



CANCELLED

NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/5A/1

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

Bizerba Model CD 8000S Weighing Instrument

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

are suitable for use for trade.

The approval of the pattern and variant is subject to review on or after 1/8/87.

All instruments purporting to comply with this approval shall be marked NSC No 6/5A/1.

Relevant drawings and specifications are lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 12/7/82

- A freely suspended self-indicating weighing instrument of 9.995 kg capacity by 0.005 kg scale intervals, with price-computing in 1c increments to \$999.99/kg and price to \$9994.90, known as a model CD 8000S.

Variant: approved 12/7/82

1. With a tare light in lieu of the tare mass indicator.

Technical Schedule No 6/5A/1 dated 3/8/82 describes the pattern and variant.

Filing Advice

The documentation for this approval consists of:

Certificate of Approval No 6/5A/1 dated 3/8/82
Technical Schedule No 6/5A/1 dated 3/8/82
Test Procedure No 6/5A/1 dated 3/8/82 (including Table 1)
Figures 1 to 3 dated 3/8/82.

3/8/82



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/5A/1

Pattern: Bizerba Model CD 8000S Weighing Instrument

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

1. Description of Pattern

The pattern is a freely suspended self-indicating weighing instrument (Figures 1 and 2).

Capacity	9.995 kg
Scale interval	0.005 kg
Tare	-995 g
Unit price	\$999.99/kg in 1c increments
Price	\$9994.90 in 1c increments

1.1 Zero

An indicator light marked ZERO is illuminated whenever zero is balanced within 0.25e.

1.1.1 Zero Setting

Zero to within 0.25e is set automatically whenever power is applied for any mass on the load receptor up to $\pm 2\%$ of the marked maximum capacity.

1.1.2 Automatic Zero Correction

This device automatically re-zeroes the instrument to within 0.25e whenever the instrument comes to rest within 0.5e of zero.

1.2 Tare

A semi-automatic subtractive taring device allows a mass of up to 995 g to be tared to within 0.25e, and displayed on the tare mass indicator.

1.3 Display Check

Pressing the button marked P causes all indicators to blank and then display 9 to 1 sequentially.

1.4 Markings

All instruments are marked with the following data, together in one clearly visible location:

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC 6/5A/1
Accuracy class	III
Maximum capacity	Max = 9.995 kg*
Minimum capacity	Min = 0.100 kg *
Verification scale interval	e = d = 0.005 kg*
Maximum subtractive tare	T = -995 g

*These markings are repeated in the vicinity of each reading face if not already there.

1.5 Sealing

Access to the calibration adjustments is prevented by a lead and wire seal (Figure 3).

2. Description of Variant

2.1 Variant 1

With a tare light, in lieu of the tare mass indicator, which illuminates when a tare is entered.

TEST PROCEDURE No 6/5A/1

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:

- ± 0.5e for loads between 0 and 500e;
- ± 1e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Range

The maximum range of operation of the zero device (power switch) should not exceed 4% of the capacity of the instrument (± 2% approximately). Satisfactory setting may be checked by the following method:

- (a) With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and operate the power switch; the instrument should not re-zero but should display the fault number 17 in the mass indicator to indicate that an attempt has been made to zero the instrument with a mass above the zero range on it.

The number 18 is displayed if an attempt is made to zero the instrument when it is in excess of the zero range in the negative direction.

- (b) Reduce the load to, say, 1.5% of maximum capacity and again adjust zero; the instrument should indicate zero balance.

2. Zero Test

- (a) As the automatic zero correction 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.
- (b) Check by means of Document 104 that when the ZERO light is lit, zero is set within 0.25e.

3. Range of Indication

- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this, the indicator should be blank.
- (b) The minimum mass indicated should be zero; below this the indicator should be blank.

4. Taring

- (a) Attempt to tare a mass above maximum tare capacity. On removal of the mass no tare should have been entered, and the indicator should display all zeroes.
- (b) The tare function should 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(b).

5. Price-computing Accuracy

The indications of mass, unit price and price as listed in Table 1, will indicate that the price-computing and mass circuits are functioning correctly. The exact figures should be indicated as rounding is effected within the computer.

Note: This test does not establish correct mass indications; a separate test in accordance with the Commission's Recommended Testing Procedure for the Elimination of Rounding Errors, as in Document 104, is necessary. This may be carried out in conjunction with the above test.

6. Test Loads

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

The instrument should display these loads within the applicable tolerance as listed above.

TABLE 1

<u>Indicated mass</u>	<u>Unit price</u>	<u>Price</u>
kg	\$/kg	\$
0	0	0
0.100	999.99	100.00
0.105	498.99	52.39
0.110	997.99	109.78
0.120	696.99	83.64
0.130	595.99	77.48
0.140	764.50	107.03
0.150	993.99	149.10
0.160	882.31	141.17
0.170	991.99	168.64
0.180	990.96	178.37
0.190	389.88	74.08
0.200	179.77	35.95
0.300	296.66	80.90
0.400	959.55	383.82
0.500	949.44	474.72
0.600	939.33	563.60
0.700	929.22	650.45
0.800	919.11	735.29
0.900	9.14	8.23
1.000	910.57	910.57
2.000	870.03	1740.06
3.000	784.67	2354.01
4.000	950.52	3802.08
5.000	884.96	4424.80
6.000	906.99	5441.94
7.000	899.64	6297.48
8.000	949.53	7596.24
9.000	988.72	8898.48
9.995	999.99	9994.90

Test Procedure - 9.995 kg Instrument With Unit Price To
\$99.99/kg And Price To \$9994.90

FIGURE 6/5A/1 - 1



Bizerba Model CD 80005 - Vendor's View

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FIGURE 6/5A/1 - 2



Model CD 8000S - Customer's View

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FIGURE 6/5A/1 - 3



Model CD 80005 Showing Sealing

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