5/6E/14
28 February 2005

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Cancellation

Certificate of

Approval No 5/6E/14

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in approval 5/6E/14 respect of the

DME Model MIF PD 340 C63 Milk Flowmetering System

submitted by Diessel GmbH & Co
Postfach 10 03 63
31103 Hildesheim
GERMANY

has been cancelled in respect of new instruments as from 1 June 2005.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the National Measurement Regulations 1999.

National Standards Commission

Certificate of Approval

No 5/6E/14

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

DME Model MIF PD 340 C63 Milk Flowmetering System

submitted by Danish Machine Engineering Ltd
100 Arnold Street
Cambridge NEW ZEALAND.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 April 2001, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 5/6E/14 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 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.

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.

Special: (for Provisional Variant 1)

Instruments purporting to comply with this approval shall be marked NSC No P5/6E/14 and only by persons authorised by the submittor.

Instruments installed under this approval are to be re-verified at six-monthly intervals. The submittor is to arrange such tests and is to send the results to the Commission.

In the event of unsatisfactory performance or of suitable test results not being received by the Commission, this approval may be withdrawn.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 15 March 1996
approved 31 May 1996

- A vehicle-mounted milk flowmetering system using a DME model MIF PD 340 C63 electromagnetic flowmeter.

Technical Schedule No 5/6E/14 describes the pattern.

Variant: provisionally approved 4 September 1997

1. With an APV model Robus self-priming pump.

Variant: approved 27 February 1998

2. With a larger capacity DME float-operated air eliminator.

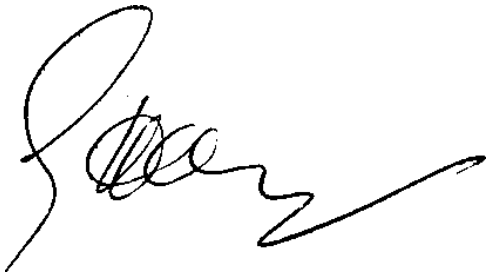
Technical Schedule No 5/6E/14 Variation No 1 describes variants 1 and 2.

FILING ADVICE

Certificate of Approval No 5/6E/14 dated 30 July 1996 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 5/6E/14 dated 4 July 1998
Technical Schedule No 5/6E/14 dated 30 July 1996 (incl. Test Procedure)
Technical Schedule No 5/6E/14 Variation No 1 dated 4 July 1998
Figures 1 to 3 dated 30 July 1996
Figure 4 dated 4 July 1998

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/14

Pattern: DME model MIF PD 340 C63 Milk Flowmetering System.

Submittor: Danish Machine Engineering Ltd
52 Tennyson Street
Cambridge New Zealand.

1. Description of Pattern

A vehicle-mounted milk flowmetering system using a DME model MIF PD 340 C63 electromagnetic flowmeter approved for use as a receival system with maximum and minimum flow rates of 600 and 100 L/min respectively. The minimum quantity is 200 L.

The system operates from either a 12 or 24 volts DC electrical supply.

1.1 The System (Figure 1)

(i) A supply tank.

(ii) The pump may be fitted in either a **suction lift** or **suction head** (flooded suction) installation, i.e. either above or below the liquid level in the supply tank, depending on the type of pump used.

Positive displacement type pumps may be fitted in either **suction lift** or **suction head** installations.

Centrifugal type pumps shall be fitted in **suction head** installations.

(iii) A DME float-operated air eliminator (Figure 1) fitted between the pump and the meter.

A pneumatic spring-loaded vent valve is fitted at the top of the eliminator. The vent valve incorporates an air detection sensor which opens the vent valve when air is detected and prevents any air from passing through the meter.

The air eliminator is equipped with a valving system for automatic CIP (clean-in-place) cleaning.

(iv) A DME model MIF PD 340 C63 electromagnetic flowmeter (Figure 2) which is vertically mounted.

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(v) A spring-loaded non-return valve located adjacent to and upstream of the meter (Figure 1) which opens at pressures above 20 kPa.

(vi) An optional DME model PVII product sampler and/or strainer may be fitted upstream of the meter.

(vii) A DME model "Truck Computer" version 3.1 type 120145 indicator/totaliser (Figure 3) incorporating the following features:

- A (resettable) LED display of quantity delivered in litres;
- A display of the daily quantity delivered (resettable) and the total quantity (non-resettable) by pressing the appropriate keys on the keypad;
- An alphanumeric display for the operator communication and for the indication of error messages;
- A numeric keypad with function keys for the entry and retrieval of data;
- An alphanumeric data display; and
- Input/output sockets for the connection of auxiliary and/or peripheral devices, including printers.

