

Title	Kiln grain for malt production		
Level	3	Credits	8

Purpose	This unit standard is for people who are currently working, or intend to work, in jobs which involve the kilning of grain, for the production of malt. People credited with this unit standard are able to: use safe working practices; prepare to kiln grain; and kiln grain to produce malt.
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Classification	Food and Related Products Processing > Food Production - Beverages
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the: Health and Safety in Employment Act 1992; Health and Safety in Employment Regulations 1995; Food Act 1981; Food Hygiene Regulations 1974; Food (Safety) Regulations 2002; Resource Management Act 1991; and their associated regulations and subsequent amendments.
- 2 Definitions
Organisational procedures refer to documents that include: worksite rules, codes, and practices; equipment operating instructions; production specifications; documented quality management systems; and health and safety requirements.
Grain refers to imported or local barley, oats, or wheat.
PPE refers to personal protective equipment and may include but is not limited to: protective clothing, gloves, safety glasses/headwear/footwear, hearing protection, safety devices.
- 3 Competence is to be demonstrated on three occasions of kilning grain for malt production.

Outcomes and performance criteria

Outcome 1

Use safe working practices.

Performance criteria

- 1.1 PPE is used in accordance with organisational procedures.

1.2 Work environment is clean and free from hazards in accordance with organisational procedures.

Range hazards to – personnel, product, plant.

1.3 Documentation is referred to and/or completed in accordance with organisational procedures.

Outcome 2

Prepare to kiln grain.

Performance criteria

2.1 Preparation to kiln grain is in accordance with organisational procedures.

2.2 Kiln equipment is operational in accordance with organisational procedures.

Range may include but is not limited to – fans, louvres, heating equipment according to fuel type.

2.3 Kiln is free from residual malt in accordance with organisational procedures.

2.4 Germinated grain is ready for kilning in accordance with production specifications.

2.5 Grain thrower is free from contamination and operational in accordance with organisational procedures.

2.6 Transfer of grain to kiln minimises product damage and is in accordance with organisational procedures.

Outcome 3

Kiln grain to produce malt.

Performance criteria

3.1 Kilning of grain to produce malt is in accordance with organisational procedures.

3.2 Grain spread in kiln bed is even and to required thickness in accordance with organisational procedures.

3.3 Grain is conditioned in accordance with malt specifications.

Range specifications may include but are not limited to – colour, moisture, friability, degree of starch modification, protein.

3.4 Variations from production specification of grain temperature during malting are identified, rectified and/or reported in accordance with organisational procedures.

- 3.5 Non-conformance of equipment during kilning is identified, rectified and/or reported in accordance with organisational procedures.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 January 1997	31 December 2022
Review	2	19 August 2004	31 December 2022
Review	3	28 January 2021	31 December 2022

Consent and Moderation Requirements (CMR) reference	0111
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.