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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 10942-2017

Replacing GB/T 10942-2001

Refrigerated bulk milk tanks

散装乳冷藏罐

(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 10942-2001 "bulk milk cold storage tank." this standard compared with GB/T 10942-2001, in addition to editorial changes outside the main technical changes are as follows.

- Modify the term atmospheric pressure tank (see 3.3);
- Modify the water reference standard (see 3.26);
- Modify the "insulation" term (see 4.2.4, 2001 5.4);
- Modify the "support" term (see 4.2.5, 2001 version 5.5);
- Modify the term "circular force" (see 4.2.7a), 5.2.8, 2001 edition 5.7a), 15.8);
- Modify the "milk import" terminology (see 4.2.8, 2001 version 5.8);
- Added "including outlet valve" [see 4.2.9a), 2001 version 5.9a)];
- Modify the provisions of the discharge pipe plug [see 4.2.9d), 2001 version 5.9d)];
- Added "the delay time is first filled from the milk tank" (see 4.3.3, 2001 version 6.3);
- Added "milk temperature measuring instrument should have a clearly visible scale," (see 4.1.1, 2001 version 7.1);
- Removed "When the end of the milk tank equipped with milk volume level display scale pipe device, below the scale tube, you must set a small valve, to prevent the graduated milk level gauge milk tube back to the tank, to ensure that the milk tank is not contaminated.

(2001 version 7.3);

- Corrected the differences in fat content (see 4.7.6, 2001 version 10.6);
- Increase the implementation of the standard number of provisions [see 4.9a)];
- Modify the average temperature "error" (see 5.1.1.1, 2001 edition 14.1.1);
- Increased reference standard documents (see 5.2.1, 2001 edition 15.1);
- Remedy interrupt discharge time [see 5.2.9.2e), 2001 edition 15.9.2e)];
- Uniform "power meter" "meter" terms (see 5.7.1.1.9.3.5.3.7.3.3.5.3.3.1, 2001 edition 20.1.1.9, 20.1.3.3, 20.1.3.3.1);
- Added "discharge water temperature measurement accuracy of 0.1 °C" (see 5.7.2.e), 2001 edition 20.1.2.5);
- Added "The situation where milk tank liner and cooling medium will occur" (see 5.7.2.h), 2001 edition 20.1.2.8);
- Added "join the first milk" (see 5.7.2.j), 2001 edition 20.1.2.10);
- Modify the time interval between the cooling (see 5.3.3.2.2, 2001 edition 20.1.3.3.2);
- Correct the limits of the ambient temperature in the insulation test (see 5.9.1, 2001 edition 20.3.1);
- Modify the provisions of sampling from other creamy layers [see 5.12.3b), 2001 edition 20.6.2.3b)];
- In the test report adds "the implementation of standard labeling" (see 6.11);
- Modify the "nominal parameters" terms [see 6.1k), 2001 edition 21.1.k)];
- Removed "and includes English text" [see 6.1r), 2001 edition 21.1q)];
- Added information appendix A.

This standard uses the redrafted law to amend the use of ISO 5708:1983 "bulk milk cold storage tank." this standard compared with ISO 5708:1983 in the structure there are more adjustments listed in Appendix A of this standard and ISO 5708:1983 Chapter number control list.

This standard and ISO 5708:1983 there are technical differences, the provisions of these differences have been passed in the outer margin of the margin the vertical single line (-) is marked.

This standard and ISO 5708:1983 technical differences and the reasons are as follows.

- On normative references, this standard made a technical difference with the adjustment to adapt to China's technical conditions, adjust the situation Concentration reflected in the

second chapter "Normative references", the specific adjustments are as follows.

- Remove the reference standard for dairy product standard sampling (see 3.25);
 - GB 5749-2006 replaced by international standards for drinking water (see 3.26);
 - GB/T 1031 instead of ISO/R468 (see 4.1);
 - ISO 683/13 replaced by GB/T 3280 (see 4.1);
 - GB 9237 replaces ISO/R1662 (see 4.5, 5.5.1);
 - Replace ISO .1992-2 with GB/T 21000.1 equivalent to international standards (see 5.1.1, 5.2.1);
 - IEC 60529:2001 is replaced by GB/T 4208 equivalent to international standards (see 5.2.7).
- Modify the implementation of the standard number [see 4.9a)].

This standard made the following editorial changes.

--- Added information appendix A.

This standard is proposed by the China Machinery Industry Federation.

This standard by the National Agricultural Machinery Standardization Technical Committee (SAC/TC201) centralized.

This standard drafting unit. China Agricultural Mechanization Research Institute Hohhot Branch.

1 Scope

This standard specifies the scope, terminology, technical requirements, test methods, test reports bulk milk cold storage tank (hereinafter referred to as milk tank).

This standard applies to farm, milk collection point of the second milk (24h) and four milk (48h) automatic control of fixed or mobile Bulk milk cold storage tank.

Note: This standard does not cover electrical safety requirements.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1031 Geometrical product specifications (GPS) Surface texture Profile method
Surface roughness parameters and their values GB/T 3280 stainless steel cold-rolled steel
sheet and strip GB/T 4208 enclosure protection (IP code) (GB/T 4208-2008, IEC

60529:2001, IDT) GB 5749 drinking water health standards GB 9237 refrigeration and heating mechanical refrigeration system safety requirements GB/T 21000.1 Commercial refrigerators test methods - Part 1. General test conditions and temperature test (GB/T 21000.1-2007, ISO .1992-2.1973, ISO .1992-3.1973, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

Bulk milk refrigerated containers refrigerated bulk milk tank with storage of bulk milk and cold storage tank-shaped equipment.

Automatic control of automatic control Under normal working conditions, the function of the device itself to control, without the operator manual operation.

Atmospheric pressure tank atmospheric tank the working pressure of the liner is designed to be atmospheric pressure.

Vacuum tank Liner working pressure designed to be lower than atmospheric pressure in the tank.

Blender agitator

For stirring, to promote heat transfer, to ensure uniform distribution of milk fat device.