

## National Standards Commission

12 Lyonpark Road, North Ryde NSW

### Notification of Change

### Supplementary Certificate of Approval No S330

### Change No 1

The following change is made to the approval documentation for the

Natsoft Model POSV2.00c Driveway Flowmeter Control System

submitted by   National Software Pty Ltd  
                    25 York Street  
                    Launceston   TAS    7250.

In Supplementary Certificate of Approval No S330 dated 23 May 1996, the Condition of Approval referring to the expiry of the approval should be amended to read:

“This approval expires in respect of new instruments on 1 February 2003.”

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

## National Standards Commission



### Supplementary Certificate of Approval

**No S330**

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

Natsoft Model POSV2.00c Driveway Flowmeter Control System

submitted by   National Software Pty Ltd  
                  25 York Street  
                  Launceston   TAS   7250.

**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.

#### CONDITIONS OF APPROVAL

This approval is subject to review on or after 1 February 2001.  
This approval expires in respect of new instruments on 1 February 2002.

Instruments purporting to comply with this approval shall be marked NSC No S330 and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S330 in addition to the approval number of the instrument.

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.

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

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

**Special:**

Instruments are only approved for installations incorporating the Commission-approved driveway flowmeters described in this approval, and may only be used for central unit price setting of driveway flowmeters which have been Commission-approved with that facility.

DESCRIPTIVE ADVICE

**Pattern:** approved 30 January 1996

- A Natsoft model POSV2.00c control system for use in a Commission-approved flowmetering system.

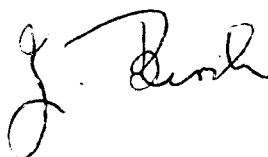
Technical Schedule No S330 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S330 dated 23 May 1996  
Technical Schedule No S330 dated 23 May 1996 (incl. Test Procedure)  
Figures 1 to 4 dated 23 May 1996

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 S330

**Pattern:** Natsoft Model POSV2.00c Driveway Flowmeter Control System.

**Submittor:** National Software Pty Ltd  
25 York Street  
Launceston TAS 7250.

#### 1. Description of Pattern

The pattern is a Natsoft model POSV2.00c control system for use in a Commission-approved flowmetering system using certain Gilbarco driveway flowmeters.

##### 1.1 The System

The system (Figure 1) may be used with up to 24 Commission-approved Gilbarco driveway flowmeters and comprises:

- a Natsoft model POSV2.00c controller;
- 1 or more Natsoft model POSV2.00c operator's consoles;
- a remote purchaser's indicator;
- 1 or 2 Gilbarco model DDM or FMS model E26B data distribution modules;
- an uninterruptable power supply (UPS); and
- a journal printer for printing receipts.

The system facilities include:

- a point of sale (POS) facility;
- an electronic funds transfer (EFT) facility;
- a facility for centrally setting the unit price (refer Conditions of Approval);
- a grade selection facility;
- a preset function which may be used for prepay transactions;
- a pump stop and all pumps emergency stop function; and
- a dual-memory facility.

##### 1.2 Controller

The Natsoft model POSV2.00c controller controls the various functions of the system including the driveway flowmeters, printer, operator's console and purchaser's indicator. The controller comprises a personal computer (PC), a PC keyboard, and a visual display unit (VDU).

The controller uses version 'POSV2.00c' software, which can be verified by "FLOWMETER CONTROLLER Version 2.00c" being displayed on the controller VDU on switch on.

The controller may be as shown in Figure 2 or in other housings and with different keyboards.

### **1.3 Console**

The Natsoft model POSV2.00c operator's console communicates with the controller and allows authorisation of the driveway flowmeters. The console consists of a PC, a VDU, a POS keyboard with optional magnetic card reader, and a PC keyboard connected to the POS keyboard. A bar code scanner and a cash drawer may also be connected to the console.

The console uses version 'POSV2.00c' software, which can be verified by "NATSOFT CONSOLE Version 2.00c" being displayed on the console VDU on switch on.

The console may be as shown in Figure 3 or in other housings and with different keyboards.

#### **1.3.1 Point of Sale Facility**

The console incorporates point of sale (POS) facilities and these shall not interact with the controller or the console in any way which would cause an incorrect indication of the measured volume or price.

#### **1.3.2 Card Reader Facility**

The optional magnetic card reader facility allows account and EFT transactions. The authorised cards may either be controlled distribution cards issued to selected users or financial institution cards available to the public.

