

Smart Awards Level 2 in SA004 Abrasive Wheels Specification

SMART AWARDS
Awarding Platform for Smart Qualifications

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Unit F8A | Holly Farm Business Park | Honiley Road | Kenilworth | CV8 1NP
T: 02476 421125
E: info@smartawards.co.uk
W: www.smartawards.co.uk

Company Number 9079735 | VAT Number 216 7632 08

Introduction

This qualification covers 1 module:

- Correct selection and mounting of Abrasive Wheels

The Abrasive Wheels qualification covers the general characteristics and safe use of abrasive wheels, including relevant health and safety legislation, correct selection and mounting, inspection, handling, transport and storage within the workplace.

Learners will develop the knowledge and understanding required to recognise the hazards and risks associated with abrasive wheels and understand how to select, inspect and use them safely, as well as gaining knowledge of relevant health and safety legislation. It tests learners' knowledge and understanding of the safety precautions and control measures required when working with abrasive wheels.
The qualification ensures that individuals working with or around abrasive wheels are suitably trained to work safely. It has been developed with reference to relevant National Occupational Standards and current industry guidance for the safe selection, mounting and use of abrasive wheels, including HSE HSG17 Safety in the use of abrasive wheels.
This qualification does not cover specific training in the operation of cut-off saws, grinders or other devices that use abrasive wheels.
For Specific cut-off saw abrasive wheel qualifications, please refer to the Smart Awards qualification catalogue.

Key Information	
Name	Smart Awards Level 2 SA004 Abrasive Wheels
Accreditation	This qualification is approved by: • Smart Awards
Level	2
Duration	5 Hours
Age	This qualification is available to anyone aged 16 or over who can reach the required standard.
Qualification type	Vocationally Related Qualification
Smart Awards product area	Safety Qualifications
Sector subject area	5.2 – Building and Construction
Certification	This qualification is valid for a period of three years from the date of certificate issue. To remain compliant and demonstrate ongoing competence, learners are required to requalify before the expiry date by completing the full qualification again.
Network Operative Passport Scheme (NOPS)	This qualification is fully aligned with the requirements of the Network Operative Passport Scheme (NOPS). Successful completion of this qualification is recorded within the NOPS system, ensuring operatives are visible and verifiable to employers and site access systems across the industry.
Prerequisites and entry requirements	There are no formal entry requirements and Smart Awards will not restrict access on the grounds of prior academic attainment, employment, geographic location, or any other grounds. There are no barriers that restrict access or progression, thereby promoting equality.

	Learners must have a basic understanding of the English language for regulated qualifications that are approved by Ofqual or Qualifications Scotland Accreditation. Please note: The New Roads and Street Works Act 1991 (NRSWA) requires at least one person on site to hold a Street Works card to work on the highway. This Smart Awards accreditation is based on a prerequisite that any work on the highway requires appropriate Street Works accreditation to be held by an individual working on site, and that this individual is qualified to check that the planned provision of footways, traffic lanes and safety zones determined by the site survey meets with the requirements of the site location and approved procedures and practices required by the NRSWA 1991. Some companies' policies may vary where more than one person on site is required to hold a valid Street Works card.
Mandatory units and optional routes to completion	Learners must complete the Abrasive Wheels unit in full to achieve this qualification. No optional units or routes are available.
Additional requirements to achieve this qualification	None.
Methods of assessment	This qualification will be assessed through both a practical assessment and a theory test. The aim of the assessment is to ensure successful learners have adequate knowledge and understanding of the selection and fitting abrasive wheels in a utility construction environment. Assessment guidance, assessor requirements and additional qualification documentation are supplied to approved Smart Awards centres via Quartz.
Theory test	Learners are required to pass a 20-question multiple-choice test, with questions randomly selected from a secure question bank to ensure comprehensive coverage of all assessment criteria. The test is timed, and learners will have 30 minutes to complete it. All multiple-choice tests are conducted online via the Smart Awards online assessment platform.
Practical assessment	During the practical assessment, the learner will demonstrate competency when performing pre-use inspection, as well as correctly and safely fitting an abrasive wheel. The learner will have 30 minutes to complete the practical assessment.
Grading	Learners will be graded on an achievement or non-achievement basis. The final grade will be determined by collective performance in the two assessment tools (theory test and practical assessment). Learners are required to achieve both the theory test and practical assessments to achieve the qualification. Theory: • The learner will have 30 minutes to answer 20 questions • To achieve a pass, 80% or more is required Practical: • If one major fault is given the learner will automatically fail • If six or more minor faults are given the learner fails. • The learner needs to achieve less than six minor faults to pass

	If there are major health and safety failures due to learners' actions or understanding, the assessment **must** be stopped. The learner should be taken to a suitable area to be explained the reason for stopping the assessment and that their assessment is deemed as failed. Guidance on the major failures that should result in stopping the assessment is provided in the practical assessment documentation.
Reasonable adjustments and special considerations	Smart Awards approved centres that have learners with specific requirements should refer to the Smart Awards Reasonable Adjustments and Special Considerations Policy and Procedure. This document outlines the support available to ensure fair access to assessments. It can be found on the Smart Awards website at www.smartawards.co.uk.
Recognition of Prior Learning	Smart Awards is committed to supporting Recognition of Prior Learning (RPL) and has established a dedicated policy and set of procedures to guide and assist approved centres in its implementation. The full policy is available on the Smart Awards website at www.smartawards.co.uk.
Required resources and site requirements for delivering this qualification	To ensure a safe and effective learning and assessment environment, the following site requirements must be met for the delivery of the SA004 Abrasive Wheels qualification: • A safe work area for the demonstration and learner's practical assessment of mounting and testing abrasive wheels • Manufacturer's instruction for using and assembling the equipment • A safe guarded and ventilated area for the assessor demonstration and learner's practical assessment of fitting, starting and stopping of abrasive wheels • The site must comply with current health and safety regulations, including safe access/egress, signage, and emergency procedures • Adequate first aid provision must be available on-site throughout the training and assessment period • The site must provide access to classroom or indoor facilities for the delivery of theoretical content and the completion of the online multiple-choice test

Qualification Structure

The level 2 Abrasive Wheels qualification consists of one mandatory unit, which learners must complete to achieve the qualification. Attainment at level 2 demonstrates the learner's ability to apply relevant knowledge, skills, and procedures to carry out clearly defined tasks and resolve straightforward problems with appropriate direction or supervision.

