

National Standards Commission



Certificate of Approval

No 5/6E/11A

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

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

OT Model 42-1035 Milk Flowmetering System

submitted by Koltek Oy
PO Box 18
Kuussillantie 18
SF-01231 Vantaa FINLAND.

This Certificate is issued upon completion of a review of NSC approval No 5/6E/11.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/11/97.
This approval expires in respect of new instruments on 1/11/98.

Instruments purporting to comply with this approval shall be marked NSC No 5/6E/11A and only by persons authorised by the submitter.

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

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation 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.

DESCRIPTIVE ADVICE

Pattern: approved 27/10/92

. An OT model 42-1035 milk flowmetering system.

Variants: approved 27/10/92

1. A model 42-1036 or 42-1037 flowmetering system.
2. A model 42-1236 or 42-1237 flowmetering system.

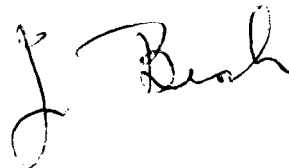
Technical Schedule No 5/6E/11A describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 5/6E/11A dated 15/12/92
Technical Schedule No 5/6E/11A dated 15/12/92 (incl. Test Procedure)
Figures 1 to 6 dated 15/12/92

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





National Standards Commission

TECHNICAL SCHEDULE No 5/6E/11A

Pattern: An OT Model 42-1035 Milk Flowmetering System.

Submittor: Koltek Oy
PO Box 18
Kuussillantie 18
SF-01231 Vantaa Finland.

1. Description of Pattern

An OT model 42-1035 flowmetering system using an OT model 10-3125 rotary piston flowmeter approved for use with maximum and minimum flow rates of 280 and 75 L/min respectively. The minimum delivery is 200 litres.

The system may be in either fixed or vehicle-mounted installations, and is approved for use with milk, alcohol, fruit juice or other liquid alimentary products of similar viscosity.

1.1 The System (Figures 1 and 3)

- (i) A supply tank.
- (ii) A positive displacement type pump. The pipework from the supply tank has a continuous fall to the pump.
- (iii) An OT model 20-2605 51 mm air eliminator fitted between the pump and the meter.
- (iv) An OT model 10-3125 51 mm rotary piston meter (Figure 2) mounted horizontally.
- (v) A Veeder-Root model VR7887 mechanical indicator with either an accumulative or zero-start ticket printer.
- (vi) A Koltek spring-loaded non-return valve located downstream of the meter.
- (vii) A strainer may be fitted upstream of the meter. A flow control valve/device may be fitted downstream of the meter.
- (viii) An OT automatic product sampler may be fitted. The quantity extracted by the sampler is included in the calibration adjustment.

1.2 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

1.3 Markings

The following information should 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/11A
Maximum flow rate L/min
Minimum flow rate L/min
Minimum quantity L
Priming quantity L
Approved for use with (product)

2. Description of Variants

2.1 Variant 1

Other model flowmetering systems (Figure 3) as listed below, using a model 10-3127 76 mm rotary piston flowmeter:

- A model 42-1036 flowmetering system approved for use with maximum and minimum flow rates of 750 L/min and 100 L/min respectively. The system includes a model 20-2706 63.5 mm air eliminator.
- A model 42-1037 flowmetering system approved for use with maximum and minimum flow rates of 1000 L/min and 100 L/min respectively. The system includes a model 20-2607 76 mm air eliminator.

2.2 Variant 2

Other model flowmetering systems (Figure 4) as listed below:

These systems include a model PD340-C63 63.5 mm electromagnetic flowmeter (Figure 5) and a Contrec model 411 indicator (Figure 6) which has battery backup for the 'total' displays.

- A model 42-1236 flowmetering system approved for use with maximum and minimum flow rates of 750 L/min and 100 L/min respectively. The system includes a model 20-2706 63.5 mm air eliminator.
- A model 42-1237 flowmetering system approved for use with maximum and minimum flow rates of 1000 L/min and 100 L/min respectively. The system includes a model 20-2607 76 mm air eliminator.

