



Australian Government

Department of Education, Employment and Workplace Relations

MTMSR303A Smoke product

Release: 1

MTMSR303A Smoke product

Modification History

Not Applicable

Unit Descriptor

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

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.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units	Nil	

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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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.
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 Occupational Health and Safety (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. A variety of products is 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 regulatory requirements.

ELEMENT	PERFORMANCE CRITERIA
	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

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- demonstrate correct loading procedure for both a full and less-than-full smokehouse
- activate and operate machinery according to manufacturer's and workplace instructions
- 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)
- interpret cooking records where appropriate with respect to relevant product
- adjust processing as required to achieve product specifications
- apply relevant **communication** and **mathematical skills**
- work effectively as an individual and with other team members
- **describe** correct smoking procedure for specific product
- **explain** chilling requirements for different products
- 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

Required knowledge

Knowledge of:

- correct smoking procedure for specific product

REQUIRED SKILLS AND KNOWLEDGE

- storage procedures for smoked products
- meat smoking process
- purpose and effect of smoking processes on meat
- health regulations that apply to smoking of meats
- chilling requirements for different products
- possible effects of inconsistent temperature on product
- effects of smoking on shelf life and taste of product
- purpose of correct water temperature and correct additive sequence, especially phosphate and smoke
- recording requirements for the smoking/cooking process
- relevant workplace requirements related to:
 - appropriate humidity levels
 - effect of moisture on casings
 - smoke generator
 - smoke jet
 - sock
 - wet bulb sock
- use and purpose of **raw materials** for smoking meat
- use and purpose of ingredients for smoking meat
- mathematical information in work instructions, specifications and recipes
- meat cuts used in smoking
- cause and effects of, and explain the appropriate corrective action for:
 - cycle out of sequence
 - excess smoke
 - insufficient smoke

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the 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 include:

- demonstration
- quiz of underpinning knowledge
- workplace referee report of performance over time.

EVIDENCE GUIDE

	Assessment practices should take into account any relevant language or cultural issues related to Aboriginality or Torres Strait Islander, 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	A current list of resources for this Unit of Competency is available from MINTRAC www.mintrac.com.au or telephone 1800 817 462.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. 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) may also be included.

Product specifications may vary according to:

- customer and workplace requirements.

Workplace requirements may include:

- enterprise-specific procedures
- OH&S requirements
- Quality Assurance (QA) requirements
- Standard Operating Procedures (SOPs)
- the ability to perform the task to production requirements
- work instructions.

Machinery and equipment may include:

- atomising generators
- automatic or manual machinery
- cookers
- friction generators
- liquid smoke jet
- moulds
- probe thermometers
- sawdust or woodchip burning generators

RANGE STATEMENT	
	• smoke generators • smokers • sock • wet bulb reservoir.
Product may include:	• beef (e.g. brisket and tongue) • game meat • lamb (e.g. legs and tongue) • mutton • other meat species or products • pork (e.g. hand and spring) • veal.
OH&S requirements may include:	• enterprise OH&S policies, procedures and programs • OH&S legal requirements • Personal Protective Equipment (PPE) which may include: • coats and aprons • ear plugs or muffs • eye and facial protection • head-wear • lifting assistance • mesh aprons • protective boot covers • protective hand and arm covering • protective head and hair covering • uniforms • waterproof clothing • work, safety or waterproof footwear • requirements set out in standards and codes of practice.
Hygiene and sanitation requirements may include:	• relevant government regulations • workplace requirements.
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.

RANGE STATEMENT	
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.
Regulatory requirements may include:	• Export Control Act • federal and state regulations regarding meat processing • hygiene and sanitation requirements • relevant Australian Standards • relevant regulations.
Smoke-producing raw materials may include:	• liquid smoke • powder • sawdust • solid timber • woodchips.

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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