| Title | Service a die head for extrusion blow moulding |         |    |
|-------|--|---------|----|
| Level | 4  | Credits | 10 |

| knowledge of the components and operation of extrusion blow<br>moulding die heads, extrusion blow moulding accumulator die<br>heads, and parison control units; and service an extrusion blow<br>moulding die head. | Purpose | moulding die heads, extrusion blow moulding accumulator die<br>heads, and parison control units; and service an extrusion blow |
|---|---------|--|
|---|---------|--|

| Classification  | Plastics Processing Technology > Extrusion Blow Moulding |  |
|-----------------|--|--|
| Available grade | Achieved   |  |

# **Explanatory notes**

- 1 Legislation relevant to this unit standard includes but is not limited to the Health and Safety at Work Act 2015.
- 2 Definitions

Service includes inspection, cleaning and lubrication as required. Servicing may also include polishing appropriate surfaces, and taking action regarding damaged electrical or hydraulic leads and connections according to workplace procedures. *Workplace procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

3 All evidence requirements must be performed in accordance with workplace procedures.

# **Outcomes and evidence requirements**

#### Outcome 1

Demonstrate knowledge of the components and operation of extrusion blow moulding die heads.

Range die head types – torpedo, mandrel.

#### **Evidence requirements**

1.1 Extrusion die head components are identified and their purpose is described.

- 1.2 Melt flow through each type of die head is described in relation to die head construction.
- 1.3 The advantages of each type of die head are described.
- 1.4 Effects of different plastics materials on die head construction and operation are described.
  - Range plastics materials heat sensitive and non-heat sensitive materials; die heads torpedo, mandrel, universal, multi-parison.
- 1.5 The procedure for achieving manual weight adjustment on a torpedo and mandrel die head is described.

# Outcome 2

Service an extrusion blow moulding die head.

Range torpedo or mandrel die head.

## **Evidence requirements**

- 2.1 Die head stripping, cleaning and reassembly are carried out.
- 2.2 Surfaces are inspected for damage and wear and results are recorded and reported.
- 2.3 Routine servicing is carried out.

# Outcome 3

Demonstrate knowledge of extrusion blow moulding accumulator die heads.

#### **Evidence requirements**

- 3.1 Extrusion blow moulding accumulator die head construction and operation are described.
  - Range accumulator die head first in first out (FIFO), last in first out (LIFO).

# Outcome 4

Demonstrate knowledge of parison control units.

## **Evidence requirements**

4.1 Parison control units and their operating systems are described.

Range operating systems – cam form, timer, multi-pin, electronic programmer; evidence is required for at least two.

4.2 Parison control unit operation is described.

Range die heads – torpedo, mandrel.

| Planned review date | 31 December 2021 |
|---------------------|------------------|
|                     |                  |

## Status information and last date for assessment for superseded versions

| Process      | Version | Date              | Last Date for Assessment |
|--------------|---------|-------------------|--------------------------|
| Registration | 1       | 28 April 1993     | 31 December 2014         |
| Revision     | 2       | 13 February 1997  | 31 December 2014         |
| Review       | 3       | 23 January 1998   | 31 December 2014         |
| Review       | 4       | 24 August 2006    | 31 December 2014         |
| Review       | 5       | 21 March 2013     | 31 December 2019         |
| Review       | 6       | 15 September 2016 | N/A                      |

Consent and Moderation Requirements (CMR) reference

0013

This CMR can be accessed at <u>http://www.nzqa.govt.nz/framework/search/index.do</u>.

#### 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 <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.