



Australian Government  
Department of Industry,  
Innovation and Science

**National  
Measurement  
Institute**

**Cancellation  
Certificate of Approval  
NMI 6/4D/351**

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 WA 220 Weighing Instrument

submitted by Avery Berkel (a Division of ITW Limited)  
Foundry Lane  
Smethwick  
West Midlands B66 2LP  
UK

has been cancelled in respect of new instruments as from 1 March 2016.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	15/12/09
1	Pattern & variants 1 to 3 cancelled – cancellation certificate issued	12/02/16

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

A handwritten signature in black ink, appearing to read 'Dr A Rawlinson'.

Dr A Rawlinson



**Australian Government**

**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

## **Certificate of Approval**

### **No 6/4D/351**

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Avery Berkel Model WA 220 Weighing Instrument

submitted by Avery Berkel (a Division of ITW Limited)  
Foundry Lane  
Smethwick  
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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.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

#### **CONDITIONS OF APPROVAL**

This approval becomes subject to review on 1 January 2015, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/351' 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 National Measurement Institute (NMI) 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 document NMI P 106.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

**Special Condition of Approval:**

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

DESCRIPTIVE ADVICE

**Pattern:** approved 14 December 2009

- An Avery Berkel model WA 220 class  $\text{\textcircled{III}}$  non-automatic multi-interval self-indicating price-computing weighing instrument of 6 kg maximum capacity.

**Variants:** approved 14 December 2009

1. Certain other models of the WA series.
2. Certain models of the WS series.
3. Certain models of the WH series.

Technical Schedule No 6/4D/351 describes the pattern and variants 1 to 3.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4D/351 dated 15 December 2009  
Technical Schedule No 6/4D/351 dated 15 December 2009 (including Test  
Procedure)  
Figures 1 to 6 dated 15 December 2009

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



TECHNICAL SCHEDULE No 6/4D/351

**Pattern:** Avery Berkel Model WA 220 Weighing Instrument

**Submittor:** Avery Berkel (a Division of ITW Limited)  
Foundry Lane  
Smethwick  
West Midlands B66 2LP UK

## 1. Description of Pattern

An Avery Berkel model WA 220 class  $\text{III}$  non-automatic self-indicating price-computing multi-interval weighing instrument with a verification scale interval ( $e_1$ ) of 0.001 kg up to 3 kg and a verification scale interval ( $e_2$ ) of 0.002 kg from 3 kg up to the maximum capacity of 6 kg.

The instrument is designed as a weigh/wrap/labelling instrument (Figure 1) for pre-package operation, i.e. it is not approved for trading direct with the public and a notice indicating this is fixed to the display module.

Instruments are fitted with an alphanumeric colour touchscreen graphics panel operator display (Figure 2) and integral dual label printers (#), one label applicator and two wrapping film rolls, with an option of an under-labeller to apply a second label to the underside of the pack.

Instruments are non-automatic weighing instruments (they require the presence of an operator), and are approved for static weighing only.

Note that the maximum weight of packages that can be wrapped may be less than the maximum weighing capacity.

The weighing platter has the area which is suitable for loading being 345 mm x 265 mm (the overall size of the load receptor is 367 mm x 310 mm).

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

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices; this may include wireless networking capabilities.

Instruments operate from a three phase 380-400 V or 200-220 V AC, 50/60 Hz power supply.

(#) Refer to the Special Condition of Approval.

### 1.1 Zero

A zero-tracking device may be fitted.

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 and/or non-automatic keyboard-entered pre-set subtractive tare device may be fitted, with a maximum value of 0.999 kg.

Pre-set tare values may be associated with product look up (PLU) items or commodity tray size(s).

A display of tare values is provided.

### 1.3 Display Check

A display check is initiated whenever power is applied.

### 1.4 Networking

The instrument may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

### 1.5 Levelling

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

### 1.6 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Avery Berkel
Name or mark of manufacturer's agent	.....
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NMI 6/4D/351
Maximum capacity	<i>Max</i> ..... g or kg #1
Minimum capacity	<i>Min</i> ..... g or kg #1
Verification scale interval	<i>e</i> = ..... g or kg #1
Maximum subtractive tare	<i>T</i> = - ..... g or kg
Serial number of the instrument	.....

#1 These markings are also shown near the display of the result if they are not already located there.

Note: Instruments are approved for use over a temperature range of -10°C to 40°C which need not be marked on the instrument. Instruments may alternatively be marked with a reduced temperature range of 5°C to 35°C.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

### 1.7 Verification/Certification Provision

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

### 1.8 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of destructible adhesive labels placed over the calibration adjustment access hole located in the platform casing, below the weighing receptor. A label over one of the access screws and over the opening which provides access to this switch can achieve this, as shown in Figure 3. Note: the platter can be removed without tools for sealing, and checking of sealing status.

