

CERTIFICATE OF APPROVAL No 6/4C/14

CANCELLED 0/1

This is to certify that the pattern of the
Mettler C40C Weighing Instrument

submitted by Watson Victor Ltd,
95-99 Epping Road,
North Ryde, New South Wales, 2113,

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

Date of Approval: 15 July 1975

The pattern is described in Technical Schedule No 6/4C/14, and in drawings
and specifications lodged with the Commission.

The approval is subject to review on or after 1 July 1980.

All instruments conforming to this approval shall be marked with the approval
number "NSC No 6/4C/14".

Approval is granted on condition that the removable unit weights of 10 CM
and 20 CM \pm 0,001 CM are marked with the serial number of the instrument
and are certified weights.

Signed



Acting Executive Officer

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Cert. No.

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NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/14

Pattern: Mettler C40C Weighing Instrument

Submitter: Watson Victor Ltd,
95-99 Epping Road,
North Ryde, New South Wales, 2113.

Date of Approval: 15 July 1975

Conditions of Approval:

1. The removable unit weights of 10 CM and 20 CM $\pm 0,001$ CM are marked with the serial number of the instrument, and are certified weights.
2. All instruments conforming to this approval shall be marked "NSC No 6/4C/14".

Description:

The pattern (see Figures 1, 2 and 3) is a portable semi-self-indicating weighing instrument (balance) with an optically projected weight-reading face graduated to 10 CM by 0,01-CM graduations. Unit weights of 10 CM and 20 CM, which may be removed from beneath the load receptor, extend the maximum capacity to 40 CM (see Figures 1 and 4). The value of the unit weights removed from beneath the load receptor must be added to the value indicated on the weight-reading face.

The weighing mechanism comprises an uneven-arm lever with the load receptor supported through a knife-edge and bearing at one end and a graticule at the other end. The load receptor is kept level by the weight of a pendulum suspended from it. The instrument is damped by magnets placed on either side of the pendulum.

A knurled knob on the front of the instrument adjusts zero by changing the angle of one of the mirrors which project the graticule on to the screen.

The instrument is provided with level indicators and is supported on three feet, two of which are adjustable. Adjacent to the level indicators is a notice advising that the instrument must be level when in use.

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The instrument is marked adjacent to the weight indicator:

II

Max = 40 CM
Min = 0,10 CM
d = 0,01 CM

and "not for retail counter use".

Special Tests:

1. Level Sensitivity

- (a) When the instrument is tilted to a slope of 1 in 500 the bubble in the appropriate indicator should move at least 2 mm; each level indicator should be checked.
- (b) When the instrument is tilted so that the bubble in the appropriate level indicator moves 2mm, and when zero is reset in the tilted position, the instrument should satisfy the weighing-accuracy specification, that is, $\pm \frac{1}{2}$ graduation

2. Certified Weights

When the 10-CM and 20-CM unit weights are removed both separately and together and the same nominal value of test weights is placed on the load receptor the weight reading face should indicate zero $\pm \frac{1}{2}$ graduation.

3. Tolerance

The tolerance applicable to a class II instrument is $\pm \frac{1}{2}$ graduation for the first 5000 graduations, ± 1 graduation for graduations over 5000 and up to 20 000 and $\pm 1\frac{1}{2}$ graduations for graduations over 20 000. The mass of each weight used for testing must be known to within $\pm 0,001$ CM.

