

Title	Break and bone export carcasses to optimise meat yield and produce specialised cuts		
Level	4	Credits	20

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the quality and yield requirements for breaking and boning carcasses; prepare to break and bone carcasses to specifications; and optimise yield when breaking and boning carcasses to specifications, in a meat processing operation.
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Classification	Meat Processing > Boning Operations
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Available grade	Achieved
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Guidance Information

- Legislation relevant to this unit standard includes but is not limited to:
 - Health and Safety in Employment Act 2015;
 - Animal Products Act 1999;
 and any subsequent amendments.
- Resource documents include but are not limited to – *Post slaughter activity Red Meat Code of Practice Chapter 9*, available from the Ministry of Primary Industry at <https://www.mpi.govt.nz/processing/meat-and-game/meat-and-game-processing/codes-of-practice-rmp-templates-and-plans/>.
 Beef + Lamb New Zealand Reference guide.
http://www.beeflambnz.co.nz/resources/Reference_Guide.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>.
- This unit standard must be assessed in an export meat processing plant under consistent organisational production output levels during boning operations. These may include but are not limited to – hourly output, shift output, daily output. The yield must meet the requirements of a minimum of three products produced by the company, and meet customer specifications required for specialised export meat cuts.
- Definitions
Company specifications – product specifications set by the company relating to cuts, weights, presentation, and packaging.
Customer specifications – product specifications set by clients relating to cuts, weights, presentation, and packaging.

Manufacturer's specifications – instructions from the manufacturer which outlines the specifications, parts, maintenance, service schedule, repair and running of specific equipment.

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.

5 Range

Carcasses may include but are not limited to – beef, bobby calf, deer, goat, lamb, pork, ratite and other birds, sheep.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the quality and yield requirements for breaking and boning carcasses in a meat processing operation.

Performance criteria

- 1.1 Describe grading classifications in relation to the selection of carcasses for breaking and boning in accordance with company specifications and customer specifications.
- 1.2 Identify contamination and meat defects and describe their causes and the actions to be taken to eliminate them in accordance with company specifications.
- Range visible defects include but are not limited to – 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; evidence of five forms of contamination or visible defects is required.
- 1.3 Describe organisational quality requirements in terms of product damage.
- Range quality requirements include but are not limited to – trimming cuts, product shape and colour, gland and extraneous material removal.
- 1.4 Describe organisational yield recovery requirements for each type of cut.
- Range requirements include but are not limited to – cutting and/or boning lines, trimming requirements, company specifications, customer specifications.
- 1.5 Describe yields in terms of methods used to maximise recoverable meat product in accordance with company specifications.

1.6 Calculate and explain yield loss in terms of cost to the business.

Range	cost to the business includes but is not limited to – requirements for rework and downgrading product, customer dissatisfaction, inability to meet product specifications; calculation of yield loss includes – grams per cut, yield loss in grams per cut, total yield loss per carcass, total yield loss per day's production, total yield loss per week.
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Outcome 2

Prepare to break and bone carcasses to specifications in a meat processing operation.

Performance criteria

- 2.1 Check work area to ensure that it has been cleaned and sanitised in accordance with organisational requirements.
- 2.2 Prepare machinery, tools, and knives in accordance with the types of carcass cuts to be completed in accordance with company specifications and manufacturer's specifications.
- 2.3 Set up work area in accordance with company specifications and organisational requirements.
- 2.4 Identify yield requirements in accordance with company specifications and customer specifications.

Outcome 3

Optimise yield when breaking and boning carcasses to specifications in a meat processing operation.

Performance criteria

- 3.1 Fasten carcasses during breaking and boning operations in accordance with organisational requirements.
- 3.2 Bone meat to maximise carcass yield and minimise damage in accordance with company specifications.
- 3.3 Cut meat in accordance with company specifications and customer specifications and within the allowable yield tolerance.

Range includes but is not limited to – specific cut, weight, quality.
- 3.4 Make breaking and boning cuts in accordance with bone structure, muscle contours, and company specifications.
- 3.5 Use techniques to optimise yield, minimise physical stress on upper body, and minimise the unnecessary duplication of cutting effort.

- 3.6 Place clean bones and trimmed product in designated bins in accordance with company specifications and organisational requirements.
- 3.7 Minimise scratching and score marks to meat in accordance with company specifications and organisational requirements.
- 3.8 Complete tasks within the timeframe specified by production schedules in accordance with company specifications and organisational requirements.
- 3.9 Remove any visible defects in accordance with company specifications and legislative requirements.

Range visible defects include but are not limited to – 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.

Replacement information	<p>This unit standard and unit standard 24601 were replaced by skill standard 40738.</p> <p>This unit standard replaced unit standard 24591, unit standard 24592, unit standard 24593, unit standard 24594, unit standard 24596, unit standard 24597, unit standard 24598, and unit standard 24599.</p>
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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	27 January 2015	31 December 2021
Review	2	24 October 2019	31 December 2027
Review	3	28 August 2025	31 December 2027

Consent and Moderation Requirements (CMR) reference	0033
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.