## **2. Description of Variants**

### **2.1 Variant 1**

Certain other models of the WA series of weighing instruments using the weighing systems and having the functions described for the pattern but having a different number of wrapping film rolls and one label printer/applicator, e.g. the model WA 210 has two wrapping film rolls while the model WA 110 has only one roll.

### **2.2 Variant 2**

Certain models of the WS series of weighing instruments (Figure 4) which are similar to the pattern, but with an externally-mounted printer (#) and utilising manual label application by the operator.

Note: In the model number, the instrument series 'WS' is followed by a number to indicate the wrapping speed, e.g. WS 15 indicates an instrument rated as 15 packs per minute.

The weighing platter has the area which is suitable for loading being 269 mm × 165 mm (the overall size of the load receptor is 273 mm × 265 mm).

The level indicator is located behind a hinged cover of the instrument. In addition to the level notice described for the pattern, a notice shall indicate the location of the level indicator (e.g. "Level bubble provided behind this cover").

Provision is made for the calibration adjustments to be sealed by means of a similar arrangement to that shown in Figure 3. Access to this area (shown in Figure 5) is available via the hinged cover which also provides access to the level indicator. Note: It is acknowledged that access to the sealing location is not ideal and the use of tools to remove other covers of the instrument may be needed to provide better access. If the access arrangements are not satisfactory to the relevant trade measurement authority, they may require additional or alternative sealing arrangements which prevent access to the calibration switch.

(#) Refer to the Special Condition of Approval.

### **2.3 Variant 3**

Certain models of the WH series of weighing instruments (Figure 6a) which are similar to the pattern but are designed as weigh/labelling instruments only, i.e. without a wrapping facility. Instruments may be fitted with either a single label printer or dual printers.

The load receptor is 260 mm × 290 mm.

Provision is made for the calibration adjustments to be sealed by sealing the platform support to the instrument (by means of a lead and wire or similar type seal), and by use of destructible adhesive labels to restrict access to the calibration switch which is located below a cover beneath the platter (Figure 6b).

## TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

### **Maximum Permissible Errors**

The maximum permissible errors are specified in Schedule 12 of the *National Measurement Regulations 1999*.

For multi-interval instruments with verification scale intervals of  $e_1, e_2 \dots$ , apply  $e_1$  for zero adjustment, and maximum permissible errors apply  $e_1, e_2 \dots$ , as applicable for the load.

