Unit Update • Use from January 2012

This version of this unit replaces all previously published versions with effect from January 2012. This unit should be used by all learners registering for qualifications that include it in their structure from this date.

Unit title:	**Manufacturing bespoke wheelwrighting products in the workplace**
Unit reference number:	D/503/2442
QCF level:	3
Credit value:	29
Guided learning hours:	97
Start date:	January 2012

Unit summary

The aim of this unit is to develop the skills, knowledge and understanding required to confirm competence in manufacturing bespoke wheelwrighting products in the workplace, within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

– -The Additional Requirements for Qualifications using the title NVQ in QCF

– -The ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Assessment recording

This unit is assessed in the workplace. The table on the following pages shows the learning outcomes and the assessment criteria for this unit. The table includes space for learners to enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centres can use their own documentation.

Learning outcomes and assessment criteria

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when manufacturing bespoke wheelwrighting products.	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, cutting lists and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, method statements, risk assessments, cutting lists, manufacturers' information, component standards and regulations governing buildings.			
2	Know how to comply with relevant legislation and official guidance when manufacturing bespoke wheelwrighting products.	2.1	Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports.			
		2.4	State the types of fire extinguishers available when manufacturing bespoke wheelwrighting products and describe how and when they are used.			
3	Maintain safe working practices when manufacturing bespoke wheelwrighting products.	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when manufacturing bespoke wheelwrighting products.			
		3.2	Explain why and when health and safety control equipment should be used, relating to manufacturing bespoke wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: – collective protective measures – personal protective equipment (PPE) – respiratory protective equipment (RPE) – local exhaust ventilation (LEV).			
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.			
		3.4	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to manufacture bespoke wheelwrighting products.	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment.			
		4.2	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: – timber, manufactured sheet material, pre-machined components, setting out rods, non-ferrous metals, glass, plastics, fabrics, ironmongery, metal and rubber wheel rims, adhesives, sealants, fixings and associated ancillary items – hand and/or powered tools and equipment.			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported.			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
		4.5	Describe any potential hazards associated with the resources and method of work.			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to manufacture bespoke wheelwrighting products.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when manufacturing bespoke wheelwrighting products.	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
		5.2	Minimise damage and maintain a clean work space.			
		5.3	Dispose of waste in accordance with legislation.			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			
6	Complete the work within the allocated time when manufacturing bespoke wheelwrighting products.	6.1	Demonstrate completion of the work within the allocated time.			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to manufacture bespoke wheelwrighting products to the required specification.	7.1	Demonstrate the following work skills when manufacturing bespoke wheelwrighting products: measuring, marking out, fitting, finishing, positioning and securing.			
		7.2	Fit and assemble wheels to given working instructions.			
		7.3	Fit and assemble to form bespoke wheelwrighting products (carriage construction) to given working instructions for two of the following: – doors – frames – wooden framed vehicles – shafts – butt welding rims – metal and/or rubber tyring – wooden framed vehicles with single curvature features – wooden framed vehicles with double curvature features.			
		7.4	Safely use and handle materials.			
		7.5	Safely use hand tools, portable power tools and ancillary equipment.			
		7.6	Safely store the materials, tools and equipment used when manufacturing bespoke wheelwrighting products.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		7.7	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – fit and assemble bespoke products – produce straight in plan and elevation; door sets, doors, sliding sash windows, units and fitments and panelling/cladding – wooden framed vehicles, shafts, wheels, welded carriage components, metal and rubber tyring – produce staircases, handrails and balustrades straight and with turns – produce products with single and double curvature features – produce bespoke products that incorporate associated materials (glass, plastics, fabrics, etc.).			
		7.8	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – take site and workplace dimensions – proportion joints associated with the product and construction method – use hand tools, power tools and equipment – requisition material.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		7.9	Describe the needs of other occupations and how to effectively communicate within a team when manufacturing bespoke wheelwrighting products.			
		7.10	Describe how to sharpen hand tools used when manufacturing bespoke wheelwrighting products.			
		7.11	Describe how to maintain the tools and equipment used when manufacturing bespoke wheelwrighting products.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)