#### **1.3.3 Dual-memory Facility**

This facility allows two purchasers to operate simultaneously, i.e. a second transaction may be carried out while a previous transaction which has not yet been completed is retained in memory.

The first purchaser carries out a delivery of fuel and the transaction data is indicated on the vendor's display. After a period of not less than 5 seconds, and once the first purchaser has hung-up the nozzle but before the first transaction has been completed, a second purchaser can be authorised for the same flowmeter.

The details of the first transaction are stored in the memory. The details of all deliveries are displayed on the vendor's display; if more than 15 flowmeters are 'active' at the same time (i.e. with a current sale and/or a memory sale) the display will show 15 flowmeters and then automatically scroll to show the remaining 'active' flowmeters.

The transactions are completed by using the appropriate flowmeter NUMBER button and the flowmeter CASH OUT button, then by entering the transaction price as indicated by the appropriate sale.

Only one transaction for each driveway flowmeter may be stored in memory at any time.

#### **1.4 Data Distribution Module**

The FMS model E26B data distribution module (Figure 4) or Gilbarco model DDM data distribution module allows the communication between the controller and the flowmeters. A second module is required if the system includes more than 12 flowmeters.

#### **1.5 Sealing and Verification/Certification Provision**

No sealing is required.

Provision is made on the controller and on the operator's console for verification/certification marks to be applied.

#### **1.6 Markings**

The controller and the operator's console are each marked with the following data, together in one location:

Manufacturer's name or mark

Model number

Serial number

NSC approval number

Operating (air) temperature range

NSC No S330

0°C to 40°C

### **TEST PROCEDURE**

Instruments should be tested in accordance with any tests included in the approval documentation for the driveway flowmeter/s to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the system to which the pattern is connected, as stated in the approval documentation for the system.

Ensure that the controller is set to self-serve mode (not attendant mode) by using the DRIVE/SELF button.

**1. Postpay Mode (including dual-memory test)**

- (i) At any driveway flowmeter, remove a nozzle from its hang-up position.
- (ii) At the console authorise the flowmeter by pressing the flowmeter NUMBER button and then the AUTHORISE button.
- (iii) At the flowmeter deliver sufficient fuel to cause the price and quantity indicators to move significantly off zero.

Stop the flowmeter by returning the nozzle to its hang-up and record the details of the delivery.

Remove the nozzle from its hang-up position again and check that the flowmeter indicator does not reset to zero.

- (iv) At the console, check that the price and volume displayed are the same as the price and volume recorded from the flowmeter.
- (v) At the same flowmeter, perform another delivery as per (i) to (iii) above.
- (vi) At the console check that both transactions are displayed as described in the operational details of the dual-memory facility given in the Technical Schedule.
- (vii) Attempt to authorise a third delivery from the same flowmeter by using the flowmeter NUMBER button and then the AUTHORISE button; this should not be possible.
- (viii) Observe that the indications for both transactions are displayed on the VDU.
- (ix) By pressing the flowmeter number and then the CASH OUT button complete the 'CURRENT' transaction and then similarly complete the 'STORED' transaction. Check that as each transaction is completed the data for the transaction is displayed on the purchaser's indicator. Press the TOTAL button followed by a payment media key to complete the sale.

Check that both memories are now clear.

- (x) Repeat steps (i) to (ix) for a number of driveway flowmeters.

