

Domain	RIGGING	Unit ID: 938
Title:	Use and maintain engineering hand tools ,dollies and skates, jacks and pumps , hoisting gears and hauling gear	
Level: 1		Credits:3

Purpose

This unit standard specifies the competencies required to use and maintain engineering hand tools. It includes selecting and using engineering hand tools, caring for and maintaining engineering hand tools and working safely with due care for self, fellow workers, equipment, materials and the environment. This unit standard is intended for those who work in lifting machine operations environment.

Special Notes

1. All work is performed under constant supervision and according to workplace and workshop manual specifications and occupational health and safety and environmental legislation.
2. Environment contexts under which this unit standards is used include but are not limited to:
 - Manufacturing and engineering (Metals, Plastics, Tyre and Rubber, Electrical Power Generation, Automotive Manufacturing).
 - Chemical and Petrochemical.
 - Mining.
 - Transport (Maritime, Road, Rail and Aviation).
 - Civil Engineering and Construction.
 - Food and Beverages.
 - Other engineering-related industry sectors.
3. Assessment evidence may be collected from a real workplace, or an appropriate simulated realistic environment in which lifting machine operations are carried out.
4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications, guidelines and instructions.
5. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act, No. 11, 2007
 - Regulations relating to the Health and Safety of employees at work, 1997 and all subsequent amendment.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Select and use engineering hand tools, dollies and skates, jacks and pumps , hoisting gears and hauling gear

Range

Engineering hand tools include but are not limited to hand files, spanners, socket sets, specialised sockets, impact sockets, torque wrench, allen keys, screwdrivers, pliers, clamps, tin snips, hacksaws, chisels, metal shears, hammers, beating files, spoons, mallets, bench stakes, files, scrapers, hole punches, anvils and riveters spray guns, sanding blocks, body filler mixing and textile scissors.

Dollies and skates may include but not limited to non-floor damaging dollies, steel chain roller skates, confined space rotating dollies, urethane roller dollies, air bearings, and recessed centre dollies, gun safe dollies and stair climbing dollies.

Jacks and pumps toe jacks, inflatable jacks, hand jacks, cylinder jacks, spreaders, pullers, hand pumps, electric pumps, air powered hydraulic pumps, pump accessories and hydraulic hoses.

Hoisting gears may include but are not limited to chain hoists, lever hoists, beam spreaders, chains, hooks and shackles, chain slings, wire rope slings, poly slings, ropes and harnesses.

Hauling gear may include but are not limited to transport chains, towing chains, securing chains, binder chains, winch straps, ratchet straps, tie downs, forklift tie downs, warning flags and oversized load banners.

Performance Criteria

- 1.1 All the engineering hand tools, dollies and skates, jacks and pumps, hoisting gears and hauling gear are identified and their uses are explained.
- 1.2 The ability to apply the various engineering tools in their different applications is demonstrated.

Element 2: Care for and maintain engineering hand tools

Range

Caring for engineering hand tools ,dollies and skates, jacks and pumps , hoisting gears and hauling gear may include but is not limited to identifications and reporting of unsafe or faulty tools, clean and maintain and store tools.

Hand tool maintenance includes sharpening, de-burring, resetting/calibration, de-rusting, oiling and replacing.

Performance Criteria

- 2.1 The maintenance of engineering hand tools, dollies and skates, jacks and pumps, hoisting gears and hauling gear are carried out in line with the applicable requirements and workplace procedures.
- 2.2 Maintenance process of engineering tools is explained.
- 2.3 The ability to recognise and report problems, changes and/or malfunctions while working with engineering tools is demonstrated.

Element 3: Work safely with due care for self, fellow workers, equipment, materials and the environment

Performance Criteria

- 3.1 Risk assessment is conducted prior to commencement of work activities.
- 3.2 Personal Protective Equipment is worn in line with safe working practices.
- 3.3 Safe working practises are explained and demonstrated.
- 3.4 Knowledge of Occupational Health and Safety is demonstrated.

Registration Data

Subfield:	Lifting, Shifting and Secure loads
Date first registered:	27 September 2012
Date this version registered:	27 September 2012
Anticipated review:	2015
Body responsible for review:	Namibia Training Authority