

Title	Demonstrate knowledge of safety on engineering worksites		
Level	2	Credits	2

Purpose	People credited with this standard are able to demonstrate knowledge of hazards, personal safety, safe work practices and safe use of equipment on engineering worksites in accordance with Worksafe guidelines.
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Classification	Mechanical Engineering > Engineering Core Skills
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Available grade	Achieved
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Explanatory notes

1 References

Health and Safety at Work Act 2015 and supporting regulations.

Accident Compensation Corporation and Department of Labour. *Metal Industry Guidelines for Safe Work*. (Wellington: ACC, 2007). Available from

http://www.acc.co.nz/PRD_EXT_CSMP/idcplg?IdcService=GET_FILE&dID=3023&dDocName=PRD.

Occupational Overuse Syndrome - Guidelines for prevention and management.

Available from <http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/occupational-overuse-syndrome-oos-guidelines-for-prevention-and-management>.

2 Definition

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.

Engineering worksite refers to the place work, which could be an engineering workshop building or a remote worksite.

OOS refers to Occupational Overuse Syndrome, often also called Repetitive Strain Injury (RSI). A range of conditions which cause discomfort or persistent pain in muscles, joints, tendons, nerves and soft tissues developing as the result of a number of factors such as repetitive movement, constant muscle contraction or straining, forceful movements and constricted postures.

Workplace procedures refers to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, safety procedures and guidelines, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

Worksafe guidelines refers to the Metal Industry Guidelines for Safe Work and other relevant WorkSafe New Zealand publications; and the Health and Safety at Work Act 2015 and supporting regulations.

3 Assessment information

Examples/evidence given must be within the context of mechanical engineering or fabrication and must meet applicable workplace procedures and accepted industry practice.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of hazards on engineering worksites in accordance with Worksafe guidelines.

Evidence requirements

1.1 Hazards commonly occurring on engineering worksites are identified and their effects on health and safety described.

Range tools, machinery, electricity, chemicals, fire, gas, fumes, compressed air, noise, confined spaces, height, lighting.

1.2 Hazard warning signs are identified.

Range minimum of five different signs.

Outcome 2

Demonstrate knowledge of personal safety on engineering worksites in accordance with Worksafe guidelines.

Evidence requirements

2.1 The personal responsibilities of workers are identified in accordance with the Health and Safety at Work Act 2015.

2.2 Effects that aspects of personal appearance can have on personal safety are described.

Range clothing, long hair, jewellery.

2.3 Items of personal protective equipment and their use are identified.

Range overalls, safety footwear, leather gloves, welding shield, safety glasses, ear muffs, ear plugs, hard hat, breathing mask.

2.4 The effects orderly workshop habits have on personal safety are identified.

Range examples of orderly workshop habits – workshop cleanliness and tidiness, avoidance of boisterous play or practical jokes in the workplace, inappropriate use of electronic devices.

2.5 Symptoms and possible causes of OOS are identified.

Range evidence is required of a minimum of five symptoms and five possible causes relevant to an engineering workplace.

2.6 Safe method of manual lifting is described.

2.7 Safe use of ladders is described.

2.8 The dangers and consequences of using mind altering drugs and alcohol when operating machinery or in the vicinity of operating machinery are described.

2.9 The dangers and consequences of fatigue and dehydration are stated.

Outcome 3

Demonstrate knowledge of safe work practices and safe use of equipment on engineering worksites in accordance with Worksafe guidelines.

Evidence requirements

3.1 Good work practices designed to avoid accidents are identified.

Range good work practices involving – tools, machinery, electricity, chemicals, fire, fumes, compressed air.

3.2 Hose reels and different types of portable fire extinguishers are identified and the type and class of fire they can be used on is stated.

Range portable fire extinguishers – water, foam, dry powder, carbon dioxide.

Replacement information	This unit standard and unit standard 21912 replaced unit standard 2824.
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Planned review date	31 December 2021
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 June 2005	31 December 2016
Review	2	17 November 2011	31 December 2021
Review	3	15 September 2016	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.