 5 ONLY)** *If an existing Assessor then please adjust total score required to 40* | **44** |
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**ACTION PLAN FOR ASSESSOR:**

***Please continue on reverse if necessary***

**ASSESSOR COMMENTS:**

***Please continue on reverse if necessary***

| | | | |
|---|---|---|---|
| **TECHNICAL VERIFIER SIGNATURE:** | | **COST:** **£200 Half Day** **£300 Full Day** | **DATE:** |
| **ASSESSOR SIGNATURE:** | | | |

# TECHNICAL EVALUATION RECORD

**AABW02** Level 2 Certificate of Competence in the Safe Use of Abrasive Wheeled Machines
**Unit 1** Select, Inspect and Fit Abrasive Wheels
**Unit 2** Operate Abrasive Wheeled Machines

**1. Knowledge of H&S regulations and industry best practice**

Key principles and practical relevance:

- ☐ Health and Safety at Work etc. Act 1974 (HASAWA)
- ☐ Management of Health and Safety at Work Regulations 1999 (MHSWR)
- ☐ Provision and Use of Work Equipment Regulations 1998 (PUWER)
- ☐ Personal Protective Equipment at Work Regulations 1992 (PPE regs)
- ☐ Control of Substances Hazardous to Health Regulations (COSHH)
- ☐ The Health and Safety (First Aid) Regulations 1992
- ☐ Reporting of Injuries Diseases Dangerous Occurrence Regulations (RIDDOR)
- ☐ Manual Handling Operations Regulations 1992

**Carry out SSRA**

- ☐ Assessor to complete a Site-Specific Risk Assessment, using provided template.
- ☐ Hazards, risks and controls identified relative to site, task and equipment.

**Operator legal and safety requirements when using Abrasive Wheeled Machines**

- ☐ Be trained and competent
- ☐ Check all controls and stop switches are correctly marked and functioning
- ☐ Not to put themselves or others in danger
- ☐ Wear appropriate PPE (high speed impact eye protection is mandatory)

**2. Explain the standard of Personal Protective Equipment Required when using Abrasive Wheeled Machines**

- ☐ Safety Boots
- ☐ Eye Protection
- ☐ Face Protection
- ☐ Hearing protection
- ☐ Dust mask
- ☐ Gloves
- ☐ Overalls

**3. Explain the safety requirements when using the following power sources**

- ☐ Electric
  - PAT testing requirements
  - Use of 110-volt power supply
  - The need for circuit breakers
  - Use of battery powered machines
  - Visual inspection of machine and supply
  - Safety decals in place
  - Positive On/Off switch
  - Guards fitted and adjustable
- ☐ Compressed Air
  - Safety checks to electrical supply to the compressor
  - Check flexible hoses and connections for damage and wear
  - Adjustment of air pressure and flow are suitable for the machine
  - Safety decals in place
  - Lubrication system for the air motor is operational and adjusted as required
  - Guards fitted and adjustable
- ☐ Engine driven
  - Complete engine pre-start checks
  - Fuel area away from ignition sources
  - All controls are marked
  - All safety decals are in place
  - Engine runs smoothly
  - Max engine speed checked against disc requirements
  - Guards fitted and adjustable

**4. State the potential hazards of abrasive wheels**

- ☐ Wheel disc contact
- ☐ Wheel burst/disintegration
- ☐ Fire
- ☐ Dust
- ☐ Noise
- ☐ Vibration
- ☐ Flying particles
- ☐ Electrocution
- ☐ Burns

**5. Select and check abrasive wheels for the following processes**

- ☐ Metal cutting
- ☐ Metal grinding
- ☐ Stone cutting

**Each wheel must be checked against abrasive wheel label or manufacturer information sheets (Technical verifier to supply wheels)**

- ☐ Out of date wheels
- ☐ Wheels with approved speeds less than the machine they are to be mounted on

**Identify wheels that are damaged/have faults (to be supplied by the Technical Verifier**

- ☐ Frayed edges
- ☐ Splits
- ☐ "Ring test" vitrified discs (bench grinders)
- ☐ Correct action to be taken regarding damaged wheels

**6. Inspect the wheel mounting system on the abrasive wheel machine**

- ☐ Spindles
- ☐ Flanges
- ☐ Bearings
- ☐ Threads
- ☐ Other components specific to the machine

**State common faults on the on different types of abrasive wheel machines**

- ☐ Damaged guards
- ☐ Loose wires
- ☐ Worn anti-vibration mountings
- ☐ Poorly secured to the bench
- ☐ Missing decals
- ☐ Controls not clearly marked

**Actions to rectify**

- ☐ Repair
- ☐ Replace
- ☐ Report to supervisor
- ☐ Clean out the wheel guard

**7. Remove and refit wheels to all types of machines**

- ☐ Wheels correctly fitted using the correct procedures
- ☐ Guards fitted and adjusted
- ☐ Check true rotation of the wheel
- ☐ Adjust work rest (bench grinders)
- ☐ Test run machine
- ☐ Adjust as required

**Explain how to true a bench grinder wheel and why this is necessary**

- ☐ Removal of flat or high spots on the wheel circumference to prevent vibration (using a hardened tool)

**Explain how to dress a bench grinder wheel and why this is necessary**

- ☐ Re-roughen the grinding surface of the wheel following glazing or excessive wear. The abrasive surface is conditioned using a suitable wheel dressing tool

**8. Identify all controls, adjustments and decals on each machine to be operated**

- ☐ Function of the controls
- ☐ Adjustments on the machine and why they would be used
- ☐ Explain all safety decals
    - Mandatory
    - Prohibitive
    - Informative
- ☐ Discuss any other information given in the instruction book

**9. Carry out appropriate pre-start checks to each machine before use**

- ☐ Checks to power supply
- ☐ Correct wheel fitted
- ☐ Wheel correctly attached
- ☐ Check Operator Presence Control

**10. Use the abrasive wheeled machine(s) to carry out specified tasks**

- ☐ Metal cutting
- ☐ Metal grinding
- ☐ Stone cutting
- ☐ Security of work
- ☐ Correct PPE is used
- ☐ Checking quality of work against specification
- ☐ Clean machine and prepare for storage
- ☐ Inspect machine prior to storage

**11. Assessment techniques**

- ☐ Clear and concise questions/instructions
- ☐ Question/instruction relative to unit.
  *(Please note: this section only needs to be completed by new assessors).*