1.2 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/14
Maximum flow rate	..... L/min
Minimum flow rate	..... L/min
Minimum quantity	 L
Priming quantity	..... L (#)
Approved for use with milk	

(#) This value is determined at verification/certification.

1.3 Verification/Certification Provision

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

1.4 Sealing Provision

Provision is made for the calibration adjustments in the indicator/totaliser to be sealed by using the sealable cover screws provided.

TEST PROCEDURE

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

Instruments are to be tested with milk and the system either primed with milk *before commencing the delivery, or the priming quantity marked on the data plate* is added to the quantity measured.

NOTE: The quantity required to prime the system shall be determined at *verification/certification and shall be stamped on the nameplate.* (*Refer* clause **1.2 Markings.**)

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 ±0.3%.

TECHNICAL SCHEDULE No 5/6E/14

VARIATION No 1

Pattern: DME Model MIF PD 340 C63 Milk Flowmetering System.

Submittor: Danish Machine Engineering Ltd
100 Arnold Street
Cambridge NEW ZEALAND.

1. Description of Variants

1.1 Variant 1

With an APV model Robus self-priming pump. (Refer to the Special Conditions of Approval.)

1.2 Variant 2

With a larger capacity DME float-operated air eliminator (which is nominally 930 mm high), fitted between the pump and the meter (Figure 4), instead of the similar unit of the pattern (which is nominally 680 mm high).

National Standards Commission

Notification of Change

Certificate of Approval No 5/6E/14

Change No 1

The following change is made to the approval documentation for the

DME Model MIF PD 340 C63 Milk Flowmetering System

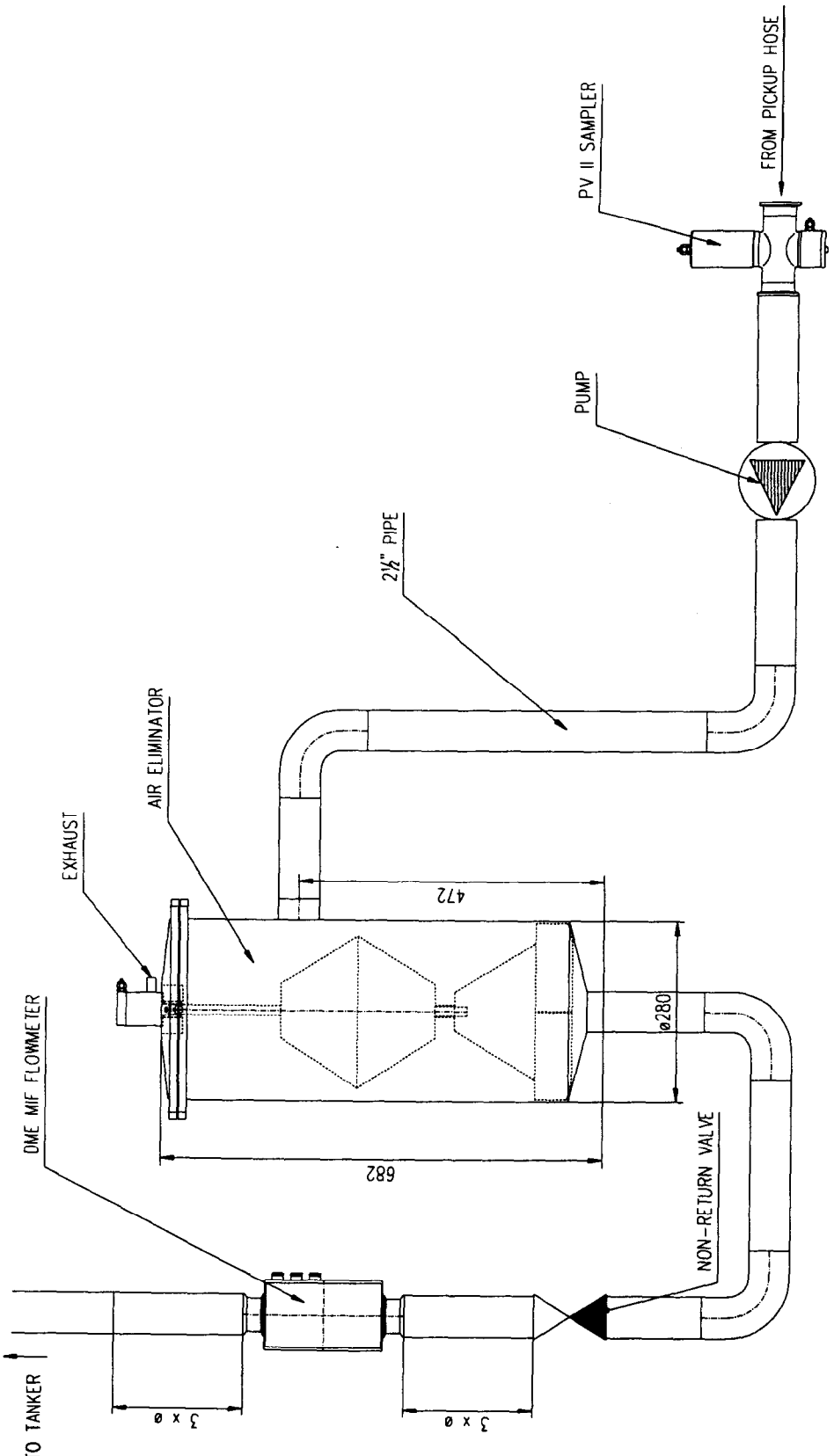
submitted by Danish Machine Engineering Ltd
100 Arnold Street
Cambridge NEW ZEALAND.

