Australian Standard®

Farm milk cooling and storage systems

This Australian Standard was prepared by Committee FT/14, Bulk Milk Handling. It was approved on behalf of the Council of Standards Australia on 26 October 1995 and published on 5 January 1996.

The following interests are represented on Committee FT/14:

Australian Chamber of Commerce and Industry
Australian Dairy Authority Standards Committee
Australian Dairy Farmers Federation
Australian Dairy Products Federation
Commercial Refrigeration Manufacturers Association of Australia
Dairy Industry Association of Australia
Metal Trades Industry Association of Australia
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This Standard was issued in draft form for comment as DR 95059.

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PREFACE

This Standard is a revision of AS 1187—1988, Refrigerated bulk milk tanks.

The title of this new edition has been changed to Farm milk cooling and storage systems to reflect the extended scope of the Standard, to accommodate larger storage vessels that may be installed externally, and the use of precooling equipment to cool milk before it enters the storage vessel.

The specifications for materials, construction, electrical components and installation remain the same as in the 1988 edition, but the following major changes have also been made:

- (a) The specification for the dip stick for measuring milk volume has been deleted. In its place, reference is made to the use of milk volume measuring devices that comply with National Standards Commission patterns and requirements.
- (b) The former test house facility that was used for testing refrigerated farm milk tanks is no longer available in Australia and in any case, would not have been suitable for testing larger installations with precooling equipment. The formal test protocol, set out in Appendix A of the 1988 edition has therefore been deleted. In its place, the required achievement of the cooling/refrigeration performance be as specified in this Standard, and this conformance be marked by the manufacturer on the storage vessel.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

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SECTION 1 GENERAL

1.1 SCOPE This Standard sets out minimum requirements for the design, construction and performance of bulk milk cooling and storage systems on farms.

NOTES:

- 1 The Standard does not include all the electrical safety requirements with which the electrical equipment incorporated in the bulk milk cooling and storage systems on farms should comply; therefore, reference should be made to relevant Standards Australia Approval and Test Specifications.
- 2 The tanks may or may not be intended to be used as measures for the volume of contents for trading.
- **1.2 REFERENCED DOCUMENTS** The documents below are referred to in this Standard:

AS	
1359	Rotating electrical machines—General requirements
1360 1360.11	Rotating electrical machines of particular types or for particular applications Part 11: Dimensions and performance of small power electrical machines
1449	Wrought alloy steels—Stainless and heat resisting steel plate, sheet and strip
1528	Tubes (stainless steel) and tube fittings for the food industry
2052	Metallic conduits and fittings
2053	Non-metallic conduits and fittings
2300 2300.1.3	Methods of chemical and physical testing for the dairying industry Method 1.3: General methods and principles—Determination of fat—Gravimetric method
2300.1.8.2	Method 1.8.2: General methods and principles—Assessment of instrumental methods—Infrared spectrometric analysis of milk.
2536	Surface texture
3000	Electrical installations—Buildings, structures and premises (Known as the SAA Wiring Rules)
3116	Approval and test specification—Electric cables—Elastomer insulated—For working voltages up to and including 0.6/1 kV.
3147	Approval and test specification—Electric cables—Thermoplastic insulated—For working voltages up to and including 0.6/1 kV
3187	Approval and test specification—Mineral-insulated metal-sheathed cables
3191	Approval and test specification—Electric flexible cords.
NSC 114	Pattern approval specifications for farm milk tanks. National Standards Commission Australia (NSC) Document 114, 2nd ed. Draft 4 and subsequent editions, 12 Lyon Park Road, North Ryde, NSW 2113, Australia, 1991.