Smart Awards Level 2 In SA004 Abrasive Wheels								
Minimum TQT for this pathway = 5 Minimum number of credits = 0 Minimum number of units = 1			Minimum number of GLH = 4 Minimum assessment time = 1 Other learning time = 0					
Unit Number	Unit title	Level	M/O	GLH	ASS	OTHER LEARNING	TQT	CREDITS
	Abrasive Wheels	2	M	4	1	0	5	0

Learner Support and Assessment Conditions

Learners will have access to support throughout the training period via their trainer. Trainers are

responsible for ensuring that each learner is adequately prepared and competent before presenting them for assessment.
No support or assistance may be given to the learner during either the theory or practical assessments, to maintain the integrity and validity of the qualification.

The theory test is a multiple-choice online test. An invigilator must be used for the theory part of the assessment (An assessor can act as the invigilator). The invigilator is responsible for ensuring that the examination room meets the following:

- You must pay attention to the level of outside noise
- Desks/tables must be provided that have sufficient room for learners to work comfortably
- Learners must be seated sufficiently far apart to ensure they cannot see each other's work
- Display material must not be visible in the examination room
- A reliable clock must be visible to each learner in the examination room
- You must create a seating plan that is in keeping with an examination room
- Please refer to Smart Awards invigilation guide

The practical assessment must be conducted in a controlled environment that simulates real-world working conditions. It must not be undertaken in a 'live' situation without prior approval from Smart Awards. All relevant assessment records must be stored by the centre and available for Smart Awards to audit. The theory test can be undertaken before or after the practical assessment.
There is only the provision for the assessments to be undertaken in English.

Qualification Objectives and Requirements

This qualification confirms that the learner has demonstrated the required competence to work safely with Abrasive Wheels in the telecommunications network, or within a similar utility environment, including suppliers and contractors. To successfully obtain this qualification, the learners will need to demonstrate the knowledge and ability requirements set out in the learning outcomes and assessment criteria.

Unit Title:	Smart Awards Level 2 in SA004 Abrasive Wheels
Unit Level:	2
Unit Credit Value:	0
Unit Reference Number:	SA004
NOS	This qualification has been developed with reference to relevant National Occupational Standards and current industry guidance for the safe selection, mounting and use of abrasive wheels, including HSE HSG17 Safety in the use of abrasive wheels.

Learning outcomes	Assessment criteria
The learner will:	The learner can:
1. Be able to work safely	1.1. Work safely at all times, complying with health and safety and other relevant regulations and guidelines. 1.2. Carry out pre-use inspections to ensure the machine, abrasive wheel, guards and other safety devices are correctly fitted, serviceable and appropriately set for the required operations.

2. Be able to select, mount and remove an abrasive wheel safely	2.1. Correctly select and securely fit a compatible cutting/grinding wheel for the prescribed application. 2.2. Start and stop the machine in normal and emergency situations. 2.3. Confirm that the cutting/grinding wheel is correctly fitted, secure and balanced 2.4. Remove the cutting/grinding wheel from the machine and store correctly.
3. Know how to recognize hazards	3.1. Outline the hazards associated with cutting and grinding machines (such as moving parts of machinery, handling the saw/grinder, lifting and moving workpieces, wheel breakage, insecure components, airborne particles, sparks and fire hazards), and how to minimise them and reduce risks. 3.2. Describe how to check that the cutting/grinding wheels are in a safe and serviceable condition (such as free from damage, cracks, correctly balanced)
4. Know relevant health and safety legislation and industry good practice	4.1. Outline the importance of wearing the appropriate protective clothing and equipment, and of keeping the work area clean and tidy. 4.2. Outline the types of PPE to be selected and used when using abrasive wheels. 4.3. Outline the relevant health and safety legislation and industry guidance applicable to the safe mounting, dressing and balancing of grinding wheels and how this applies to you. 4.4. Describe the specific safety precautions to be taken when setting up work holding devices, tools and cutters on a tool and cutter grinding machine. 4.5. Outline the importance of ensuring that the machine is isolated from the power supply before mounting cutting/grinding wheels, workpieces and work holding devices. 4.6. Outline safety control measures to be implemented before, during and post abrasive wheel tool use.

5. Know how to use an abrasive wheel	5.1. Outline the basic principles of operation of the cutter/grinding machine and typical operations that they can perform. 5.2. Describe the problems that can occur with setting up the cutter/grinder machine, work rest, holding devices and machine operating parameters, your responsibility and whom to report to if problems occur. 5.3. Outline methods of mounting an abrasive wheel to a cutter/grinder machine 5.4. State the different types of abrasive wheels and their purpose. 5.5. Describe how to use an abrasive wheel and their limitations. 5.6. Interpret the abrasive wheel marking system to determine wheel type, dimensions, intended application and maximum permissible operating speed. 5.7. Outline the requirements for safe storage, handling and transport of abrasive wheels, including relevant environmental considerations. 5.8. Explain the types of wheels that require to be dressed and the reasons.