



R S.

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 5/6E/10

This is to certify that an approval has been granted that the pattern of the Neptune Model RSS Alimentary Flowmetering System

submitted by Norman J Hurl & Co (Aust) Pty Ltd
14 Aristoc Road
Glen Waverley Vic 3150

is suitable for use for trade.

Conditions of Approval

General:

This approval is subject to review on or after 1/3/90.

Instruments purporting to comply with this approval shall be marked NSC No 5/6E/10.

This approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.

Special:

Any additional auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0.

Signed

Executive Director

Descriptive Advice

Pattern: approved 14/2/85

. Neptune flowmetering system with a model RSS oscillating piston meter approved for transferring alimentary products.

Technical Schedule No 5/6E/10 describes the pattern.

Filing Advice

The documentation of this approval comprises:

Certificate of Approval No 5/6E/10 dated 22/8/85
Technical Schedule No 5/6E/10 dated 22/8/85
Test Procedure No 5/6E/10 dated 22/8/85
Figures 1 and 2 dated 22/8/85



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6E/10

Pattern: Neptune Model RSS Alimentary Flowmetering System

Submitter: Norman J Hurll & Co (Aust) Pty Ltd
14 Aristoc Road
Glen Waverley Vic 3150

1. Description of the Pattern

A flowmetering system (Figures 1 and 2) with maximum and minimum flow rates of 560 L/min and 250 L/min respectively, for use in fixed installations for bulk transfer of milk, water or other alimentary products with similar viscosity. The minimum delivery is 1000 L.

1.1 The System

- (a) A supply tank.
- (b) The pipework from the supply tank has a continuous fall to the centrifugal pump.
- (c) A Chicargo gas purger.
- (d) A Neptune model RSS 50 mm (2") oscillating piston meter.
- (e) A Neptune model 441 single-handle indicator or a model 443 zero-start single-handle indicator/ticket printer, both of which have 5 wheels and have 1 litre intervals.
- (f) A spring-loaded non-return valve located adjacent to and downstream of the meter.

Notes: The system is constructed such that the meter does not have variable back-pressure.

A strainer and product sampler may be fitted; the quantity extracted by the sampler is included in the calibration adjustment.

1.2 Markings

The following information shall be clearly and permanently marked on one or more permanently attached nameplates:

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval number	5/6E/10
Maximum flowrate	560 L/min
Minimum flowrate	250 L/min
Minimum delivery	1000 litres
Viscosity range (mPa.s) or type of liquid	

Note: The oscillating piston is to be marked with the same serial number as the meter.

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Sealing

The calibration device in the indicator is sealed.

TEST PROCEDURE No 5/6E/10

Complete one or more deliveries and check the volume indicator against the actual delivered volume. The results shall be within the maximum permissible errors as set out in Document 118.

The instrument is to be tested with the product marked on the data plate and the system is either primed before commencing the delivery, or the priming quantity marked on the data plate is added to the quantity measured.

1. Empty Compartment Test

Either;

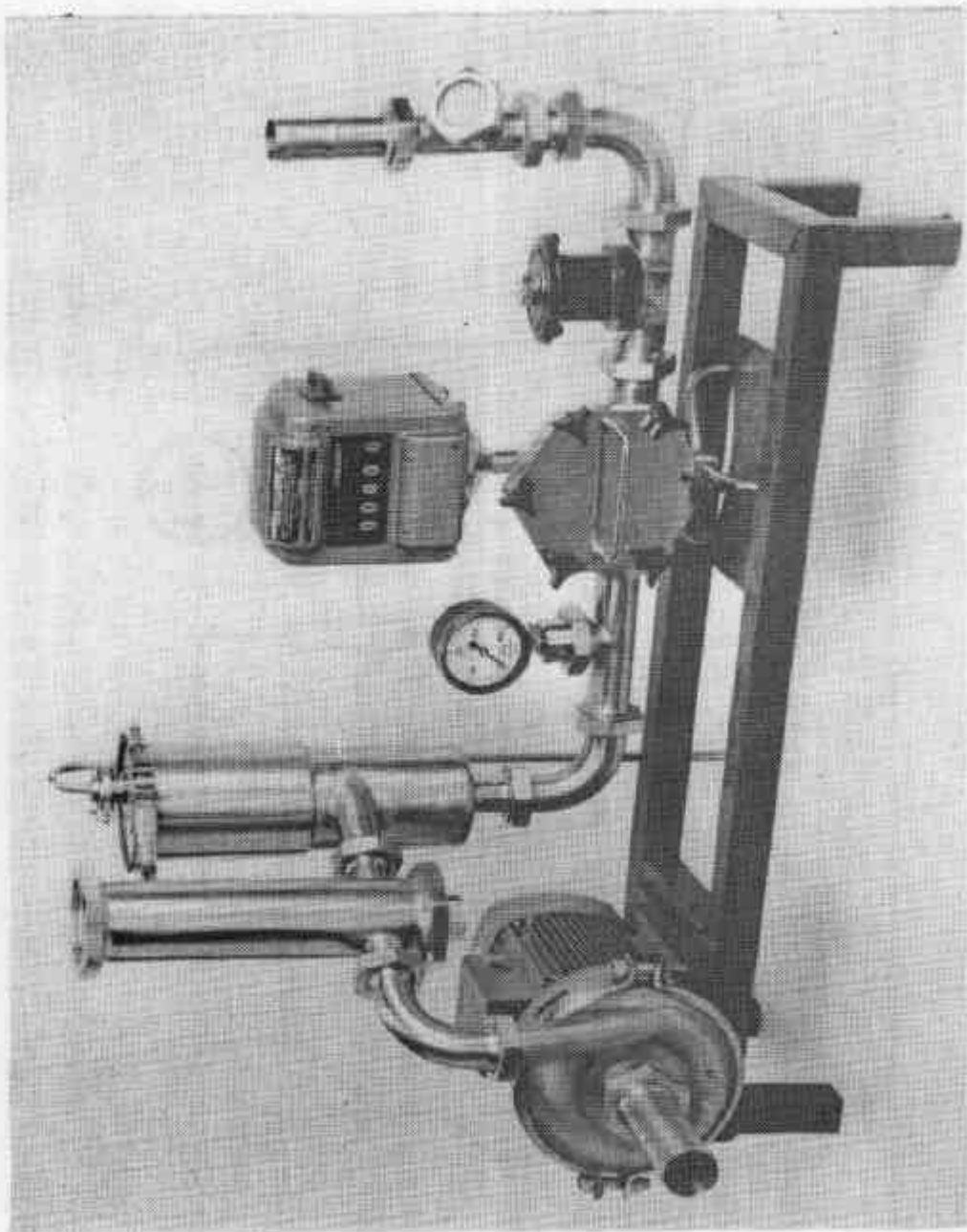
- (a) Allow the supply to run dry during a test delivery; stop the pump motor and refill or change the supply tank, then start the pump motor to allow the delivery into the proving measure to continue, or
- (b) Allow the proving measure to run dry during a test delivery.

