S332 22 March 2002





National Standards Commission

12 Lyonpark Road, North Ryde NSW

Cancellation

Supplementary Certificate of Approval

No S332

Issued under Regulation 60 of the National Measurement Regulations 1999

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

Ishida Model BWI-15 Digital Indicator

submitted by PCC Systems 407 Creek Road Mt Gravatt QLD 4122

has been cancelled in respect of new instruments as from 1 April 2002.

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.

moBennett



National Standards Commission

Supplementary Certificate of Approval No S332

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

Ishida Model BWI-15 Digital Indicator

submitted by PCC Systems 407 Creek Road Mt Gravatt QLD 4122.

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 becomes subject to review on 1 August 2001, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S332 and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S332 in additon 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.

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.

DESCRIPTIVE ADVICE

Pattern: approved 4 July 1996

• An Ishida model BWI-15 single or multiple-range digital indicator.

Technical Schedule No S332 describes the pattern.

Variant approved 27 November 1997

1. In an alternative housing.

Technical Schedule No S332 Variation No 1 describes variant 1.

FILING ADVICE

Supplementary Certificate of Approval No S332 dated 2 December 1996 is superseded by this Certificate, and may be destroyed.

The documentation for this approval now comprises:

Supplementary Certificate of Approval No S332 dated 6 March 1998 Technical Schedule No S332 dated 2 December 1996 (incl. Table 1 & Test Procedure) Technical Schedule No S332 Variation No 1 dated 6 March 1998 Figure 1 dated 2 December 1996 Figure 2 dated 6 March 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 S332

Pattern: Ishida Model BWI-15 Digital Indicator.

Submittor: PCC Systems 407 Creek Road Mt Gravatt QLD 4122.

1. Description of Pattern

An Ishida model BWI-15 single or multiple-range digital mass indicator (Figure 1 and Table 1) which may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

Instruments may be as shown in Figure 1 or without the internal journal printer.

The instrument is approved for use over a temperature range of -5° C to $+40^{\circ}$ C, and must be so marked.

1.1 Weighing Ranges

The weighing range to be used is manually selected.

Instruments are approved for use with a maximum of 3000 verification scale intervals per range.

1.2 Zero

For the weighing range selected, zero is automatically corrected to within $\pm 0.25e$ whenever power is applied and whenever the instrument comes to rest within 0.5e of zero.

For the weighing range selected, the instrument has an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the range.

1.3 Tare

A semi-automatic subtractive taring device may be fitted, of up to the maximum capacity for the range selected.

1.4 Display Check

A display check is initiated whenever power is applied.

Technical Schedule No S332

1.5 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible label being placed over the access hole at the rear of the indicator.

1.7 Management Function

Instruments may be fitted with a number of management functions which are not approved for trade use, including counting function and UNDER/ACCEPT/OVER facility.

1.8 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	k	
Serial number		
Accuracy class		
For each range:		
Maximum capacity		Max kg
Minimum capacity		Min kg
Verification scale interval		e = kg
Maximum subtractive tare		T = kg
NSC approval numbers -	indicator	NSC No S332
-	other components	NSC No #
Special temperature limits		-5°C / 40°C
• •		

May be located separately from the other markings.

TABLE 1 - Specifications

Maximum number of verification	3000
scale intervals per range	
Minimum sensitivity	0.8 x 10 ⁻³ mV/scale interval
Excitation voltage	12 V DC
Minimum load impedance	85.7 Ω
Maximum excitation current	140 mA

Page 3

TEST PROCEDURE

Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

For the weighing range selected, the maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within $\pm 0.25e$ at no load, are:

 $\pm 0.5e$ for loads from 0 to 500e;

- $\pm 1.0e$ for loads over 500e up to 2000e; and
- ±1.5e for loads over 2000e.

Ensure that instruments are being used within the special temperature limits specified in this approval.

TECHNICAL SCHEDULE No S332

VARIATION No 1

Pattern: Ishida Model BWI-15 Digital Indicator.

Submittor: PCC Systems 407 Creek Road Mt Gravatt QLD 4122.

1. Description of Variant 1

The pattern in an alternative stainless steel housing (Figure 2) and now known as a model BWI-15W.





FIGURE S332 - 2



Ishida Model BWI-15W Indicator