

# NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

# REGULATION 9

#### CERTIFICATE OF APPROVAL No 6/9C/85

This is to certify that an approval has been granted by the Commission that the pattern of the

Bizerba Model MCA-2 Platform Weighing Instrument

submitted by Bizerba Scales Aust. Pty Ltd 53-55 Ramsden Street Clifton Hill, Victoria, 3068

is suitable for use for trade.

# Conditions of Approval

This approval is subject to review on or after 1/7/89.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/85.

This approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.

The number of scale intervals applicable to the weighing instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell, or the indicator whichever is the smallest.

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 25/6/84

A self-indicating platform weighing instrument of up to 100 kg capacity.

Technical Schedule No 6/9C/85 describes the pattern.

#### Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/9C/85 dated 23/11/84 Technical Schedule No 6/9C/85 dated 23/11/84 Test Procedure No 6/9C/85 dated 23/11/84 Figures 1 and 2 dated 23/11/84.



# NATIONAL STANDARDS COMMISSION TECHNICAL SCHEDULE No 6/9C/85

Pattern: Bizerba Model MCA-2 Platform Weighing Instrument.

Submittor: Bizerba Scales Aust. Pty Ltd 53-55 Ramsden Street Clifton Hill, Victoria, 3068.

#### 1. Description of Pattern

The pattern is a self-indicating weighing instrument of up to 100 kg capacity (Figure 1) which is approved for use with up to 3000 scale intervals.

#### 1.1 Indicator

The model MCA and MCI indicators are described in the documentation of NSC approval No S171 and are approved for use with up to 3000 scale intervals. A subtractive taring device with a capacity up to the maximum capacity may be fitted.

# 1.2 Basework

The model 183 two-lever basework has one centrally placed load cell, and is approved for use with up to 3000 scale intervals. The approved capacities are 6,10,15,20,30,60 and 100 kg using different lever ratios.

Adjustable legs are provided and adjacent to the level indicator is a notice advising that the instrument must be level when in use. A similar notice should be located adjacent to the indicator reading face.

#### 1.3 Lood Cell

The HBM Z6H2 100 kg load cell is described in the documentation of NSC approval No S135 and is approved for use with up to 3000 scale intervals.

#### 1.4 Marking

The instrument is marked with the following data, together in one location:

 Manufacturer's name or mark

 Serial number

 NSC approval number

 Accuracy class

 Maximum capacity in the form:

 Minimum capacity in the form:

 Verification scale interval in the form:

 Maximum subtractive tare in the form:

 T = 

\*These should be repeated adjacent to each reading face.

## 1.5 Verification Mark

Provision is made for a verification mark to be applied,

#### TEST PROCEDURE No 6/9C/85

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

 $\pm$  0.5e for loads between 0 and 500e;  $\pm$  1.0e for loads between 501e and 2000e; and  $\pm$  1.5e for loads above 2000e.

#### 1. Zero Range

The maximum range of the zero setting device should not exceed 4% of the maximum capacity (± 2% approximately). With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument; it should not be possible to obtain zero by means of the zero adjustment.

#### 2. Zero Test

- (a) Check by means of Document 104 that when the zero light is illuminated, zero is set within 0.25e.
- (b) As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will then be 10e and 11e respectively.

# 3. Range of Indication

- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this indicated mass the indication should be blank or show non-numerical characters.
- (b) The minimum mass indicated should be zero; below this the indication should be blank or show the mass preceded by a minus sign.

# 4. Tare

- (a) Attempt to tare a mass greater than the marked tare capacity; this should not be possible.
- (b) The semi-automatic tare function should be able to reset the mass indicator to zero within 0.25e at any load within its tare capacity. This may be checked as described for Zero Test 2(a).

## 5. Load Test

Test loads are to be applied to the weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.



FIGURE 6/9C/85 - 1