



Australian Government

UEGNSG224 Construct and lay copper and stainless steel gas distribution pipelines

Release: 1

UEGNSG224 Construct and lay copper and stainless steel gas distribution pipelines

Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Industry Training Package.

Application

This unit involves the skills and knowledge required to construct and lay copper and stainless steel gas distribution pipeline and services up to 20 mm diameter, and install the meter connection to the services users.

It includes the use of relevant tools and equipment, completing necessary documentation, working safely in accordance with workplace procedures, and complying with relevant legislative, standard and code requirements.

This unit excludes welding of stainless steel pipe work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Gas Distribution

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to construct copper and stainless steel

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Work health and safety (WHS)/occupational health and safety (OHS) workplace procedures and environmental

gas distribution pipelines	measures for the site are identified and applied
1.2	Job requirements and workplace procedures for the site are obtained and discussed with relevant person/s to confirm the work schedule
1.3	WHS/OHS, environmental and sustainable energy policies and procedures are obtained and applied in accordance with workplace procedures
1.4	Hazards are identified, risks are assessed and control measures prioritised, implemented and monitored in accordance with workplace procedures
1.5	Level of responsibility under the relevant work permit and/or relevant notification is obtained and confirmed with relevant person/s in accordance with job requirements and workplace procedures
1.6	Equipment, plant, tools and personal protective equipment (PPE) required to construct copper and stainless steel gas pipelines and services are identified, obtained and checked for operation and safety in accordance with workplace procedures
1.7	Relevant person/s are consulted to ensure the work is coordinated effectively with others involved
1.8	Materials, plans, diagrams, drawings and resources required to construct gas pipelines are confirmed, scheduled and obtained in accordance with workplace procedures
1.9	Safety and emergency procedures for an incident at the work site are checked and confirmed
1.10	Third-party issues are referred to relevant person/s in accordance with workplace procedures
1.11	Site preparation, safety plan and work schedule are confirmed with relevant person/s in accordance with workplace procedures
2 Construct copper and stainless steel gas distribution pipelines	
2.1	WHS/OHS and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
2.2	Materials, tools, equipment and measuring devices required for work activities are selected and used correctly and safely in accordance with manufacturer

instructions and workplace procedures

2.3 Hazardous activities are conducted safely in accordance with WHS/OHS workplace procedures and job instructions

2.4 Construction of copper and stainless steel gas pipelines and services are conducted in accordance with industry standards and workplace procedures

2.5 Work is carried out to the required standard, without waste of materials or damage to apparatus, equipment, and the surrounding environment or services using sustainable energy principles

2.6 WHS/OHS risks, incidents and accidents are reported to authorised person/s for directions in accordance with workplace procedures

2.7 Unplanned events are referred to authorised person/s for directions in accordance with workplace procedures

2.8 Quality and safety checks of work, including testing of pipework are carried out in accordance with work instructions

3 Complete the work and relevant documentation

3.1 WHS/OHS and environmental risk control measures for work completion are followed

3.2 Relevant person/s are notified of work completion in accordance with workplace procedures

3.3 Tools, equipment and any surplus resources and materials are cleaned, checked and securely stored in accordance with workplace procedures

3.4 Work site is tidied and made safe in accordance with workplace procedures

3.5 Work documentation is completed and provided to relevant person/s in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEG Gas Industry Training Package Companion Volume Implementation Guide.

competency must include the following:

- constructing copper and stainless steel gas distribution pipelines and services up to 20 mm diameter
- cutting pipes, joining pipes and fittings
- installing the meter connection to the service riser, upstands, above ground services and response lines.

Unit Mapping Information

This unit replaces and is equivalent to UEGNSG224A Construct and lay copper and stainless steel gas distribution pipelines.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>

Assessment Requirements for UEGNSG224 Construct and lay copper and stainless steel gas distribution pipelines

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying controls for stray, static and induced electrical faults
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements
- applying sustainable energy and environmental principles and practices
- checking tools, equipment, plant and personal protective equipment (PPE) for correct operation and safety
- cleaning, checking and storing tools and equipment
- communicating effectively with others
- completing required documentation and reporting
- conducting quality and safety checks
- constructing copper and stainless steel gas distribution pipelines
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- identifying and correctly reading plans, drawings, manuals and diagrams
- identifying plant and equipment and safe operating parameters/requirements
- maintaining a clean work area
- minimising waste
- obtaining job requirements and work instructions
- obtaining relevant resources, tools, equipment and materials to conduct the work
- referring third-party issues to supervisor
- reporting WHS/OHS risks, incidents, accidents and unplanned events to supervisor
- working in accordance with relevant work permit/notifications.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include

knowledge of:

- controls for stray, static and induced electrical faults
- copper and stainless steel gas pipelines, including:
 - accessories
 - advantages and disadvantages
 - applications
 - characteristics
 - fittings
 - handling and storage
 - material specifications
 - pipe sizes
 - safety data sheets (SDS)
- copper, stainless steel and other piping materials
- dangers of working with live gas
- effective communication techniques
- environmental and sustainable energy principles and practices
- hazards and hazardous activities in the workplace
- quality and safety checks
- relevant industry and technical standards
- relevant manufacturer specifications
- relevant materials, plans, diagrams, drawings and resources
- relevant materials, tools, equipment, plant, measuring devices and PPE
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant standards, legislations, codes and regulations
- relevant WHS/OHS legislated requirements
- relevant work permits and/or notifications
- relevant workplace documentation
- relevant workplace policies and procedures
- site preparation, safety plans, job requirements and work schedules
- techniques to minimise waste.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment must occur in workplace operational situations where it is appropriate to do so;

where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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