#### CERTIFICATE OF APPROVAL No 6/9C/28

#### VARIATION No 1

This is to certify that the following modifications of the pattern and variants of the

Toledo Model 2020 Weighing Instrument

approved in Certificate No 6/9C/28 dated 29 September 1972

submitted by Toledo-Berkel Pty Ltd, 525 Graham Street, Port Melbourne, Victoria, 3207,

have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade.

The approved modifications are:

1. fitting a fabricated headwork; and

2. fitting a fabricated platform support.

Approval was granted on 28 May 1974.

This variation is described in Technical Schedule No 6/9C/28, Variation No 1, and in drawings and specifications lodged with the Commission.

The approval is subject to review on or after 1 June 1979.

All instruments conforming to this approval shall be marked with the approval number "NSC No 6/9C/28".

Signed

**Executive Officer** 

/ moret of

28/5/74



Weights and Measures (National Standards) Act 1960-1966 Weights and Measures (Patterns of Instruments) Regulations

#### COMMONWEALTH OF AUSTRALIA

# NATIONAL STANDARDS COMMISSION

# **Certificate** of Approval

#### CERTIFICATE NUMBER 6/9C/28

#### In respect of the pattern of

Toledo Self-indicating Weighing Instrument of 30-kg Capacity and Variants.

Submitted and manufactured by:

Toledo-Berkel Pty Ltd, 525 Graham Street, Port Melbourne, Victoria. 3207.

This is to certify that the pattern and variants of the instrument illustrated and described in this Certificate have been examined by the National Standards Commission under the provisions of the abovementioned Regulations and have been approved as being suitable for use for trade.

The pattern and variants were approved on 22 September 1972.

The pattern and variants are marked "NSC No 6/9C/28" and comply with the General Specifications for Measuring Instruments to be Used for Trade.

This Certificate comprises:

Pages 1 and 2 dated 29 September 1972. Figures 6/9C/28 - 1 to 6 dated 29 September 1972.

Date of issue 29 September 1972.

Signed

Phulop & Arminian

A person authorized by the Commission to sign Certificates under the abovementioned Regulations.

29/9/72

## DESCRIPTION OF PATTERN

The pattern is a self-indicating weighing instrument of 30-kg capacity known as the Toledo Model 2020 Bench Scale (see Figure 4). It comprises the components tabulated in Column 5 of Figure 1. The dial is graduated to 30 kg by 50-g graduations.

## DESCRIPTION OF VARIANTS

The components tabulated in the columns of Figure 1 marked "Variants" make up variants of the pattern with capacities up to the capacities of the baseworks.

#### DESCRIPTION OF COMPONENTS

- 1. Two-lever system basework (see Figures 2 and 3) consists of two second-order main levers, the nose-end knife-edge of one being coupled to the nose-end knife-edge of the other, an extension of which is coupled to the headwork pullrod. The load and fulcrum knife-edges are cantilevered while the nose-end knife-edges are supported between two side plates. The fulcrum knife-edges are supported in bearings located in swinging links suspended from the basework frame. The self-aligning load bearings are mounted in the platform, which is therefore mounted directly on the levers. Two check links fixed to the platform and the frame limit horizontal movement of the platform and levers. The capacity is limited to 120 kg.
- 2. Two-lever system basework the levers have cantilevered knife-edges and are described in Certificate No 6/9C/2. The capacity is limited to 1300 kg.
- 3. Headwork pillar (see Figure 4) the pillar which is fixed to the basework frame supports the resistant mechanism housing.
- 4. Headwork cabinet (see Figure 5) the small headwork cabinet is described in Certificate No 6/9C/2.
- 5. Spring-resistant mechanism (see Figure 6) the mechanism is described in Certificate No 6/18/2, except that the dashpot is attached to the cross-arm to which the springs and rack are fixed. The mechanism is suitable for dials with up to 1.7 graduations per degree.

