

**Australian Government** 

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

# Cancellation Supplementary Certificate of Approval No S408

## 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 respect of the

GLOBAL Weighing Model PR1713/00 Digital Indicator

submitted by

GWT GLOBAL Weighing Technologies GmbH (now Sartorius Hamburg GmbH) Meiendorfer Strasse 205 22145 Hamburg GERMANY.

has been cancelled in respect of new instruments as from 1 November 2007.

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**

12 Lyonpark Road, North Ryde NSW

## **Supplementary Certificate of Approval**

## No S408

## Issued under Regulation 60 of the National Measurement Regulations 1999

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

GLOBAL Weighing Model PR1713/00 Digital Indicator

submitted by GWT GLOBAL Weighing Technologies GmbH Meiendorfer Strasse 205 22145 Hamburg GERMANY.

**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.

#### Supplementary Certificate of Approval No S408 Page 2

## CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 August 2007, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S408 and only by persons authorised by the submittor.

Instruments incorporating a digital indicator purporting to comply with this approval shall be marked NSC No S408 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 NSC P 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

The Commission reserves the right to examine any instrument or digital indicator 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 19 July 2002

• A GLOBAL Weighing model PR1713/00 single or multiple range digital indicator.

Variants: approved 19 July 2002

- 1. With an Arlec model ENG750 external power supply.
- 2. With certain not approved for trade hardware interface options.
- 3. With certain approved for trade hardware interface options.

Technical Schedule No S408 describes the pattern and variants 1 to 3.

## FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S408 dated 10 September 2002 Technical Schedule No S408 dated 10 September 2002 (incl. Table 1 and Test Procedure)

Figures 1 and 2 dated 10 September 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.

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## TECHNICAL SCHEDULE No S408

Pattern: GLOBAL Weighing Model PR1713/00 Digital Indicator

Submittor: GWT GLOBAL Weighing Technologies GmbH Meiendorfer Strasse 205 22145 Hamburg GERMANY

#### 1. Description of Pattern

A GLOBAL Weighing model PR1713/00 digital mass indicator (Table 1 and Figure 1) which may be configured as:

- A weighing instrument with a single weighing range of up to 5000 verification scale intervals.
- A multiple range instrument with up to three weighing ranges, in which case it is approved for use with up to 5000 verification scale intervals per weighing range. The changeover between weighing ranges is automatic.

The instrument has a vacuum fluorescent display including provision for display of the weight value and for two lines of alphanumeric information.

Instruments may be fitted with output sockets for the connection of auxiliary and/or peripheral devices. An RS-232 serial interface is provided as a standard feature.

The indicator is powered from the mains power supply.

This approval does not include the use of the indicator as an automatic weighing instrument, unless specifically mentioned in a certificate of approval for such an instrument.

#### TABLE 1 – Specifications

Maximum number of verification scale intervals	5000 or 5000 per range
Minimum sensitivity	1.0 μV/scale interval
Excitation voltage	12 V DC ( <u>+</u> 6 V DC)
Maximum excitation current	160 mA

#### 1.1 Zero

Zero is automatically corrected to within  $\pm 0.25e$  ( $\pm 0.25e_1$  for multiple range operation) whenever the instrument comes to rest within 0.5e ( $0.5e_1$  for multiple range operation) of zero or whenever power is applied. This feature may, or may not be enabled.

If the instrument comes to rest outside that range but within the zero setting range, zero may be set by pressing the zero  $(\rightarrow 0 \leftarrow)$  button.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

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

Technical Schedule No S408

## 1.2 Tare

The instrument has provision for semi-automatic subtractive and pre-set tare devices of up to maximum capacity. A table of pre-set tare values may be stored and recalled using the 'Fixtar' feature which is accessed using the 'Softkey' menuing system.

The value of tare currently in use may be displayed temporarily using the tare recall key (T within the shape of a mass); the NET indicator is extinguished and a T indicator appears.

The gross value of the mass on the load receptor may be displayed temporarily using the gross value recall key ( $\boldsymbol{B}$  within the shape of a mass); the NET indicator is extinguished and a  $\boldsymbol{G}$  indicator appears.

Note: The symbol 'B' represents 'gross' in some languages other than english.

## 1.3 Display Check

A display check is initiated whenever power is applied.

The software identification number is displayed at start-up.

## **1.4 Additional Features**

The instrument keyboard has a number of dialogue (menu access) and function keys which can be programmed to perform various functions.

The indicator may also have certain additional features (e.g. 'Batching', 'Recipe Management', Set point facilities, Hold Functions, Counting) that may require additional license codes from the manufacturer to be enabled. Some of these functions can be assigned to function keys of the indicator. The additional functions (other than the indications of measured mass - i.e. gross, tare, net - displayed either on the indicator or on an auxiliary or peripheral device) are not approved for trade use.

