

Title	Operate injection stretch-blow moulding equipment		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the construction of injection stretch-blow moulding equipment; start up and shut down injection stretch-blow moulding equipment and ancillary equipment that have been pre-set; and operate an injection stretch-blow moulding process.
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Classification	Plastics Processing Technology > Injection Stretch-Blow Moulding
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Available grade	Achieved
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Entry information	
Recommended skills and knowledge	Unit 23129, <i>Process and use plastics materials.</i>

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 This unit standard applies to either single stage or two stage injection stretch-blow moulding processes.
- 4 All evidence requirements must be performed in accordance with workplace procedures.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of the construction of injection stretch-blow moulding equipment.

Evidence requirements

1.1 Injection stretch-blow moulding equipment components are identified using workplace equipment, and their purpose is described.

Range components – controls, safety features, preform mould clamping unit, injection unit, preform transport unit, preform conditioning, bottle blowing unit, product ejection, power unit, frame.

1.2 Machine services are identified using workplace equipment, and their purpose and controls are described.

Range machine services – power, water, chilled water, low pressure operating compressed air, high pressure blowing compressed air, mould conditioning.

Outcome 2

Start up and shut down injection stretch-blow moulding equipment and ancillary equipment that have been pre-set.

Range one start-up and one shutdown of equipment.

Evidence requirements

2.1 Raw material for moulding is verified against job specification and loaded.

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

Range examples of work areas are – floors, stairs, platforms, machine surfaces, ledges, intake and output areas, hand tools.

2.3 Injection stretch-blow moulding equipment and ancillary equipment starting-up is performed.

2.4 Injection stretch-blow moulding equipment and ancillary equipment shutdown is performed.

Outcome 3

Operate an injection stretch-blow moulding process.

Evidence requirements

3.1 Injection stretch-blow moulding equipment process operations are performed.

Range process operations include – lock-out procedures, clearing jam ups, clearing short shots, restarting procedures.

3.2 Operation of production line equipment is performed.

Range examples of production line equipment are – equipment for palletising, labelling, wrapping, strapping, carton erection. Evidence is required for two different items of production line equipment.

3.3 Quality inspection procedures are consistently applied.

Range examples of quality inspection procedures include checking for – product section weight, capacity, top load, material distribution, colour, dimensions, seal integrity, part line.

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	30 September 1998	31 December 2019
Revision	2	15 November 2002	31 December 2019
Revision	3	17 March 2004	31 December 2019
Rollover and Revision	4	25 September 2006	31 December 2019
Review	5	18 September 2009	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 (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.

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.