Note: This test should only be carried out where it could be expected that a tank will be completely emptied during a normal day's delivery.

2. Syphoning Test

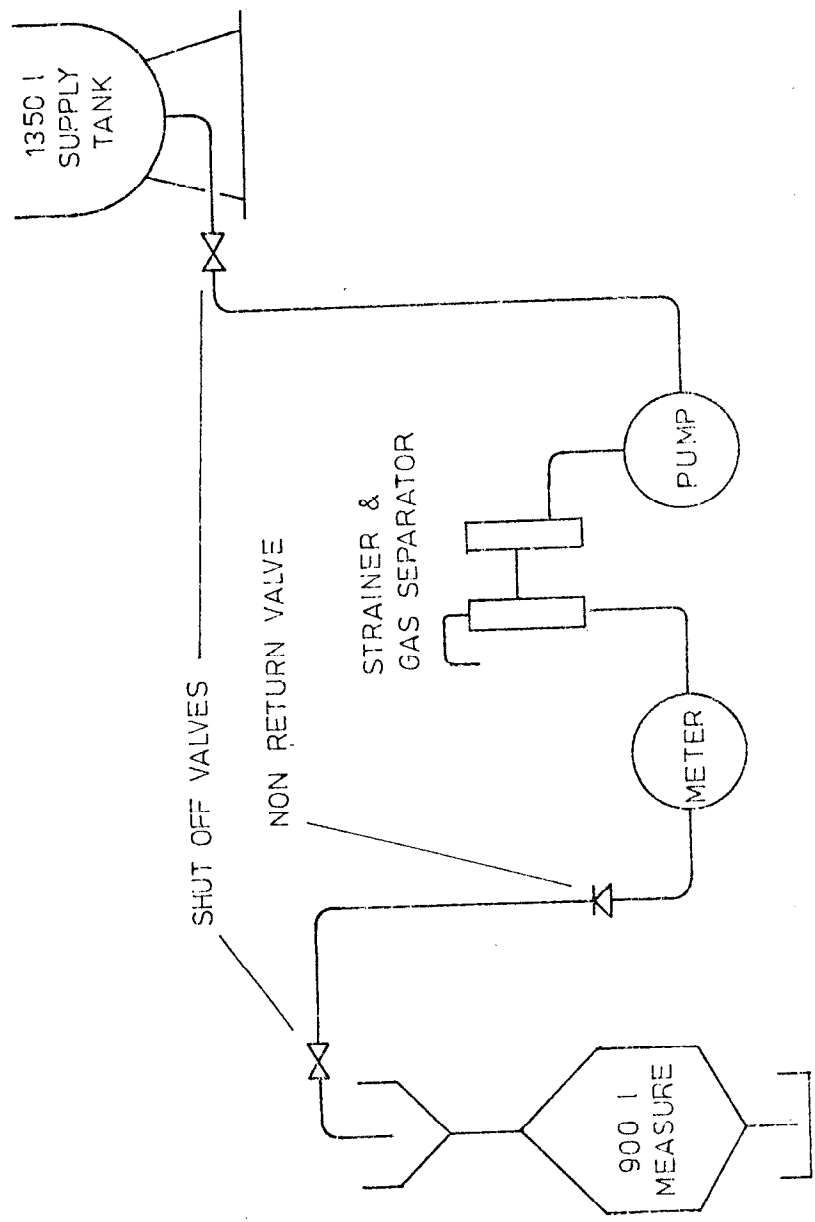
To test for syphoning or gravitational feed, stop the pump during a delivery and observe that flow has stopped.

FIGURE 5/6E/10 - 1



Neptune RSS Flowmetering System

FIGURE 5/6E/10 - 2



Schematic of System