In Certificate of Approval No 5/6E/14 and its Technical Schedule Variation No 1 both dated 4 July 1998, and in Technical Schedule No 5/6E/14 dated 30 July 1996, all references to the submittor should be amended to read:

"Diessel GmbH & Co
Postfach 10 03 63
31103 Hildesheim
GERMANY"

Signed and sealed by a person authorised under Regulation 63 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

FIGURE 5/6E/14 - 1

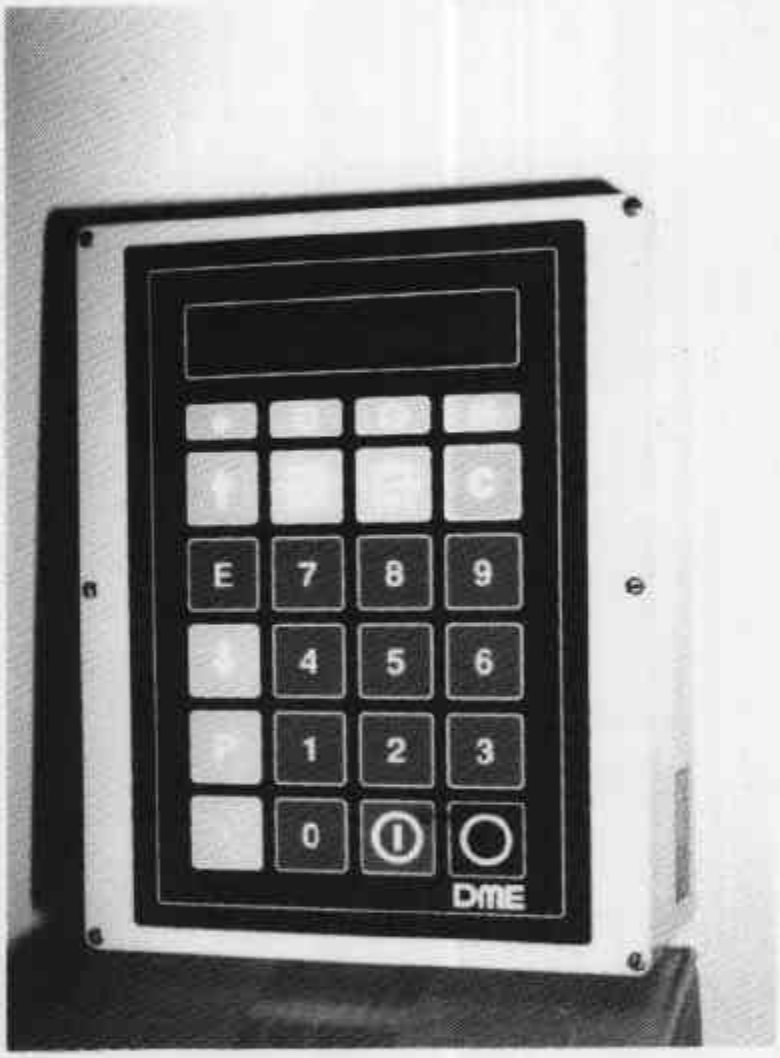


Typical DME Milk Flowmetering System

FIGURE 5/6E/14 - 2

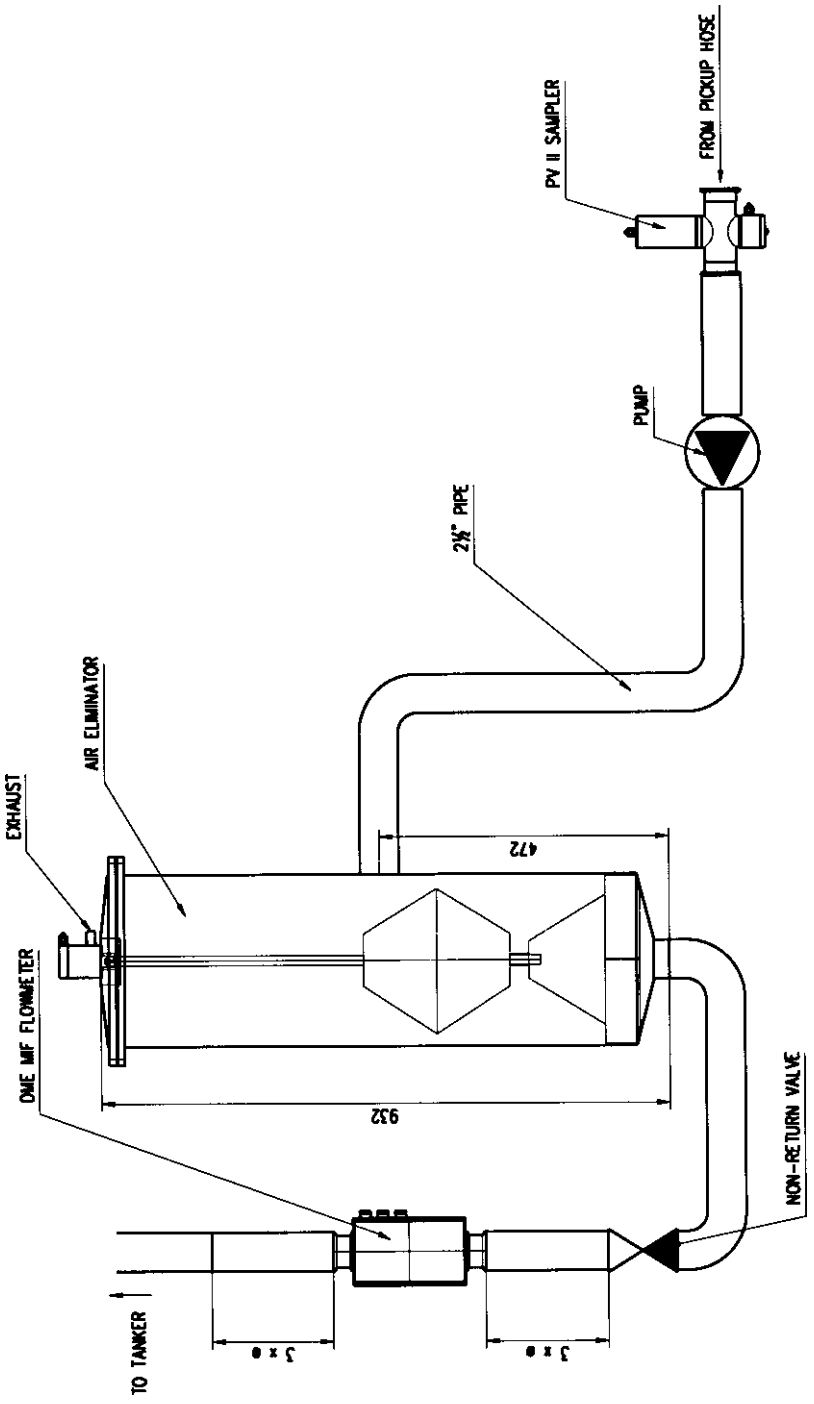
DME Model MIF PD 340 C63 Flowmeter

FIGURE 5/6E/14 - 3



DME Version 3.1 Type 120145 Indicator/Totaliser

FIGURE 5/6E/14 - 4



Typical System With Large Air Eliminator (Variant 2)