29/9/72



# NATIONAL STANDARDS COMMISSION

# TECHNICAL SCHEDULE No 6/9C/28

## VARIATION No 1

Pattern: Toledo Model 2020 Weighing Instrument

<u>Submittor</u>: Toledo-Berkel Pty Ltd, 525 Graham Street, Port Melbourne, Victoria, 3207.

Date of Approval\_of Variants: 28 May 1974

The modifications described in this schedule apply to the pattern and variants described in the following pages and figures of Certificate No 6/9C/28 dated 29 September 1972:

Page 2 dated 29 September 1972 Figures 6/9C/28 - 1 to 6 dated 29 September 1972

All instruments conforming to this approval shall be marked "NSC No 6/9C/28".

Description:

This variation approves:

- 1. Fitting a fabricated headwork (see Figure 7). The movement of the cross-arm to which the spring resistant is fixed is limited by fixed stops. The movement of the zero-adjustment nut is limited by a pin.
- 2. Fitting a platform support fabricated from mild steel having a minimum thickness of 4 mm (see Figure 8).

24/12/92

# **National Standards Commission**



# NOTIFICATION OF CHANGE

# VARIOUS CERTIFICATES OF APPROVAL

The following changes are made to the approval documentation for various approvals

submitted by Toledo Scale (Australia) Ltd 525 Graham Street Port Melbourne VIC 3207.

In the Certificates and Technical Schedules listed overleaf, the following changes should be made: (Note: Only current approvals are listed.)

1. The submittor should be changed to read;

Mettler Toledo Limited

(the address remains unchanged)

- 2. All references to 'Toledo' instruments or components should be amended to read 'Toledo (or Mettler or Mettler Toledo)'.
- NOTE: Any 'Toledo' instrument or component described in the approval documentation may now also be known as 'Mettler or Mettler Toledo'.

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#### Notification of Change

**APPROVAL NUMBER** 8214 Weighing Instrument 6/4C/65 8215 Weighing Instrument 6/4C/68 8421 Weighing Instrument 6/4D/242 2191 Weighing Instrument 6/9C/2A 2503 Weighing Instrument 6/9C/24A 2020 Weighing Instrument 6/9C/28

6/9C/97 6/9C/98 6/9C/206 6/9C/231 6/10B/46A 6/14B/9A

6/9C/24A

6/9C/76

6/9C/87

6/18/21

S253 S266 S283

S111A 0721 Load Cell 0723 Load Cell S112A S143 0752 Load Cell 0725 Load Cell S172 0742 Load Cell S211 0760 Load Cell S252 0752 Load Cell S264 **RLC 5000 Load Cell** S268

> Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

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PATTERN

2985 Weighing Instrument

2295 Weighing Instrument

2375 Weighing Instrument

2155 Weighing Instrument

9118 Weighing Instrument

6303 Weighing Instrument

**1938 Weighing Instrument** 

7560 Weighing Instrument

8530 Digital Indicator

8520 Digital Indicator

8510 Digital Indicator

2352 Hopper Weighing Instrument

2299 Overhead Weighing Instrument

2		3	4	ีย	9	2
COMPONENTS D <sub>1</sub> APPI	D/ APPI	ATE ROVED	FOOT- NOTES	PATTERN	VAR	IANTS
iseworks						
lever system (Figures 2 and 3) 22 SEI	22 SEI	P 72		*	*	
lever system 22 SE1	22 SEI	2 7 2				*
eadwork Components						
eadwork pillar (Figure 4) 22 SEI	22 SEI	P 72		*	*	
eadwork cabinet (Figure 5) 22 SEI	22 SEI	0 72				*
oring-resistant mechanism 22 SEF (Figure 6)	22 SEI	0 72		*	*	*

\* - indicates required component

Compatibility Table for Components Described in this Certificate

29/9/72





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Self-indicating Bench Platform Weighing Instrument 29/9/72



Portable Platform Weighing Instrument with Spring-resistant Mechanism

29/9/72



Spring-resistant Mechanism



Toledo Model 2020 — Fabricated Headwork

