



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval No 6/4D/295

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

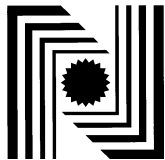
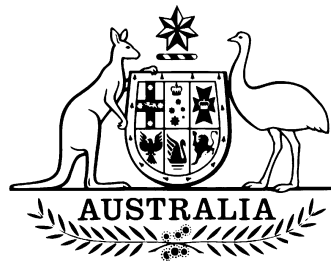
Avery Berkel Model FX 220 Weighing Instrument

submitted by Avery Berkel International
Foundry Lane
Smethwick
West Midlands B662LP
UNITED KINGDOM

has been cancelled in respect of new instruments as from 1 September 2006.

Signed by a person authorised by the Chief Metrologist
to exercise his powers under Regulation 60 of the
National Measurement Regulations 1999.

A handwritten signature in black ink, appearing to be 'J. H. T.', written in a cursive style.



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 6/4D/295

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

Avery Berkel Model FX 220 Weighing Instrument

submitted by Avery Berkel International
now of
Foundry Lane, Smethwick
West Midlands B66 2LP
UK.

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 2005, and then every 5 years thereafter. Instruments purporting to comply with this approval shall be marked NSC No 6/4D/295 and only by persons authorised by the submitter.

It is the submitter'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.

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.

DESCRIPTIVE ADVICE

Pattern: approved 20 July 2000

- An Avery Berkel model FX 220 price-computing weighing instrument of 7.5 kg maximum capacity.

Variants: approved 20 July 2000

1. Certain other capacities of the FX 220 series.
2. Certain capacities of the FX 210 series.

Variant: approved 26 July 2000

3. Model G 220 with counting function.

Technical Schedule No 6/4D/295 describes the pattern and variants 1 to 3.

Variant: approved 22 October 2002

4. Certain capacities of the FX 120 and FX 125 series.

Technical Schedule No 6/4D/295 Variation No 1 describes variant 4.

FILING ADVICE

Certificate of Approval No 6/4D/295 dated 8 August 2000 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/295 dated 6 December 2002

Technical Schedule No 6/4D/295 dated 8 August 2000 (incl. Table 1 & Test Procedure)

Technical Schedule No 6/4D/295 Variation No 1 dated 6 December 2002 (incl. Table 2 & Notification of Change)

Figures 1 to 3 dated 8 August 2000

Figures 4 to 7 dated 6 December 2002

TECHNICAL SCHEDULE No 6/4D/295

Pattern: Avery Berkel Model FX 220 Weighing Instrument

Submittor: Avery Berkel International
12-38 Talavera Road
North Ryde NSW 2113.



1. Description of Pattern

An Avery Berkel model FX 220 self-indicating price-computing weighing instrument of 7.5 kg maximum capacity with a verification scale interval of 0.001 kg.

Instruments may be fitted with integral displays (Figure 1), or with the customer display mounted on a column; either version may have the load receptor fitted with attachments providing support for a scoop (Figure 2).

Instruments are powered by a 12 volt DC supply from either an Avery Berkel Type FW 1288 mains adaptor or internal batteries.

Instruments have unit price to \$999.99/kg, price to \$9999.90, and a price-look-up (PLU) facility.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25 e$ whenever power is applied and whenever the instrument comes to rest within $0.5e$ of zero.

The initial zero-setting device of the pattern has a nominal range of approximately 20% of the maximum capacity of the instrument.

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.

1.2 Tare

A semi-automatic subtractive tare device of up to 3.75 kg maximum capacity may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

Instruments are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating 'instrument must be level when in use', or similar wording.

1.5 Verification/Certification Provision

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

1.6 Sealing Provision

Provision is made for the calibration adjustments of the instrument to be sealed by means of destructible adhesive labels applied over the calibration plug access cover (inside the battery compartment) and over the rectangular access hole near the centre of the underside of the instrument.

