National Standards Commission

Certificate of Approval

No 8/34

Issued under Regulation 9
of the
National Measurement (Patterns of Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

Frigrite Model CP 9000 Farm Milk Tank

submitted by Frigrite Refrigeration
27 Grange Road
Cheltenham VIC 3192.

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

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CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/12/91.
This approval expires in respect of new instruments on 1/12/92.

Instruments purporting to comply with this approval shall be marked NSC No 8/34 and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the drawings and specifications lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Special:

Instruments purporting to comply with this approval shall conform with the relevant requirements of Australian Standard AS 1187-1988 for Refrigerated Farm Milk Tank-units.

DESCRIPTIVE ADVICE

Pattern: approved 3/11/86

- A Frigrite model CP 9000 refrigerated farm milk tank of 9 000 L capacity.

Variant: approved 3/11/86

1. In other capacities as listed in Table 1.

Technical Schedule No 8/34 describes the pattern and variant 1.

Variant: approved 9/11/90

2. In other capacities as listed in Table 2.

Technical Schedule No 8/34 Variation No 1 describes variant 2.

FILING ADVICE

Certificate of Approval No 8/34 dated 15/10/87 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises.

Certificate of Approval No 8/34 dated 18/2/91
Technical Schedule No 8/34 dated 15/10/87 (incl. Table 1)
Technical Schedule No 8/34 Variation No 1 dated 18/2/91 (incl. Table 2)
Test Procedure No 8/34 dated 15/10/87
Figures 1 to 3 dated 15/10/87

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 8/34

Pattern: Frigrite Model CP 9000 Farm Milk Tank

Submittor: Frigrite Refrigeration
27 Grange Road
Cheltenham Vic 3192

1. Description of Pattern

(i) The pattern (Figure 1 and Table 1) is a dome top farm milk tank of 9000 L capacity. The tank is a vertical stainless steel cylinder (vessel) sheathed in an outer casing of stainless steel; the cavity between is filled with insulating material. The bottom of the vessel is in the form of an offset cone sloping to the outlet control valve (Figure 2) with no intermediate shut-off. The lower portion of the tank is refrigerated.

(ii) The integral dome top (Figure 2) has two dipstick sockets located equidistant from the centre of the tank and an access hole located such that the surface-condition of the milk may be readily observed during dipping.

(iii) There are three uniformly spaced level marks on the outside of the tank and in the same horizontal plane as the level mark on the rear of the dipstick. Levelling is effected by means of adjustable legs.

(iv) The dipstick sockets and dipstick are shown in Figure 3.

1.1 Markings

The following is marked on a nameplate permanently attached to the instrument in a clearly visible location:

Manufacturer's name or mark
Model number
Serial number
NSC approval number NSC No 8/34
Maximum capacity
Year of manufacture

Also a notice adjacent to one dipstick socket is marked LEVEL CONDITION OF TANK TO BE ADJUSTED IF DIPSTICK READING FROM BOTH SOCKETS DIFFER BY MORE THAN 1 mm.

1.2 Verification Provision

Provision is made for a verification mark to be applied.

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2. Description of Variant 1

Similar to the pattern but in other capacities as listed in Table 1.

TABLE 1

Model	Capacity (litres)	Number of Legs	Diameter (mm)	Height (mm)
CP 9000	9000	6	2438	2714
CP 6600	6600	6	2540	2032
CP 4500	4500	6	2083	2032
CP 3600	3600	4	2083	1727

TEST PROCEDURE No 8/34

Tests should be conducted in accordance with the Provisions of the Inspectors Handbook (May 1987) or as below.

Maximum Permissible Error

For farm milk tanks, the maximum permissible error shall not exceed the limitation of error specified in the National Standards Commission Document 118.

* ±1 scale interval at any scale mark on the dipstick.

1. Performance Testing

(a) Wet the tank thoroughly by flushing the sides of the tank with water.

(b) Drain the tank with the outlet valve open for one minute after the continuous flow of water has ceased. Close the outlet valve and check that there are no residual pools of water remaining in the tank.

(c) Ensure that the tank drains freely to the outlet.

The ability to drain freely is checked in the following manner:

(i) Level the tank.

(ii) Flush the tank with water to wet the surface thoroughly and allow to drain for four minutes.