**Notes:** The use of these features may or may not be appropriate in different situations. The acceptability in any particular situation must be assessed in-situ and may require consultation with the appropriate trade measurement authority. In some situations it may be necessary for a print-out of the weighing result to be produced for the method of operation to be considered acceptable. In such situations NSC General Supplementary Certificate of Approval No S1/0/A should be consulted.

This approval does not include the use of the indicator as an automatic weighing instrument, unless specifically mentioned in a certificate of approval for such an instrument.

Page 3

## 1.5 Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	
Indication of accuracy class	
Maximum capacity (for each range)	Max kg *
Minimum capacity (for each range)	Min kg *
Verification scale interval (for each range)	e = kg *
Serial number of the instrument	
Pattern approval mark for the indicator	NSC No S408
Pattern approval mark for other components	#

- \* These markings are also shown near the display of the result if they are not already located there.
- # May be located separately from the other markings.

In addition, instruments not greater than 100 kg capacity shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

Instruments configured for multiple range operation shall carry the markings for Maximum Capacity, Minimum Capacity and Verification Scale Interval for each range. The markings for each weighing range shall be clearly associated with an indication of the corresponding range (i.e. '|', '||' or ' $\equiv$ ') to correspond to the weighing range designations shown in the instrument display.

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

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

Provision is made for the calibration adjustments to be sealed by means of destructible adhesive labels over at least 2 opposing screws fixing the front of the instrument to the main housing, thus preventing access to the calibration switch within the case.

To ensure that the calibration switch is in the 'calibration protected' state, the instrument casing may be opened and it can be checked that the switch (wire link) is closed as shown in Figure 2.

Alternatively it is possible to check that the calibration switch is in the 'calibration protected' state, by entering the Setup menu of the indicator, then selecting Calibration (press the enter key); if the calibration switch is in the 'calibration protected' state the words "Can not calibrate jumper is closed" will appear.

After any calibration or alteration of instrument parameters and prior to carrying out verification/certification, the instrument shall be turned off and then on, to ensure that the stored calibration and parameter data is used by the instrument.

Technical Schedule No S408

## 2. Description of Variants

## 2.1 Variant 1

With an Arlec model ENG750 external power supply (in a model PC6 enclosure) in which case instruments have maximum excitation current of 500 mA.

## 2.2 Variant 2

The following hardware interface options may be fitted but are not approved for trade use. These interfaces shall comply with clause 5.3.6 of NSC R76-1 (April 2002).

PR1713/06	isolated 16 bit analogue data output (020mA or 420mA)
PR1713/07	additional 4 × 12 bit analogue input
PR1713/12	isolated digital I/0, 4 in & 4 out
PR1713/15	digital I/0, 4 in & 4 out, the outputs with 24V relays
PR1713/17	digital I/0, 6 in & 8 out, isolated but with common grounds

## 2.3 Variant 3

The following hardware options may also be fitted. These interfaces shall comply with clause 5.3.6 of NSC R76-1 (April 2002).

PR1713/05	additional memory
PR1713/04	additional serial interfaces (RS232 and RS422/485)
PR1713/08	BCD output
PR1713/13	INTERBUS-S-Master for connecting IBS-modules (for more I/0)
PR1713/14	Ethernet network interface
PR1721/xx	Fieldbus option (Profibus, Interbus, Canbus, Devicenet)

Any use of outputs from these interfaces for trade use shall comply with the requirements of NSC General Supplementary Certificate of Approval No S1/0/A.

Note particularly that this approval does not include the use of the indicator as an automatic weighing instrument, unless specifically mentioned in a certificate of approval for such an instrument.

Indications other than the indications of measured mass (i.e. gross, tare, net, totals) displayed either on the indicator or on an auxiliary or peripheral device, are not for trade use.

Technical Schedule No S408	Page 5

## TEST PROCEDURE

Instruments should 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 Uniform Test Procedures.

#### Maximum Permissible Errors at Verification/Certification

For single range instruments, the maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, *m*, expressed in verification scale intervals, *e*, are:

 $\pm 0.5e$  for loads  $0 \le m \le 500$ ;  $\pm 1.0e$  for loads  $500 < m \le 2000$ ; and  $\pm 1.5e$  for loads  $2000 < m \le 10000$ .

For multiple range instruments with verification scale intervals  $e_1, e_2, ..., apply e_1$ , for zero adjustment, and for maximum permissible errors apply  $e_1, e_2, ..., as$  applicable for the load.

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## FIGURE S408 - 1



GLOBAL Weighing Model PR1713/00 Digital Indicator





Showing Location of Calibration Switch