1.7 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Avery Berkel
Importer (if other than manufacturer)
Indication of accuracy class	Ⓜ
Maximum capacity	<i>Max</i> kg *
Minimum capacity	<i>Min</i> kg *
Verification scale interval	<i>e</i> = kg *
Maximum subtractive tare	<i>T</i> = - kg
Serial number of the instrument
Pattern approval mark for the instrument	NSC No 6/4D/295
* These markings shall also be repeated adjacent to each reading face, if they are not already located there.	

2. Description of Variants

2.1 Variant 1

Other capacities of the FX 220 series as listed in Table 1.

2.2 Variant 2

Certain capacities of the FX 210 series as listed in Table 1 (Figure 2). These instruments do not have price-computing, i.e. they display mass only.

TABLE 1

Model Number	Maximum Capacity	Verification Scale Interval	Tare Capacity
FX 220	15 kg	0.002 kg	7.5 kg
FX 220	30 kg	0.005 kg	15 kg
FX 210	7.5 kg	0.001 kg	3.75 kg
FX 210	15 kg	0.002 kg	7.5 kg
FX 210	30 kg	0.005 kg	15 kg

2.3 Variant 3

Model G 220 (Figure 3) which is similar to the model FX 210 (variant 2) but is a mass only weighing instrument with a counting facility. The counting facility is not approved for trade use.

Instruments also have a keyboard-entered pre-set tare facility; pre-set tare values may also be associated with PLU keys.

Instruments are marked “not to be used for direct sale to the public”, or similar wording.

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Inspector’s Handbook.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, m , expressed in verification scale intervals, e , are:

- $\pm 0.5 e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0 e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5 e$ for loads $2\,000 < m \leq 10\,000$.

TECHNICAL SCHEDULE No 6/4D/295

VARIATION No 1

Pattern: Avery Berkel Model FX 220 Weighing Instrument

Submittor: Avery Berkel International
Foundry Lane, Smethwick
West Midlands B66 2LP UK

1. Description of Variant 4

Certain capacities of the Avery Berkel FX 120 and FX 125 series of weighing instruments as listed in Table 2 (Figures 4 to 7).

The FX 125 series are price-computing weighing instruments while the FX 120 series instruments do not have price-computing, i.e. they display mass only.

Instruments may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

Instruments may be fitted with one or two displays, which are either:

- (a) fitted within the instrument housing (Figures 4 and 6);
- (b) located remotely; or
- (c) mounted on a column located either remotely (Figures 5 and 7) or attached to the instrument.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless two displays are present or unless the single display is located such that all primary indications are clearly and simultaneously displayed to both the vendor and the customer.

TABLE 2

Model Number	Maximum Capacity	Verification Scale Interval	Tare Capacity
FX 120	7.5 kg	0.001 kg	3.75 kg
FX 120	15 kg	0.002 kg	7.5 kg
FX 120	30 kg	0.005 kg	15 kg
FX 125	7.5 kg	0.001 kg	3.75 kg
FX 125	15 kg	0.002 kg	7.5 kg
FX 125	30 kg	0.005 kg	15 kg

NOTIFICATION OF CHANGE

In Technical Schedule No 6/4C/295 dated 8 August 2000, the reference to the submittor's address should be amended to now read:

"Foundry Lane, Smethwick
West Midlands B66 2LP UK"

FIGURE 6/4D/295 - 1



Avery Berkel Model FX 220 Weighing Instrument

6/4D/295
8 August 2000

FIGURE 6/4D/295 - 2



Typical Scoop

FIGURE 6/4D/295 - 3



Avery Berkel Model G 220 Weighing Instrument

FIGURE 6/4D/295 - 4



Avery Berkel Model FX 120 With Integral Display

6/4D/295
6 December 2002

FIGURE 6/4D/295 - 5



Avery Berkel Model FX 120 With Remote Column-mounted Display

FIGURE 6/4D/295 - 6



Avery Berkel Model FX 125 With Integral Display

6/4D/295
6 December 2002

FIGURE 6/4D/295 - 7



Avery Berkel Model FX 125 With Remote Column-mounted Display