

Technical Evaluation Record v2 Apr20



QUALIFICATION:	Safe Use of Abrasive Wheels	Qualification/Units:	AABW02 – Units 1 & 2					
		Endorsements: (Please Tick)	Bench Mounted (Electric)	<input type="checkbox"/>	Portable Handheld (Electric)	<input type="checkbox"/>	Portable Handheld (Compressed Air)	<input type="checkbox"/>
Assessor Name:		Technical Verifier Name:						
Assessor No: NEW? DOB:		Technical Verifier No:						
Assessor Email:		Start Time:						
Invoice To: <small>(Include Centre name if applicable)</small>		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	TOTAL SCORE REQUIRED TO ACHIEVE ASSESSOR STATUS:					44	
	NOT MET	(NB. ACHIEVED IN PERFORMANCE EVALUATION COLUMNS 4 & 5 ONLY) <i>If an existing Assessor then please adjust total score required to 40</i>						
ACTION PLAN FOR ASSESSOR:								
<i>Please continue on reverse if necessary</i>								
ASSESSOR COMMENTS:								
<i>Please continue on reverse if necessary</i>								
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
- Electrocutation
- 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).