



Australian Government

Department of Education, Employment and Workplace Relations

MTMS38C Smoke product

Release: 1

MTMS38C Smoke product

Modification History

Unit Descriptor

This unit covers the skills and knowledge required to prepare products which are smoked, such as ham, bacon and smallgoods products.

Application of the Unit

This unit is suitable for skilled operators responsible for smoking ham, bacon and other smallgoods products and operating the smokehouse in smallgoods plants or meat retail enterprises.

Licensing/Regulatory Information

Pre-Requisites

Employability Skills Information

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged, will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Select meat	1.1 Meat is selected according to product specifications. 1.2 Meat is prepared according to product specifications (where part of the work instructions).

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|---|---------------------|-----|--|
| 2 | Prepare ingredients | 2.1 | Ingredients are prepared according to product specifications and workplace requirements. |
| 3 | Prepare facility | 3.1 | Machinery and equipment are prepared according to product and manufacturer's specifications. |
| 4 | Load products | 4.1 | Product is checked to ensure correct spacing prior to loading. |
| | | 4.2 | Product is loaded in a manner that ensures even cooking. |
| | | 4.3 | Product is handled at all times according to OH&S , and hygiene and sanitation requirements . |
| 5 | Smoke product | 5.1 | Core temperature probes are inserted into the centre of the product as appropriate to product specifications and workplace requirements. |
| | | 5.2 | Machinery is programmed, where applicable in accordance with manufacturer's and product specifications. |
| | | 5.3 | Variety of products are smoked to workplace requirements and customer specifications at a speed similar to production requirements. |
| | | 5.4 | Process is monitored and recorded according to workplace requirements. |
| 6 | Monitor smoke cycle | 6.1 | Smoke cycle is monitored regularly, results are noted and deviations from the program are corrected. |
| | | 6.2 | Internal temperature is manually checked in accordance with workplace requirements to ensure correct smoke time has been achieved and, where necessary, further cooking is undertaken. |
| | | 6.3 | When product type and processing procedures require, a shower cycle is initiated according to process specifications. |

7 **Chill** product

- 7.1 On completion of smoke cycle, product is correctly weighed and either:
chilled immediately or
cooled at ambient temperature to a specified internal temperature before chilling according to product specifications.
- 7.2 Product is held at a specific and constant temperature according to product specifications.
- 7.3 Product is stored according to product specifications.
- 7.4 Product is identified and stacked according to product specifications and workplace requirements.

Required Skills and Knowledge

This describes the essential skills and knowledge required for this unit. Where bold italicised text is used, further information is detailed in the Range Statement.

Activate and operate machinery according to manufacturer's and workplace instructions.

Adjust processing as required to achieve product specifications.

Apply relevant **communication** and **mathematical skills**.

Demonstrate ability to work effectively as an individual and with other team members.

Demonstrate correct loading procedure for both a full and less-than-full smokehouse.

Describe correct smoking procedure for specific product.

Describe storage procedures for smoked products.

Describe the meat smoking process.

Describe the purpose and effect of smoking processes on meat.

Discuss health regulations that apply to smoking of meats.

Explain chilling requirements for different products.

Explain possible effects of inconsistent temperature on product.

Explain the effects of smoking on shelf life and taste of product.

Explain the purpose of correct water temperature and correct additive sequence, especially phosphate and smoke.

Explain the recording requirements for the smoke process.

Explain the relevant workplace requirements related to:

appropriate humidity levels

effect of moisture on casings

smoke generator

smoke jet

sock

wet bulb sock.

Explain the use and purpose of **raw materials** for smoking meat.

Identify and explain the use and purpose of ingredients for smoking meat.

Identify mathematical information in work instructions, specifications and recipes.

Identify meat cuts used in smoking.

Identify the cause and effects of, and explain the appropriate corrective action for:

cycle out of sequence

excess smoke

insufficient smoke.

Interpret cooking records where appropriate with respect to relevant product.

Measure and monitor product internal temperature correctly to ensure it meets product specifications.

Monitor smoking of meat on a regular basis to meet product specifications (including, where relevant, the interpretation of graphs or flow charts or mimic panels and controls).

Operate smoke facility according to OH&S, hygiene, **regulatory**, product specifications and **workplace requirements**, and meet production requirements

Report machine faults either verbally or in writing according to workplace specifications.

Store meat according to OH&S, hygiene, regulatory, product specifications and workplace requirements.

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

The meat industry has specific and clear requirements for evidence. A minimum of three forms of evidence is required to demonstrate competency in the meat industry. This is specifically designed to provide evidence that covers the demonstration in the workplace of all aspects of competency over time.

These requirements are in addition to the requirements for valid, current, authentic and sufficient evidence.

Three forms of evidence means three different kinds of evidence - not three pieces of the same kind. In practice it will mean that most of the unit is covered twice. This increases the legitimacy of the evidence.

All assessment must be conducted against Australian meat industry standards and regulations

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Competency must be demonstrated over time and under normal operating conditions for the enterprise, within the parameters of the role and responsibilities, and according to workplace requirements.

Context of and specific resources for assessment

Assessment must occur in the workplace under normal operating conditions in a simulated environment.

Resources may include:

equipment that meets safety requirements
product specifications and ingredients
smoking equipment, machinery or
production facility.

Method of assessment

Recommended methods of assessment are:
demonstration - snapshot of performance
quiz of underpinning knowledge
workplace referee report of performance

over time.

Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender, or language backgrounds other than English. Language and literacy demands of the assessment task should not be higher than those of the work role.

Guidance information for assessment

Resource materials available from MINTRAC, telephone 1800 817 462.

Meat and Livestock Australia
(www.mla.com.au):

Guidelines for the safe manufacture of smallgoods

Range Statement

RANGE STATEMENT

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments within the meat industry and situations that may affect performance. This includes any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts. Bold italics wording in the Elements and Performance Criteria, and Required Skills and Knowledge, is detailed below.

Product specifications may vary according to customer and workplace requirements.

Machinery and equipment used in processing may include:

atomising generators
automatic or manual machinery
cookers
friction generators
liquid smoke jet
moulds
probe thermometers
sawdust or woodchip burning generators
smoke generators
smokers
sock
wet bulb reservoir.

Product may include:

beef - brisket, tongue
game meat
lamb - legs, tongue
mutton
other meat species or products
pork - hand, spring
veal.

Product may be **chilled** by:

chill cabinets
immersing in ambient running water
placing in cool room
showering with ambient water
use of intensive coolers
washing in water or brine.

Communication skills may include

- reading and interpreting workplace-related documentation
- sharing information
- speaking clearly and directly
- working with diverse groups and individuals
- writing to audience needs.

Mathematical skills may include collection, estimation, calculation and interpretation of deviations within cycle, internal temperature, humidity, ambient temperature, weights.

Descriptions and explanations may:

- be in diagrammatic, sketch, tabular or graphic formats
- be presented in writing, using standard formats
- be presented orally
- include information and mathematical data gathered, interpreted and summarised from a range of complex and unfamiliar sources.

Smoke-producing **raw materials** may include:

- liquid smoke
- powder
- sawdust
- solid timber
- woodchips.

Hygiene and sanitation requirements may include:

- relevant government regulations
- workplace requirements.

Regulatory requirements may include:

- Export Control Act
- federal and state regulations regarding meat processing
- hygiene and sanitation requirements
- relevant Australian Standards
- relevant regulations.

Workplace requirements may include:

- enterprise-specific procedures
- OH&S requirements
- Quality Assurance requirements
- Standard Operating Procedures
- the ability to perform the task to production

requirements
work instructions.

Unit Sector(s)