

40738**Apply a boning technique to optimise meat yield and produce specialised meat cuts**

Kaupae Level	4
Whiwhinga Credit	25
Whāinga Purpose	<p>This skill standard is for people working in a meat processing operation.</p> <p>It recognises the skill required to apply a boning technique to optimise meat yield and produce specialised meat cuts.</p> <p>It can be used in the New Zealand meat processing qualifications at Level 4 and above.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Define hot, warm and cold boning techniques in terms of process, quality and yield in a meat processing operation.	a. Compare different boning techniques and tools used.
	b. Explain the dynamics and processing requirements of boning techniques.
	c. Describe the effects of boning techniques on meat quality and yield, including potential improvements in carcass yield.
	d. Describe contamination risks and meat defects associated with boning techniques, and the actions required to eliminate them in accordance with company specifications.
	e. Explain quality requirements related to product, damage and yield recovery according to company specifications.
2. Explain yield recovery from carcasses, and yield loss impact.	a. Identify and establish yield requirements for different meat cuts based on grading, methods used to recover meat, and customer and company specifications.
	b. Explain the impact of yield loss on business costs.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
3. Apply a boning technique to optimise meat yield, producing specialised meat cuts	a. Apply a boning technique, utilising correct tools, to produce specialised meat cuts in accordance with bone structure, muscle contours, company and customer specifications, within the allowable yield tolerance.
	b. Apply ergonomic practices during breaking and boning operations to minimise physical strain and maximise carcass yield in accordance with company specifications.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

The yield must meet the requirements of a minimum of three different meat cuts produced by the company, and meet customer specifications required for specialised export meat cuts.

- Carcasses may include but are not limited to – beef, bobby calf, deer, goat, lamb, pork, ratite and other birds, sheep.
- Evidence of five forms of contamination or visible defects is required.

Definitions:

Company specifications – product specifications set by the company relating to meat cuts, weights, presentation, and packaging.

Customer specifications – product specifications set by clients relating to meat cuts, weights, presentation, and packaging.

Organisational requirements – instructions to staff on policies and procedures that are documented in memo, electronic, or manual format and available in the workplace.

Quality requirements – customer requirements regarding shape, trimming, colour, and weight.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Hot, warm and cold boning techniques

- Pre-breaking and boning procedures such as – tool and machinery preparation, work area sanitisation requirements.
- Hot, warm and cold pre-boning processes completed outside the boning department and that affect meat quality and yield, such as – spray chilling, blast freezing or chilling, electrical stimulation, plate freezers.
- Differing tools and equipment used for hot, warm and cold boning, such as – hooks, knives.
- Cost and productivity factors such as – weight loss, drip loss, chiller space, refrigeration, processing time from slaughter to load-out, capital cost for buildings, labour, transport, yield, occupational overuse injuries, hard fat problems.

- Dynamics of boning – synchronisation of the slaughter of animals and chain speed, hygiene requirements, air temperature.
- Meat quality characteristics – tenderness, shape, appearance, pH levels, muscle shortening. Potential improvements include – removal of fat, trimming, evaporation losses, chilling durations, vacuum packing, temperature tolerances, positioning of carcasses in chillers.
- Visible defects– any pathology, parasitic lesions in excess of those permitted in the post-mortem criteria, bruises, blood clots, clusters of hair or wool, hide, rail dust, dirt, stains, grease, extraneous material.
- Quality requirements – trimming cuts, product shape and colour, gland and extraneous material removal.

Yield Recovery

- Grading classifications.
- Yield requirements – cutting and/or boning lines, trimming requirements, company specifications, customer specifications.
- Yield loss– total yield loss per carcass, total yield loss per day's production, total yield loss per week.
- Allowable yield tolerance – specific meat cut, weight, quality.
- Cost to the business– requirements for rework and downgrading product, customer dissatisfaction, inability to meet product specifications.

Rauemi | Resources

- [Health and Safety in Employment Act 2015](#).
- [Animal Products Act 1999](#).
- Ministry for Primary Industries: [Operational Code: Red meat post mortem activities](#) Code of Practice, Chapter 9.
- Beef + Lamb New Zealand Reference guide. [https://www.beeflambnz.co.nz/s/Beef-and-Lamb-Reference-Guide 2023 LR.pdf](https://www.beeflambnz.co.nz/s/Beef-and-Lamb-Reference-Guide%2023_LR.pdf).
- New Zealand Meat – Guide to Beef Carcass Classification
<https://www.interest.co.nz/files/rural/beefgrade.pdf>.
- New Zealand Meat – Guide to Lamb and Mutton Classification
<https://www.interest.co.nz/files/rural/lambgrade.pdf>.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Manufacturing > Meat Processing > Boning Operations
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0033

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 August 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standards 24601 and 28231.		
Rā arotake Planned review date	31 December 2030		

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council at qualifications@hangaarorau.nz to suggest changes to the content of this skill standard.