Title	**Review and analyse production trial results and specify re-trial**		
Level	**4**	**Credits**	**6**

Purpose	People credited with this unit standard are able to: review production trial results; analyse production trial results and make corrections for a future trial; and specify and carry out re-trial procedures.

Classification	Plastics Processing Technology > Plastics Processing - General

Available grade	Achieved

Entry information	
Recommended skills and knowledge	Unit 9708, *Explain the influence of polymer morphology on properties and processing of plastics materials*, and competency at carrying out production trials in a specific plastics processing stream.

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
Operating window – the range of each of the process control parameters which achieves product quality and production objectives in accordance with workplace requirements.
Production trial – trialling of products, tooling, material grades, or processing equipment.
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.

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Outcomes and evidence requirements

Outcome 1

Review production trial results.

Evidence requirements

1.1 Trial objectives are confirmed as a basis for comparison, prior to review of results.

Range trial objectives – preliminary product specifications (physical properties, size, weight, appearance), production requirements (output, rejects, yield, practical operating window).

1.2 Trial product quality and production results are reviewed and compared with trial objectives to identify variations.

Outcome 2

Analyse production trial results and make corrections for a future trial.

Evidence requirements

2.1 Trial results are analysed to establish priorities for the correction of parameters which are outside specifications.

Range trial results – product quality results, production results.

2.2 Changes are recommended to achieve product quality and production requirements.

Range changes – product design and specifications; mould and/or tooling design and construction; material grade, machine configuration or specification; production specifications; processing parameters.

2.3 Changes are made to achieve the required product quality and production requirements.

Range changes – product design and specifications; mould and/or tooling design and construction; material grade; machine configuration or specification; production specifications; processing parameters.

Outcome 3

Specify and carry out re-trial procedures.

Evidence requirements

3.1 Re-trial objectives and priorities are specified.

Range re-trial objectives – product quality and production requirements.

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3.2 Re-trial variations are carried out to achieve the trial objectives.

Range variations – sample size; machine parameters; material grade changes; mould and/or tooling changes; machine configurations.

3.3 Trial results are recorded.

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	21 March 1997	31 December 2019
Revision	2	15 November 2002	31 December 2019
Review	3	24 August 2006	31 December 2019
Review	4	15 September 2016	N/A

Consent and Moderation Requirements (CMR) reference	0013

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.

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