

SAQCC FIRE

D&GS TRAINING SUB COMMITTEE

TYPICAL COURSE CURRICULUM LAYOUT

This form allows one to provide a curriculum for a training course in a standard format.

COURSE	SAFETY, WORKSHOP PRACTICE HAND TOOLS AND POWER TOOLS	
ORIGINATOR	Hanlie Truter	
DATE	5 July 2014	
Amendment No 1	17th September	Committee changes
Amendment No 2	26th January 2015	Committee changes
Amendment No 3	03rd March 2015	Committee changes
Issued	02nd April 2015	

EQUIVALENT TRAINING COURSES AVAILABLE		
TITLE	TRAINING SCHOOL	CONTACT DETAILS
Nil		

EQUIVALENT UNIT STANDARD	
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Unknown

STATUS OF CURRICULUM - Issued

PURPOSE OF TRAINING COURSE

Gas suppression workshop practice and safety introduces learners to the work environment and its tools, equipment, workshop and safety regulations, policies and procedures applicable to health, safety and industry standards and systems. It will equip learners with the necessary hand-skills for the gas suppression industry. Workplace policies and procedures that conform to health and safety regulations and safe working practices will be learnt.

Gas suppression workshop practice contains subject outcomes which present an opportunity for learners to attain enough trade specific skills, knowledge, attitudes and values so that learners can perform at a basic level in the installation of gas suppression systems.

LEARNING ASSUMED TO BE IN PLACE

This course assumes the learner can read, write and understand English and has a basic knowledge of hand tools.

OUTCOMES REQUIRED

Topics Covered:

1. Safety and Regulations
2. Engineering Hand Tools
3. Engineering Power Tools
4. Site work procedures

Assessments take on the form of written tests using various strategies and practical activities to evaluate and provide feedback to the attendee and employer alike.

1. SAFETY AND REGULATIONS

Outcome 1: Explain safety practices

Learning Outcomes:

The learner should be able to:

- Explain why safety is of paramount importance in the workplace
- List causes of accidents/ incidents
- Distinguish between unsafe acts and unsafe conditions
- Describe the benefits of good housekeeping
- Demonstrate safe practice with regard to stacking of goods and materials
- Identify potential workplace hazards
- Identify types of personal protective equipment available and explain what they are used for
- Observe safety precautions when working in an elevated position
- List and describe types of injuries associated with electricity
- Complete a risk assessment of the task to be carried out

Assessment:

- Written test to determine if student understands the importance of safety
- Learner is shown workshop and worksite hazardous conditions
- Demonstrate the wearing of Personal Protective Equipment for working at heights
- Know the danger of electrocution

Outcome 2: Report a health and safety incident

Learning Outcomes:

The learner should be able to:

- Describe the basic procedures to report an incident
- Report an incident according to the prescribed procedures

Assessment:

- Test to determine if the learner can report an incident and correctly fill in a basic first aid report

2. ENGINEERING HAND TOOLS

Outcome 1: Select engineering hand tools

The range includes:

Tape measure, spirit level, chalk line, vernier caliper, screw drivers, spanners, pipe spanners, pipe vice, ladders, hacksaw, file, types of drill bits, cylinder trolley

Learning Outcomes:

The learner should be able to:

- Identify and name different hand tools and their parts
- Describe the function of different hand tools
- Select the correct hand tool for a specific task

Assessment:

- Test and assignments on selection of hand tools
- Group discussion on used of hand tools
- Assignment on selection of tools for a specific task

Outcome 2: Use engineering hand tools

Learning Outcomes:

The learner should be able to:

- Explain the importance of using hand tools safely and indicate the consequences of incorrect use
- Identify unsafe or faulty tools and describe the nature of the fault/s
- Use engineering hand tools safely

Assessment:

Practical tasks to illustrate safe use of hand tools.

- Explain the importance of using hand tools safely and indicate the consequences of incorrect use of tools
- Identify unsafe or faulty tools and state the nature of the fault
- Use engineering hand tools safely
- Task on identifying faulty tools and steps to rectify them

Outcome 3: Care for and storing of engineering hand tools

Learning Outcomes:

The learner should be able to:

- List factors to consider when caring for and maintaining hand tools
- Identify faulty hand tools and take corrective action
- Explain the consequences of improper care and storage of engineering hand tools

Assessment:

- List factors to consider when caring for and maintaining hand tools
- Identify faulty hand tools and take corrective action
- Explain the consequences of improper care and storage of engineering hand tools
- Practical assignment on proper and improper care and storage of hand tools

3. ENGINEERING POWER TOOLS

Outcome 1: Select engineering power tools

Learning Outcomes:

The learner should be able to identify and use each tool for the correct job

The range includes:

Drilling Machine and pipe threading machine, pipe cutting machine, grinder, extension leads and compressors

Assessment:

- Identify and name different power tools and their parts
- Describe the function of different power tools
- Select the correct power tool for a specific task

Outcome 2: Use engineering power tools

Learning Outcomes:

The learner should be able to:

- List safety measures to take when using different power tools
- Explain the importance of following manufacturer's recommendation when using various power tools
- Safely use engineering power tools and attachments for a particular application
- Use a bench grinder
- Select the correct drill bit for the material being drilled
- Use the drill to drill holes in masonry and other materials correctly
- Use the drill according to manufacturer's guidelines and instructions

Assessment:

- List safety measures to take when using different power tools
- Explain the importance of following manufacturer's recommendation when using various power tools
- Safely use engineering power tools and attachments for a particular application

Outcome 3: Care for and store engineering power tools

Learning Outcomes:

The student should be able to:

- List factors to consider when caring for and maintaining power tools
- Check power cables and plugs of power tools
- Identify faulty power tools and take corrective action
- Lubricate power tools according to manufacturer's recommendation
- Store power tools and explain the consequences of improper care and storage of engineering power tools

Assessment:

Test on the following:

- List factors to consider when caring for and maintaining power tools
- Check power cables and plugs of power tools
- Identify faulty power tools and take corrective action
- Lubricate power tools according to manufacturer's recommendation
- Store power tools and explain the consequences of improper care and storage of engineering power tools
- Practical test on power tools checks and inspections
- Demonstrate how power tools are correctly stored

4. SITE WORK PROCEDURES

Outcome 1: Explain and perform basic site work procedures

The range includes:

- A basic knowledge of safety signs, colour-coding of walkways, work-areas, no-go areas, and fire-fighting equipment and permit to work on systems.

Learning Outcomes:

The learner should be able to:

- List typical worksite procedures
- Identify safety signs

The range includes: fire-fighting equipment, restricted and hazardous areas, conditions requiring the compulsory wearing of safety equipment, no smoking areas, high voltage, slippery surfaces etc.

- Identify colour coding as applied at sites of work, in factories and in workshops
- List fire-fighting equipment and describe their application (classes of fires limited to A, B, C and D)

Assessment:

- Test to determine if the learner has a basic knowledge of good worksite procedures, safety signs and colour-coding
- Distinguish between electrical and chemical fires and correctly select the extinguishing equipment