Title Perform fault diagnosis, repair, modification and preparation of mould equipment for glass container manufacturing

Level 3

Credits 40

Purpose People credited with this unit standard are able to: demonstrate knowledge of critical container faults attributable to mould equipment; diagnose container faults attributable to mould equipment; repair mould set components and ancillary equipment; modify mould equipment; and interpret production plan, and prepare mould set components and ancillary equipment.

Classification Glass and Glazing > Glass Container Manufacturing

Available grade Achieved

Entry information

Recommended skills and knowledge Unit 23072, Prepare and service mould equipment for glass container manufacturing; Unit 2714, Produce components by performing engineering turning operations or demonstrate equivalent knowledge and skills.

Explanatory notes

Definitions
Enterprise means an organisation where training and/or assessment is taking place, and/or where the trainee is employed.
Enterprise procedure is defined as actions which comply with the policies, systems, and directives in a particular enterprise. Enterprise procedure must comply with the requirements of the Health and Safety in Employment Act 1992, and subsequent amendments.
Mould equipment is mould set components and mould ancillary equipment.
Mould set components are blank mould, thimble, plunger, neck ring, guide plate, cup funnel, baffle, blow mould, mould bottom plate, blow head, take-out grips, set-up blanks. Mould ancillary equipment is hinges, neck ring arms, delivery equipment.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of critical container faults attributable to mould equipment.
Evidence requirements

1.1 Critical container faults attributable to mould equipment and their causes are identified, and their effect explained.

Range critical container faults include – birdswing, overpressed finish, sugary finish, flanged finish, hollow neck, spike, wire edge.

Outcome 2
Diagnose container defects attributable to mould equipment.

Evidence requirements

2.1 Possible mould equipment faults contributing to reported container defects are diagnosed in accordance with enterprise procedure.

2.2 The cause of container defects is verified in accordance with enterprise procedure.

Outcome 3
Repair mould set components and ancillary equipment.

Range: evidence is required for repairs carried out in three job changes

Evidence requirements

3.1 Repair of mould set components is performed in accordance with enterprise procedures.

Range repair – seam damage (blank and mould), match damage (neck ring, baffle, bottom plate), interlock fit, baffle fit, neck ring fit, bottom plate fit, hanger band damage, cavity damage (blank and mould), neck ring repairs (match, thread, guide plate match, plunger match), blow head repairs (blow tubes, exhaust, face venting, bayonet), baffle (valves and bayonet), plates repair (spigots, retainer), take out grips including inserts, blank mould coating (solid film lubricant).

3.2 Repair of mould ancillary equipment is performed in accordance with enterprise procedures.

Range repair – hinge assembly, neck ring arms assembly, delivery gear coating.
Outcome 4
Modify mould equipment.

Evidence requirements

4.1 Hollow grinding equipment is set-up, and hollow grinding is performed and verified in accordance with enterprise procedures.

Range evidence is required for a 750ml container mould and a 330ml container mould.

4.2 Vent milling equipment is set-up, and vent milling is performed and verified in accordance with enterprise procedures.

Range evidence is required for a 750ml container mould and a 330ml container mould.

Outcome 5
Interpret production plan, and prepare mould set components and ancillary equipment for job change.

Range: evidence is required for three job changes.

Evidence requirements

5.1 The production plan is interpreted and job-on preparation of mould set components and mould ancillary equipment is performed in accordance with enterprise procedures.

Range job-on preparation includes machining of components already set-up.

Planned review date 31 December 2019

Status information and last date for assessment for superseded versions

<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>20 November 2006</td>
<td>31 December 2017</td>
</tr>
<tr>
<td>Review</td>
<td>2</td>
<td>16 April 2015</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Consent and Moderation Requirements (CMR) reference 0134
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 (CMRs). 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.