<table>
<thead>
<tr>
<th>Title</th>
<th>Level mechanical machinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>3</td>
</tr>
</tbody>
</table>

**Purpose**  
This unit standard, intended for on job assessment, is for people training in mechanical engineering trades.  
People credited with this unit standard are able to check mechanical machinery for level, and level mechanical machinery.

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

**Available grade**  
Achieved

**Prerequisite**  
Unit 21912, *Apply safe working practices on an engineering worksite*, or demonstrate equivalent knowledge and skills.

**Guidance Information**

1. **References**  
Health and Safety at Work Act 2015.  

2. **Definitions**  
*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.  
*Workplace procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

3. **Recommended for entry**  
Unit 22898, *Demonstrate and apply knowledge of machine levelling and alignment.*
4 Related unit standards
This unit standard is one of a machinery levelling and alignment set:
- Unit 22898, *Demonstrate and apply knowledge of machine levelling and alignment* (Level 3), an introductory unit standard that covers basic levelling and alignment knowledge and application.
- Unit 2408, *Align mechanical machinery* (Level 4).
- Unit 2409, *Level mechanical machinery* (Level 3).

# Outcomes and performance criteria

## Outcome 1

Check mechanical machinery for level.

**Range**
- two items of machinery;
- two types of levelling equipment;
- examples of levelling equipment are – machine levels; lines; optical, electronic, laser; dumpy level; theodolite.

### Performance criteria

1.1 Procedures and equipment for checking level are identified.

1.2 Level tolerances are identified from manufacturer's specifications or accepted industry practice.

1.3 Levelling checks are carried out in accordance with manufacturer’s specifications and accepted industry practice.

## Outcome 2

Level mechanical machinery.

**Range**
- machinery, and levelling equipment from outcome 1.

### Performance criteria

2.1 Reasons for errors in level are determined in accordance with accepted industry practice.

**Range**
- examples are – soft foot, unstable surface, missing or broken machine mounts, insufficient depth of foundation, uneven foundation pads.

2.2 Machinery is levelled in accordance with manufacturer’s specifications or accepted industry practice.

2.3 Machinery records are completed in accordance with workplace procedures.
Planned review date | 31 December 2022

<table>
<thead>
<tr>
<th>Process</th>
<th>Version</th>
<th>Date</th>
<th>Last Date for Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>1</td>
<td>25 October 1994</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Revision</td>
<td>2</td>
<td>14 April 1997</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Revision</td>
<td>3</td>
<td>5 January 1999</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Revision</td>
<td>4</td>
<td>18 September 2001</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Review</td>
<td>5</td>
<td>28 April 2003</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Revision</td>
<td>6</td>
<td>25 July 2006</td>
<td>31 December 2011</td>
</tr>
<tr>
<td>Rollover</td>
<td>7</td>
<td>20 June 2008</td>
<td>31 December 2014</td>
</tr>
<tr>
<td>Review</td>
<td>8</td>
<td>15 April 2011</td>
<td>31 December 2022</td>
</tr>
<tr>
<td>Review</td>
<td>9</td>
<td>17 August 2017</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Consent and Moderation Requirements (CMR) reference: 0013

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.