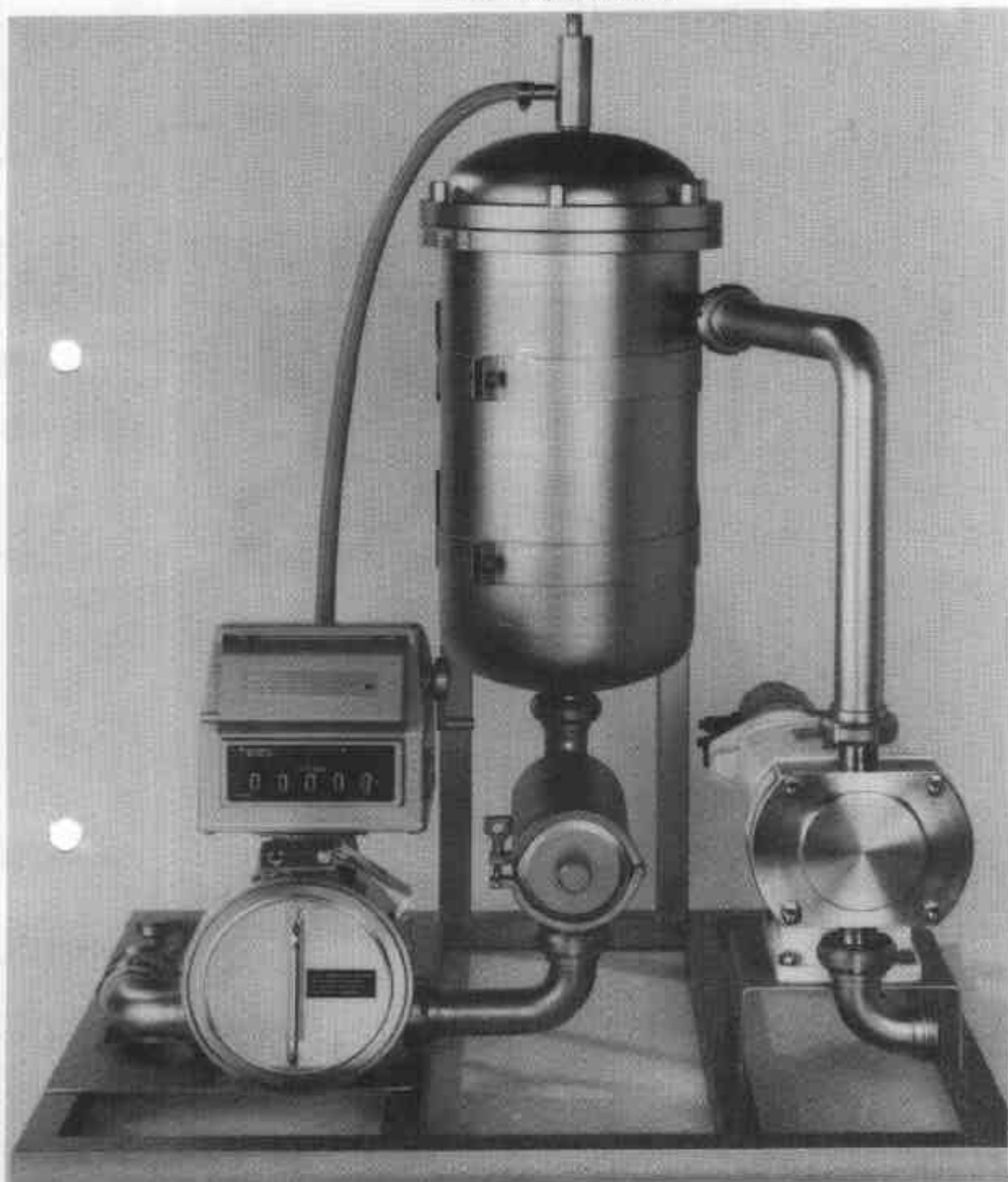
TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