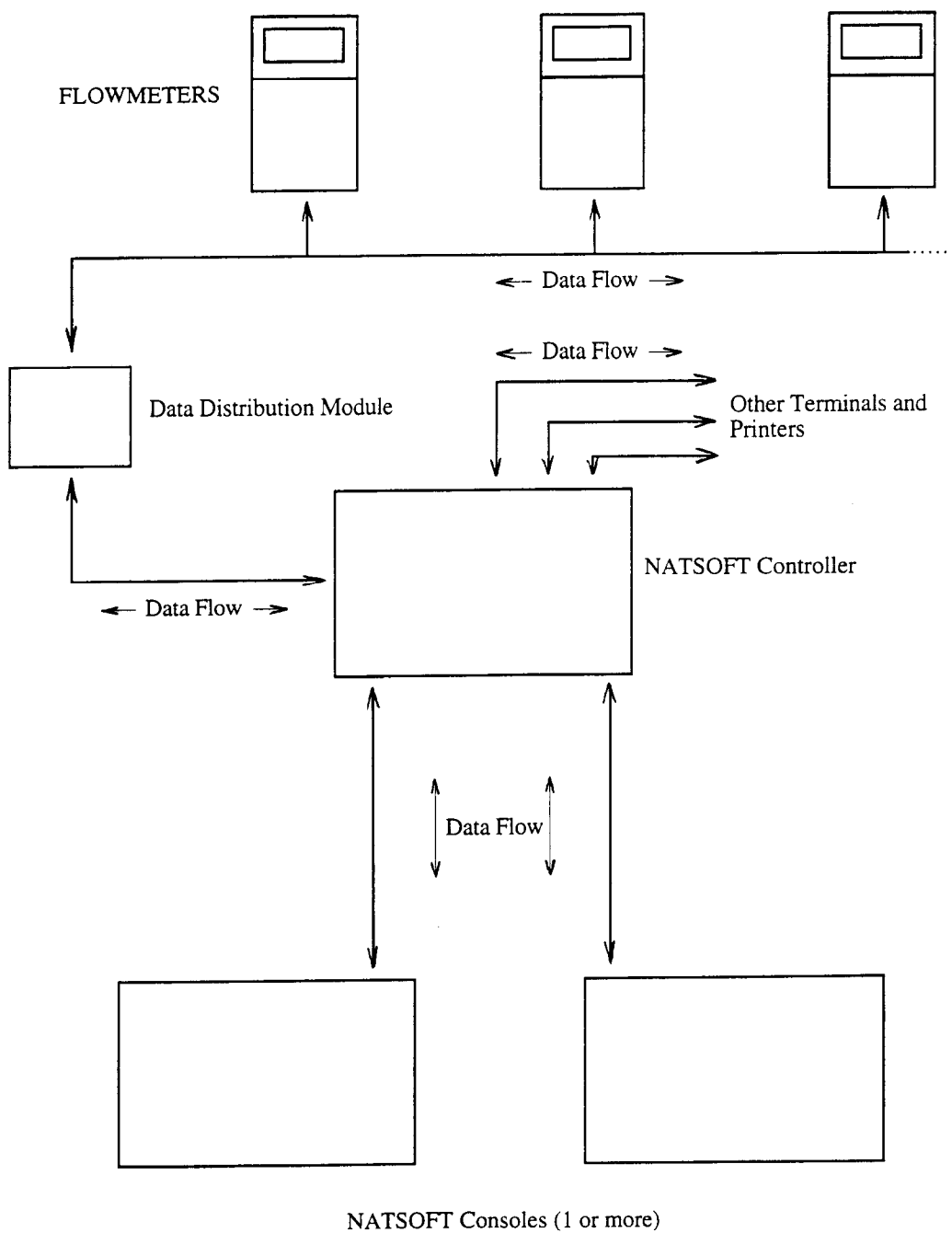
## 2. Prepay Mode

The operation in prepay mode is similar to that described above.

- (i) At the console, authorise a flowmeter by pressing the flowmeter NUMBER button and the PREPAY button followed by the prepay amount and the TOTAL button. Then press the TOTAL button again followed by a payment media key to complete the sale.
- (ii) While the delivery is in progress, attempt to authorise a prepay transaction (by selecting the flowmeter, entering a cash value via the keyboard, pressing the TOTAL button and then a payment media button); this should not be possible.
- (iii) Complete the delivery by returning the nozzle to its hang-up position.
- (iv) Authorise a prepay transaction for the flowmeter as in (ii) in the the second memory. The console will accept the authorisation and by pressing the print button issue a receipt indicating acceptance of the price, which flowmeter is to be used, and the time and date. Check that the preset value is displayed on the VDU and on the flowmeter preset display panel.
- (v) Start the delivery and observe that the flowmeter stops on the preset value, and that when the nozzle is returned to its hang-up, no amount is due at the console for this transaction. Complete the transaction.
- (vi) Repeat the above for another flowmeter.
- (vii) Commence another delivery but hang-up the nozzle before the prepaid value is reached. Observe that the details of the incomplete transaction are displayed.
- (viii) Complete the transaction and observe that details on the receipt issued and the console indications are the same.  
  