(iii) Close the outlet valve and deliver 40 L of water into the tank. Open the outlet valve and allow the tank to drain under gravity for one minute, then close the outlet valve.

(iv) Place a container under the outlet valve.

(v) Open the outlet valve and collect the drainings over a period of four minutes.

The volume of water collected should not exceed 160 mL.

(d) When verifying/reverifying a farm milk tank, determine the accuracy of the dipstick by delivering a measured quantity of water into the tank at the following volumes, and reading the dipstick.

(i) The lowest scale mark.

(ii) At least three, approximately evenly spaced, intermediate scale marks.

(iii) The highest scale mark.

(e) Check that the water level coincides with the datum mark on the dipstick and the tank datum level marks.

*NOTE: The maximum permissible error shown is that error applicable as at May 1987.

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(f) Drain the tank.

(g) With the tank empty, recheck that the level indicating device is centrally located.

Rigidity of the tank is satisfactory if the displacement of the level indicating device from its central position does not exceed 0.25 of a dipstick scale interval.

2. Test for Strength of the Bridge on a Farm Milk Tank

Fill the tank to a scale mark and apply a static load of 100 kg to any position on the bridge.

The strength of the bridge is satisfactory if the dipstick reading does not change by more than 0.5 of a scale interval.

(The test may be repeated for different positions on the bridge).

National Standards Commission

TECHNICAL SCHEDULE No 8/34

VARIATION No 1

Pattern: Frigrite Model CP 9000 Farm Milk Tank.

Submittor: Frigrite Refrigeration
27 Grange Road
Cheltanham VIC 3192.

1. Description of Variant 2

In certain capacities as listed in Table 2.

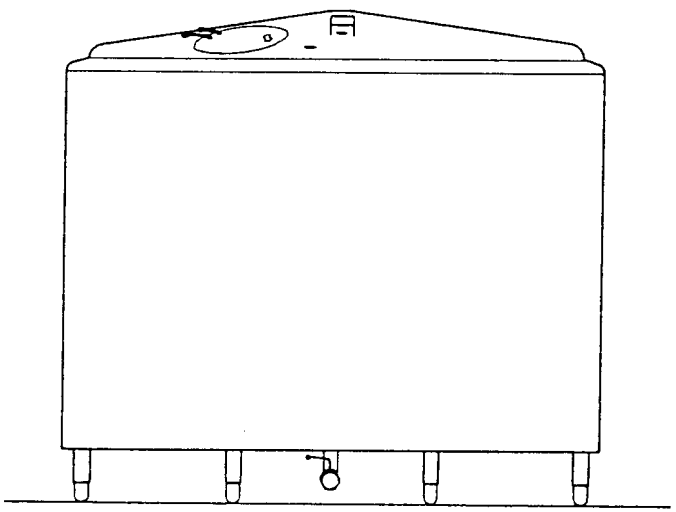
TABLE 2

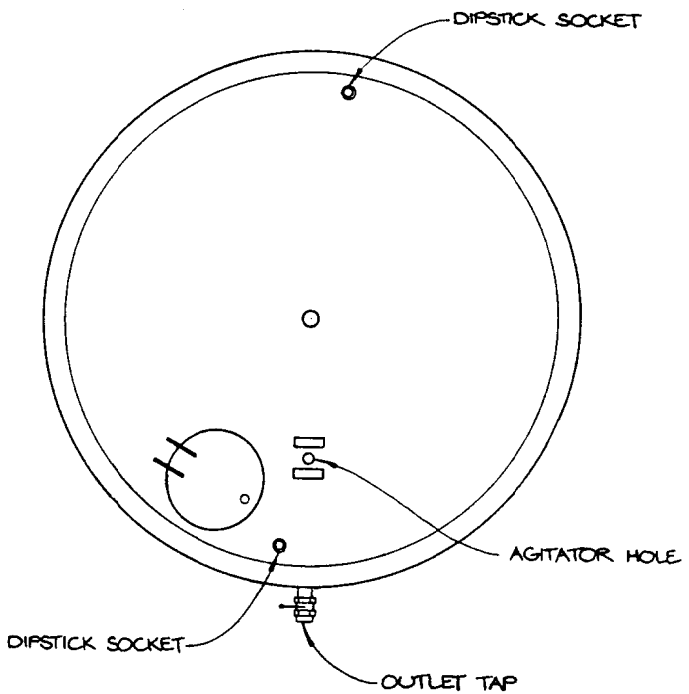
Model	Capacity (litres)	Number of Legs	Diameter (mm)	Height (mm)
CP 4800	4 800	6	2 083	2 032
CP 3800	3 800	4	2 083	1 727