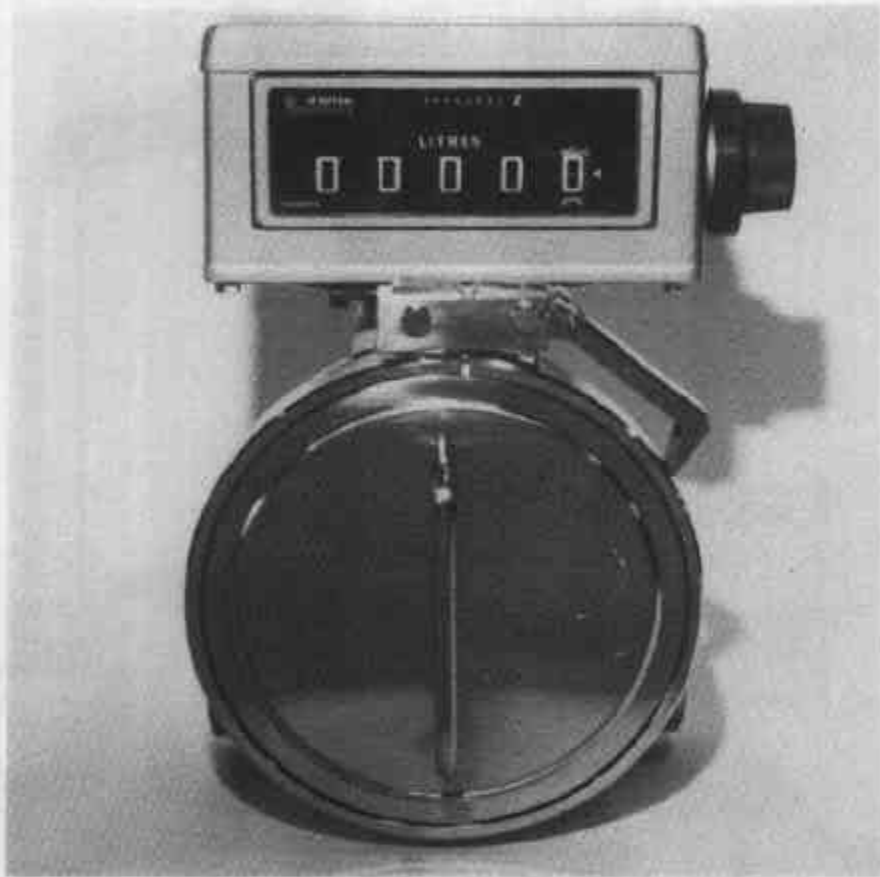
The maximum permissible error applied during a verification test from normal flow rate to the minimum flow rate specified in the Certificate of Approval or Technical Schedule is $\pm 0.3\%$.

FIGURE 5/6E/11A - 1



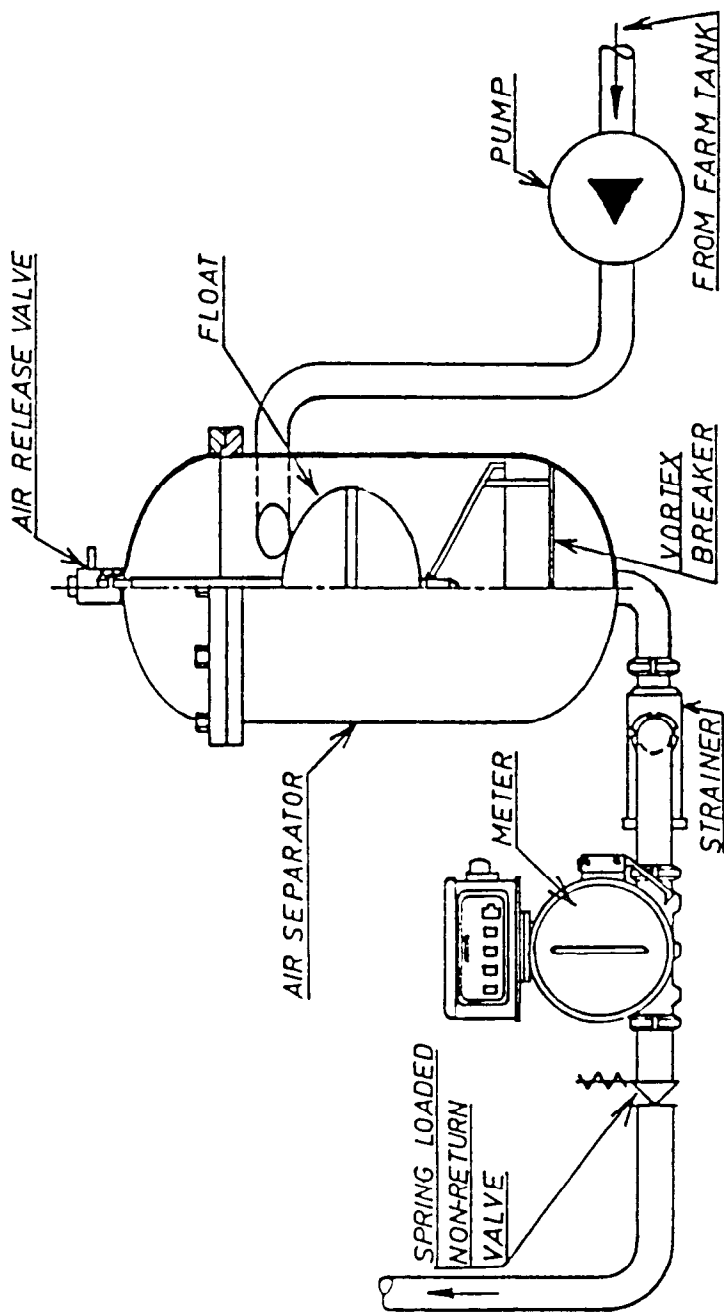
OT Model 42-1035 Milk Flowmetering System

