



Australian Government

AHCDRY305 Conduct mechanical tests on milking machines

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to mechanically test and make recommendations on the performance of milking machines used on dairy farms.

This unit applies to individuals who conduct mechanical tests as part of service and maintenance of milking machines for dairy facilities.

All work is carried out to comply with workplace policies and procedures, according to state/territory work health and safety, animal welfare, environmental and biosecurity legislation, regulations and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy (DRY)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for testing of milking machine	1.1 Identify and confirm testing requirements with facility records and personnel 1.2 Identify facility health and safety hazards, assess risks and determine control measures 1.3 Select testing tools and equipment and check for serviceability

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Prepare and fit required personal protective equipment (PPE)
2. Establish milking machine specifications	2.1 Establish herd details and health status 2.2 Determine expected performance from machine specifications, testing procedures and performance criteria 2.3 Assess and record condition of components
3. Calculate required milking machine performance	3.1 Calculate effective reserve based on facility specifications 3.2 Calculate vacuum pump capacity from effective reserve 3.3 Record manufacturer recommended component specification and matching
4. Measure milking machine performance	4.1 Measure working vacuum levels against required performance 4.2 Adjust vacuum to optimise milking facility performance 4.3 Measure and report air consumption of component groups and pipeline leakage 4.4 Test pulsators according to procedures and report results relative to manufacturer performance recommendations 4.5 Establish recommended air consumption of components and measure consumption according to testing procedures
5. Make recommendations to optimise machine performance	5.1 Interpret test results against desired performance and herd details 5.2 Provide recommendations and written report on safety considerations for specific installation tested 5.3 Provide recommendations on milking facility performance 5.4 Complete report on component condition according to manufacturer requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
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Skill	Description
Reading	Interpret key information from a range of documentation
Writing	Complete accurate records and reports using clear language and industry terminology
Oral communication	- Use open-ended questioning and active listening to gather information - Use clear language and industry terminology when communicating recommendations to others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCDRYH305 Conduct mechanical tests on milking machines	AHCMKH305 Mechanically test milking machines	Change to unit title and sector Element added for clarity Changes to performance criteria performance and knowledge evidence Foundation skill added Assessment conditions expanded	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCDRY305 Conduct mechanical tests on milking machines

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has conducted mechanical testing of milking machines on at least five occasions, including for each:

- identified and recorded milking machine specifications
- calculated and measured milking machine performance
- developed a report describing machine conditions and made recommendations to optimise machine performance
- applied work health and safety requirements, including using personal protective equipment (PPE).

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- types, functions, cleaning, monitoring and maintenance of milking machines and their components and milking facility equipment
- relevant work health and safety requirements related to testing milking machines and their components
- requirements, criteria and assessment methods for optimal performance of milking machines and their components
- udder physiology, invasive pathogens and the interaction between the milking machine and the lactating animal
- information required, criteria and methods for assessing herd health status
- requirements and methods for determining the performance targets of a milking facility from the herd status and milking installations
- possible faults, problems and poor performance with milking machines and their components, impacts on milking operations and corrective actions for these faults and problems

- key aspects and components of reports and recommendations to a milking facility.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a dairy milking facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - milking machines, their components and associated equipment as specified in performance evidence
 - tools, equipment and materials used to test milking machines
 - personal protective equipment
- specifications:
 - workplace policies and procedures for testing milking machines, including advice on health and safety, hygiene, and animal welfare requirements
 - manufacturer specifications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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