Try to re-authorise the flowmeter; this should not be possible for at least 3 minutes from the time that the nozzle is hung-up.
- (ix) If there is a flowmeter on site to which a preset panel and indicator are not fitted and/or there is no remote purchaser's indicator connected, attempt to authorise a prepay delivery at the console; this should not be possible.



FIGURE S330 - 1



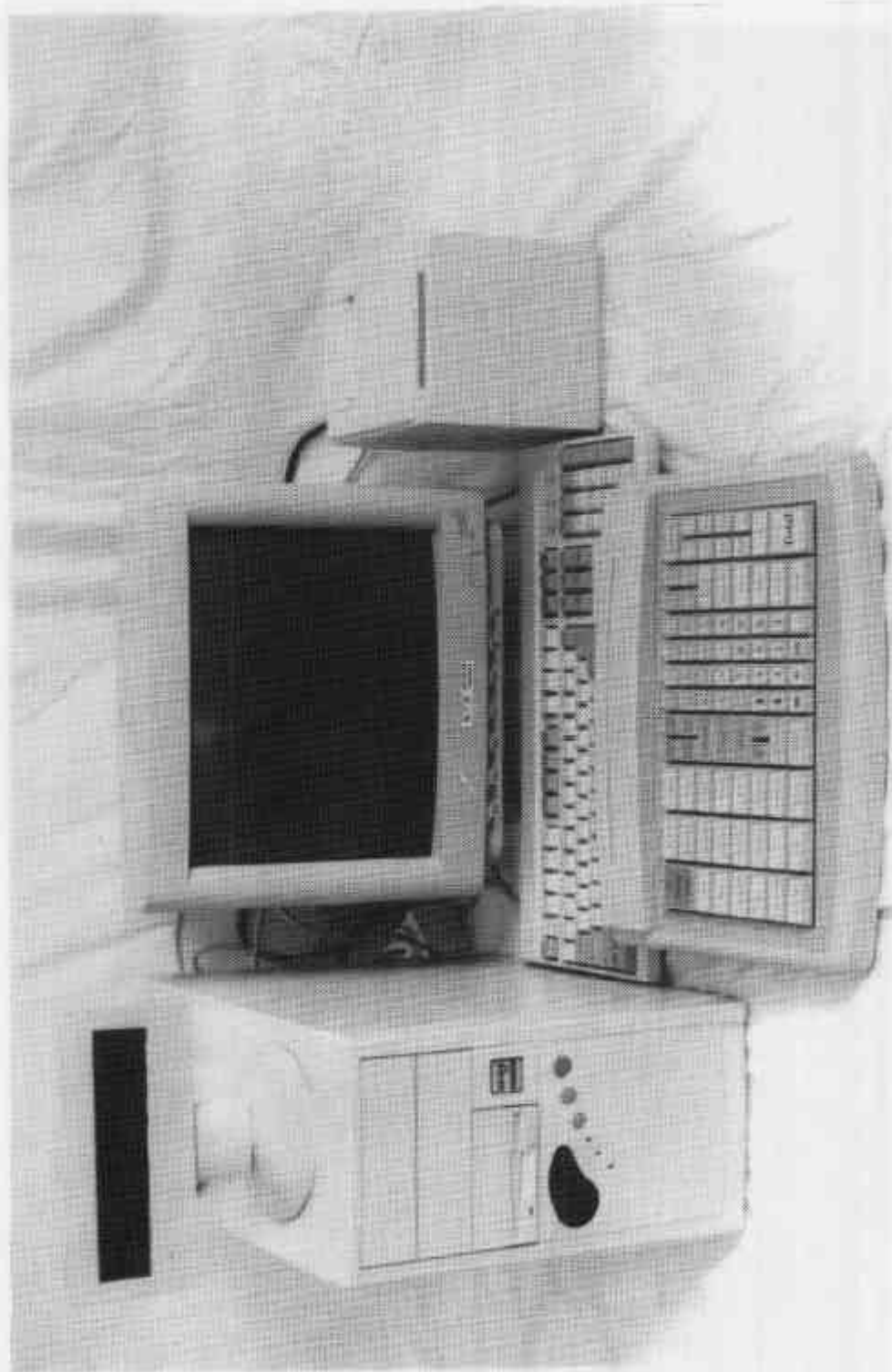
Typical Natsoft Model POSV2.00c Control System

FIGURE S330 - 2



Typical Natsoft Model POSV2.00c Controller

FIGURE S330 - 3



Typical Natsoft Model POSV2.00c Console