FIGURE 5/6E/11A - 2



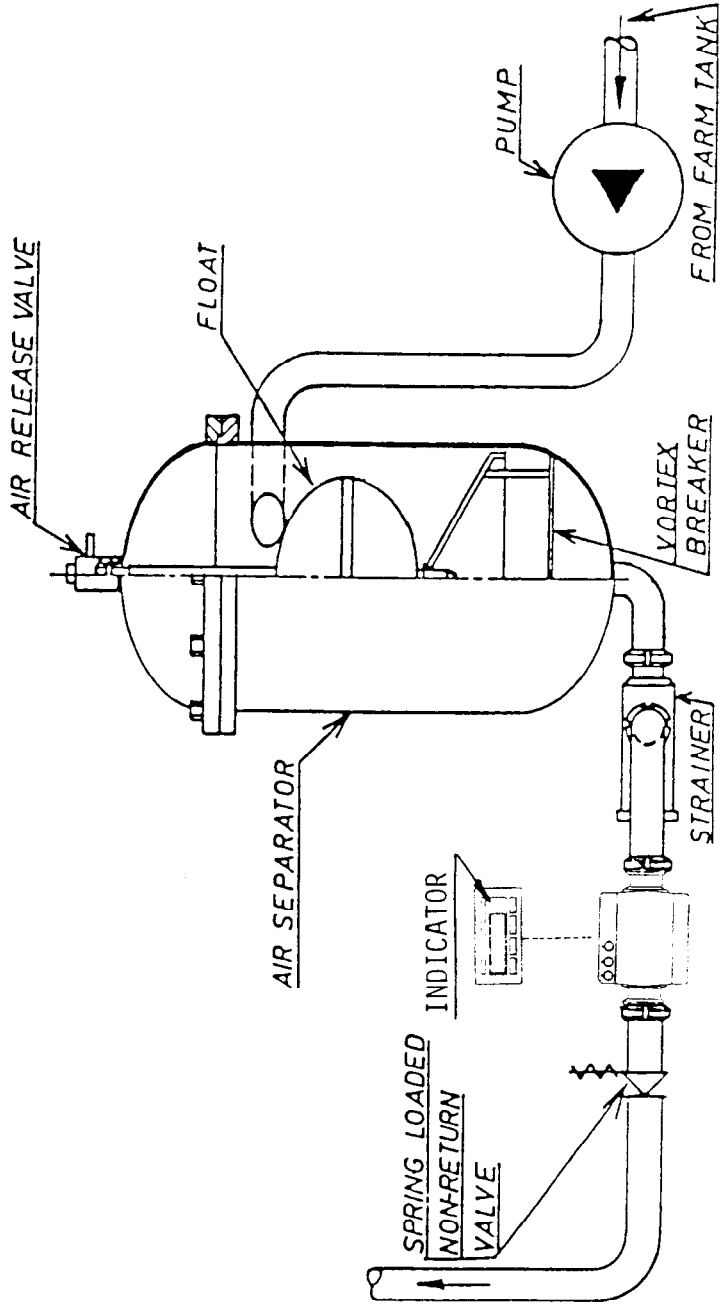
OT Model 10-3125 Flowmeter

FIGURE 5/6E/11A - 3



Typical System - Pattern & Variant 1

FIGURE 5/6E/11A - 4



Typical System - Variant 2

FIGURE 5/6E/11A - 5



OT Model PD340-C63 Flowmeter

FIGURE 5/6E/11A - 6



Contrec Model 411 Indicator