

Title	Operate an extrusion blow moulding machine		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to demonstrate knowledge of the main components of an extrusion blow moulding machine; start up and shut down an extrusion blow moulding machine and ancillary equipment that have been pre-set; and demonstrate knowledge of, and operate an extrusion blow moulding process.
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Classification	Plastics Processing Technology > Extrusion Blow Moulding
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Available grade	Achieved
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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
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 main components of an extrusion blow moulding machine.

Evidence requirements

- 1.1 Main components of blow moulding machine are identified and their purpose is described.

Range	main components – controls, safety features, extrusion unit, clamp unit, cutting unit, blow assembly, deflashing unit, hydraulic power pack, frame.
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1.2 Machine services are identified and their purpose and controls are described.

Range machine services – electrical supply, water, compressed air.

Outcome 2

Start up and shut down an extrusion blow moulding machine and ancillary equipment that have been pre-set.

Evidence requirements

2.1 Raw material for moulding is verified against job specification and loading procedures are followed.

Range loading procedures include – hopper cleaning, cleaning and fitting a hopper magnet.

2.2 Work area is cleared and cleaned to ensure safe operating conditions.

Range work area examples are – floors, stairs, platforms, machine surfaces, ledges, intake and output areas, hand tools; evidence is required for at least four.

2.3 Extrusion blow moulding machine and ancillary equipment start-up and shut-down is performed.

Range material type – heat sensitive or non-heat sensitive; evidence to be demonstrated for one type, and knowledge of the other type.

Outcome 3

Demonstrate knowledge of, and operate an extrusion blow moulding process.

Evidence requirements

3.1 Process operations are performed, and quality inspection procedures are consistently applied for products.

Range process operation examples are – product removal, product finishing, product jiggling, product measurement, product testing; evidence is required for at least two process operations; products – products with at least two of the following quality attributes: surface finish; colour; dimensions; capacity; weight, wall thickness distribution; evidence is required for two products.

3.2 Routine production adjustments are performed.

Range routine production adjustments – parison straightening, die-lip cleaning, parison inflation air adjustment, parison tail length adjustment, product weight adjustment, mould face cleaning; evidence is required for at least four different routine production adjustments.

3.3 The possible causes of jammed moulding are identified and the removal of jammed moulding is described.

Range at least one of – jammed in mould, jammed in transfer deflash equipment.

3.4 Production is monitored to meet job specifications.

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 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
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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 (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.