IVQ in Oil and Gas (8510)

Equipment List
Mechanical Maintenance Technician
Electrical Maintenance Technician
Instrumentation Maintenance Technician
Process Technician
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1 IVQ in Oil and Gas
List of Resource Requirements

Equipment which may be required for any route in this qualification and specifically for the following:

Advanced Award in Oil and Gas Process Technician (Core Skills): Units 58 and 59

Advanced Award in Oil and Gas Process Technician: Units 60 and 61

The equipment requirements are those to be found on onshore and offshore oil and gas processing sites. The type of plant and equipment available will depend upon the nature and purpose of the site. The requirements also include chemicals. Plant and equipment may comprise of, but not be limited to:

Absorbers (e.g. silica gel)
Accumulators
Air blowers
Air ejectors
All instrumentation and system logic control associated with the plant and equipment
Anaerobic digesters
Annulus casing
Ballast systems
Blenders
Blowdown facilities
Booster pumps
Brine reservoirs
Burners
Caissons
Centrifuges
Chemical injection package
Chemicals for hydrocarbon and water treatment
Choke valves
Christmas tree manifold
Coalescers
Compressors (centrifugal and reciprocating)
Condensers
Contactors
CO2 Absorbers
DC power units
Gear boxes
Generators (electrical)

De-aerators
Dehydration towers
Degassing tanks
Desiccants
Distillation columns
Downhole safety valves (DSV)
Drains (hydrocarbon and water)
Driers
Economisers
Electrochlorination plants
Electrolytic cells
Electrostatic treaters
Evaporators
Expanders
Fans (coolers)
Filter separators and strainers
Filters (coarse, sand)
Firewater deluge systems
Fiscal flow meters
Flaps
Flares
Flash drums
Flotation units
Foam systems
Gas turbines
Gaseous extinguishing systems
Gaslift equipment
Heat exchangers
Hot oil systems
Heaters (electric and oil)
Humidifiers
Hydraulic cranage
Hydraulic oil pressurised reservoirs
Hydrocarbon gas chillers
Hydrogen displacement vessels
Injection pumps
Joule Thomson valve
Knock-out drums
Lube oil systems
Mechanical refrigerators
Meter provers
Metering pumps
Meters
Moisture separators
Molecular seives
Monitors (firefighting)
Nitrogen (bottled and bulk storage systems)
Off gas compressor
Orifice plates
Packers and seal/expansion arrangements
pH control systems
Pig launchers
Pig receivers
Pigs
Plate separators
Pressurised storage vessels
Prime movers (diesel and electric)
Pumps
Reboilers
Receivers
Recirculation systems
Re-compressors
Reflux accumulators
Reflux drum
Refrigerators and units
Regulators
Relief systems
Reservoirs
Scrubbers
Sea oil systems
Sea water lift pumps
Separator drums
Separators (conventional and test)
Septic tanks
Shore terminal receiving systems
Skimmers
Slug catchers
Sour sea-oil traps
Stabilisers
Storage tanks
Sub-sea safety valves (SSSV)
Suction drums
Surge tanks
Sumps
Tanker loading systems
Trayed fractionation columns
Trunking
Tubing
Vacuum pumps and packages
Valves and pipework
Vaporisers
Vents
Water drive equipment
Water injection manifolds
Water treaters
Wellheads
Wellhead master valves
2 Mechanical Maintenance Technician

List of Resource Requirements: Mechanical Maintenance

Advanced Award in Oil and Gas Maintenance (Core Skills): Units 001, 002, 006.

Advanced Award in Oil and Gas – Mechanical Maintenance: Units, 007, 008, 009, 010, 011, 012, 013, 014, and 015.

Advanced Diploma in Oil and Gas – Mechanical Maintenance Technician: Units 016, 017, 018, 019, 020, 021, 022 and 023.

The equipment requirements are those to be found on onshore and offshore oil and gas processing sites. The type of plant and equipment available will depend upon the nature and purpose of the site. Plant and equipment may comprise of, but not be limited to:

Rotating Equipment
Support Equipment
Firefighting/Safety Equipment
Pressure Relief Systems
Reciprocating Equipment
Heat Exchangers
Vessels
Pipework
Marine Systems
3 Electrical Maintenance Technician
List of Resource Requirements: Electrical Maintenance

Advanced Award in Oil and Gas Maintenance (Core Skills): Units 001, 002, 006.

Advanced Award in Oil and Gas – Electrical Maintenance: Units 24, 25, 26, 27, 28, 29, 30, 31 and 32.

Advanced Diploma in Oil and Gas – Electrical Maintenance Technician: Units 33, 34, 35, 36, 37, 38, 39 and 40.

The equipment requirements are those to be found on onshore and offshore oil and gas processing sites. The type of plant and equipment available will depend upon the nature and purpose of the site. Plant and equipment may comprise of, but not be limited to:

- Power Generation Systems and Equipment
- High Voltage Distribution Systems and Equipment
- Low Voltage Distribution Systems and Equipment
- Extra Low Voltage Distribution Systems and Equipment
- Rotating Electrical Systems and Equipment
- Electrical Protection Systems and Equipment
- Control Systems and Equipment
4 Instrumentation Maintenance Technician
List of Resource Requirements: Instrumentation Maintenance

Advanced Award in Oil and Gas Maintenance (Core Skills): Units 001, 002, 006.

Advanced Award in Oil and Gas – Instrumentation Maintenance: Units 41, 42, 43, 44, 45, 46, 47, 48 and 49.

Advanced Diploma in Oil and Gas – Instrumentation Maintenance Technician: Units 50, 51, 52, 53, 54, 55, 56 and 57.

The equipment requirements are those to be found on onshore and offshore oil and gas processing sites. The type of plant and equipment available will depend upon the nature and purpose of the site. Plant and equipment may comprise of, but not be limited to

Temperature Measurement and Control Equipment
Pressure Measurement and Control Equipment
Flow Measurement and Control Equipment
Level Measurement and Control Equipment
Position Measurement and Control Equipment
Control Systems
Single Loop Controllers
Valves
Shutdown Systems
High Integrity Protection Systems (HIPS)
Hydraulic Control Panels
Well Control Systems and Equipment
Rotating and Reciprocating Equipment Control and Protection
Fire and Gas Systems
Fiscal Metering and Allocation Systems and Equipment
Analysis Equipment