FIGURE 6/4D/351 – 1



Typical Avery Berkel WA Series Weighing Instrument



FIGURE 6/4D/351 – 2

ONLINE PLU No. 000001 STORE 11. OCT. 2009(SUN) 2:34

**BRAISING STEAK**

MENU

IMAGE 1  
74

IMAGE 2  
0

PSET ZERO NET WT UNIT PRICE \$/kg TOTAL PRICE

TARE kg 0,008 **-0,008kg** **12,34** \$ **0,00**

PACK DATE SHELF LIFE M PRICE TRAY No. 0001 F-FORMAT

11. OCT. 2009 15. OCT. 2009 WHITE 2D TRAY 8

	1	2	3	4	5
PRICE	\$ 12,34	\$ 12,34	\$ 12,34	\$ 12,34	\$ 12,34
SYMB.					
TRAY	0001	0002	0003	0004	

CLEAR

ACCUM. 9 PACK

Heater is turning off

INPUT

WRAP LABEL

DIAL ADJUST TRACE PASSPORT WRAP SPD (HIGH) LABEL POSITION TRAY MANUAL SUBTRACT

FIGURE 6/4D/351 – 3



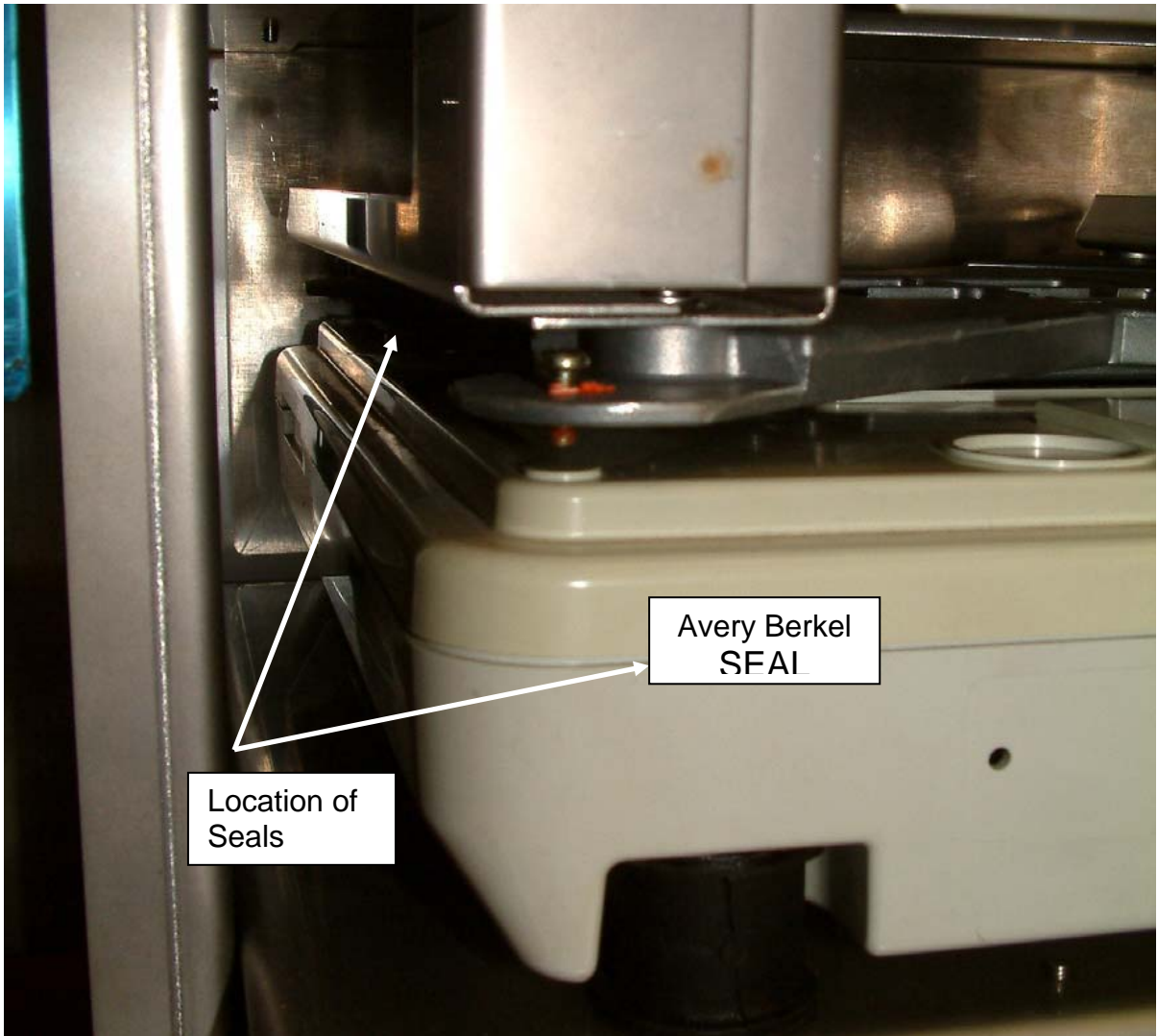
Typical Sealing of WA Series

FIGURE 6/4D/351 – 4



Typical WS Series Instrument

FIGURE 6/4D/351 – 5

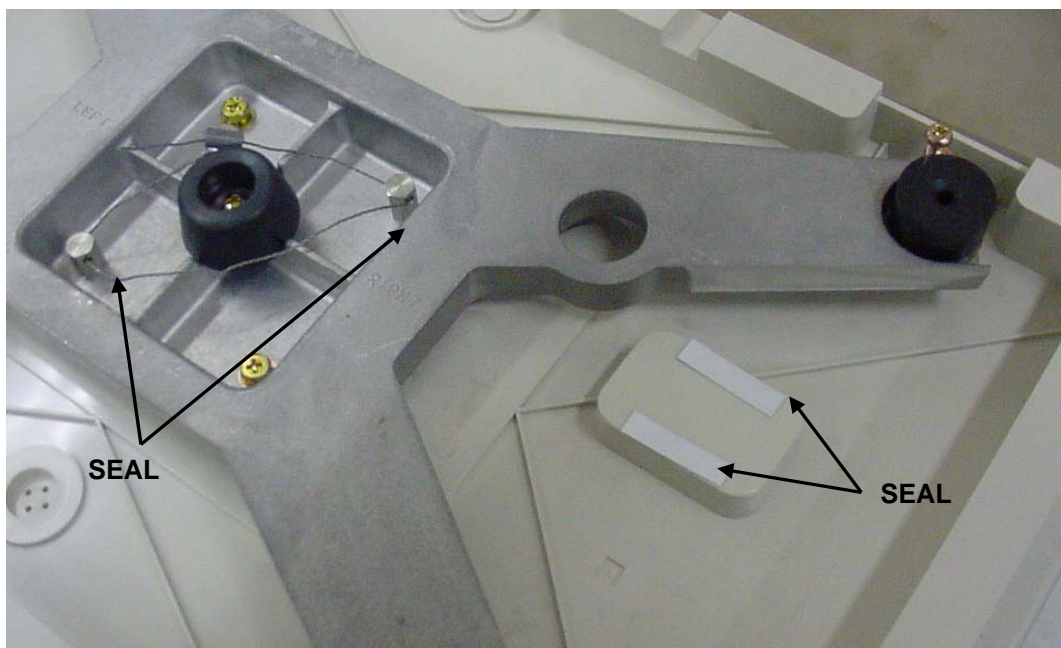


Typical Sealing of WS Series

FIGURE 6/4D/351 – 6



(a) WH Series Instruments, Single and Dual Printer Versions



(b) Typical Sealing of WH Series