FIGURE 8/34 - 1

Frigrite CP9000 Farm Milk Tank

FIGURE 8/34 - 2





Typical Top Access Tank

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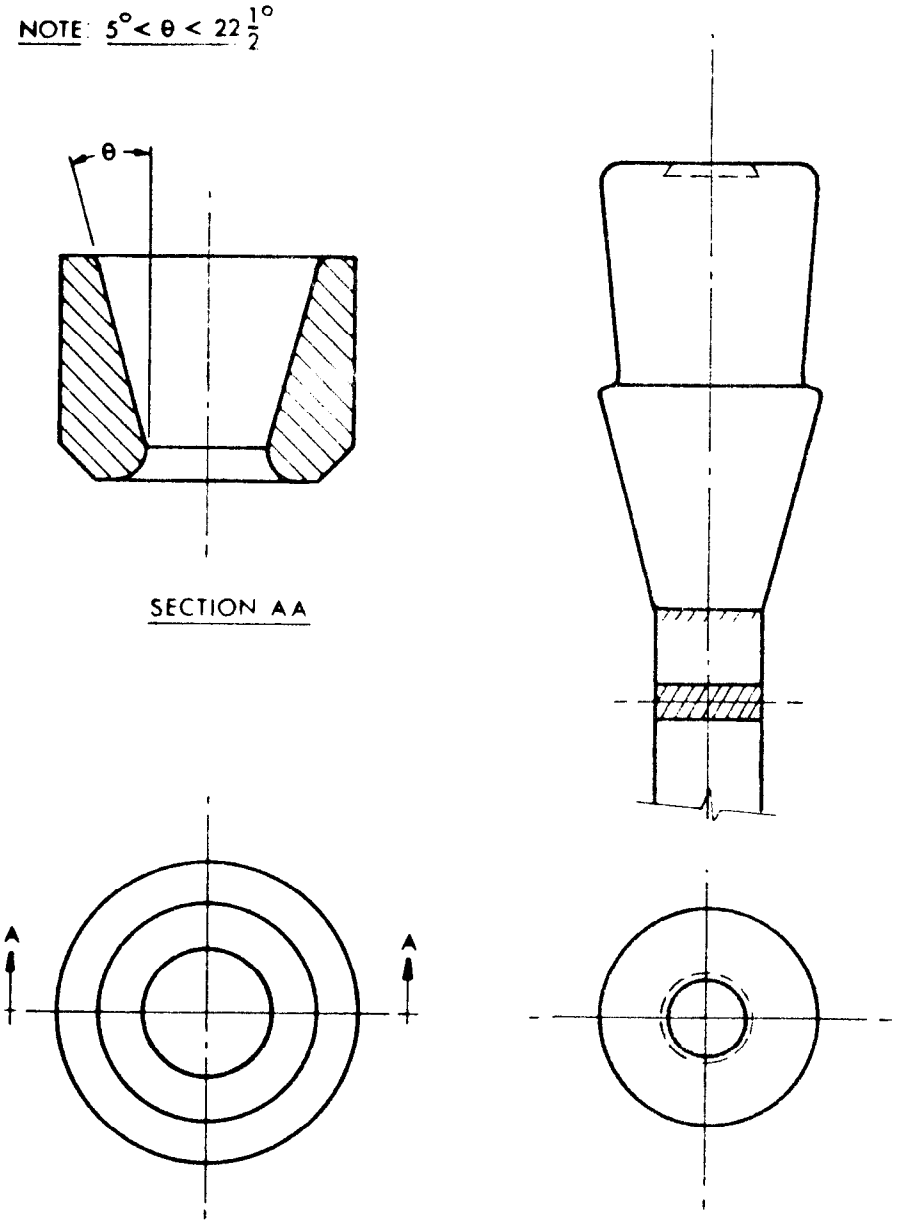
FIGURE 8/34 - 3



Dipstick-plug And Socket