Title | Replace static seals in machines and equipment
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Level | 3
Credits | 5

**Purpose**
People credited with this unit standard are able to prepare for seal replacement, and replace and test static seals.

**Classification**
Mechanical Engineering > Maintenance and Diagnostics in Mechanical Engineering

**Available grade**
Achieved

**Entry information**

**Critical health and safety prerequisites**
Unit 21912, *Apply safe working practices on an engineering worksite*, or demonstrate equivalent knowledge and skills.

**Explanatory notes**

1. **Reference**

2. **Definition**
   *Industry practice* – safe and sound trade practices generally accepted by competent persons within the mechanical engineering industry.

3. **Range**
   Static seals applicable to this unit standard may include but are not limited to gaskets, ‘O’ rings, and joint sealants. Evidence is required for the selection and replacement of at least four different static seals.

**Outcomes and evidence requirements**

**Outcome 1**
Prepare for seal replacement.

**Evidence requirements**

1.1 Appropriate seal types are identified in accordance with industry practice.

1.2 Sealing principles relevant to the seal type and intended usage are described.

1.3 Tools and replacement method are determined relevant to seal assembly.
Outcome 2

Replace and test static seals.

Evidence requirements

2.1 Existing seals are removed in accordance with industry practice.

2.2 Machine and equipment seal surfaces are inspected for damage prior to seal fitting in accordance with industry practice.

2.3 Seals and other replacement parts are prepared in accordance with industry practice.

Range may include but is not limited to – stock items, making of ‘O’ ring seals, cutting gaskets, annealing of copper.

2.4 Seals are inspected for defects, as applicable, prior to fitting in accordance with industry practice.

2.5 Seals are fitted to machines and equipment in accordance with industry practice.

2.6 Seals are tested for performance with specification in accordance with industry practice.

2.7 Records for seal replacement are completed in accordance with industry practice.

| Replacement information | This unit standard was replaced by unit standard 30286. |

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.
### Status information and last date for assessment for superseded versions

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### Consent and Moderation Requirements (CMR) reference


**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.