FIGURE 6/4C/14-1

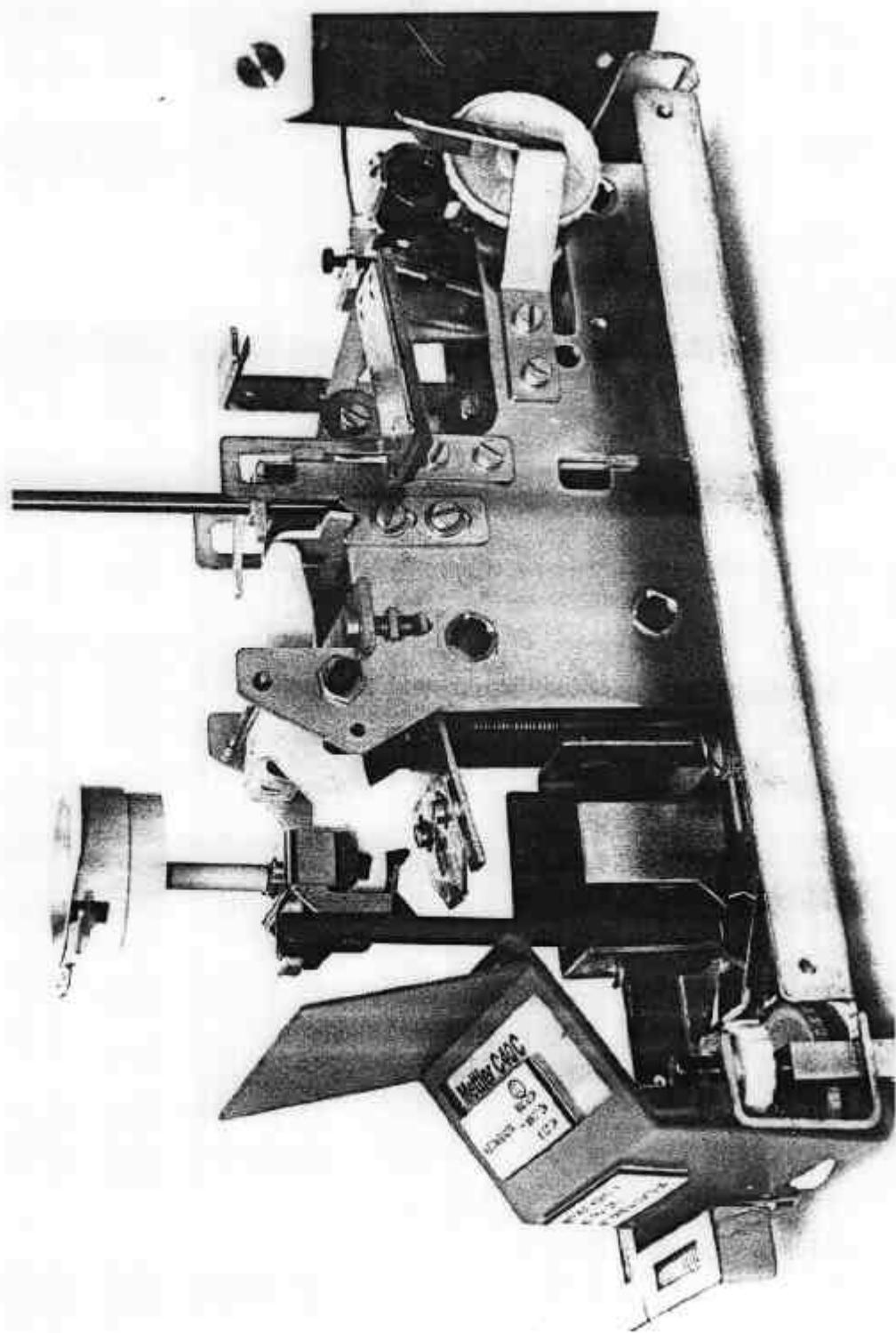


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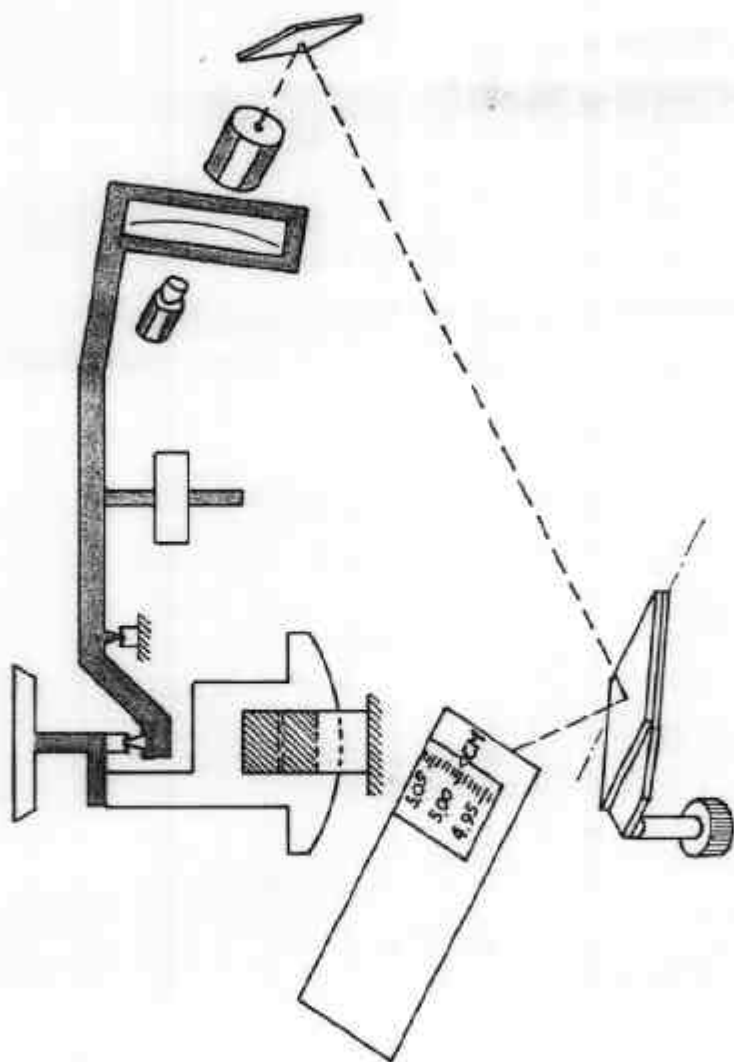
FIGURE 6/40/14-2



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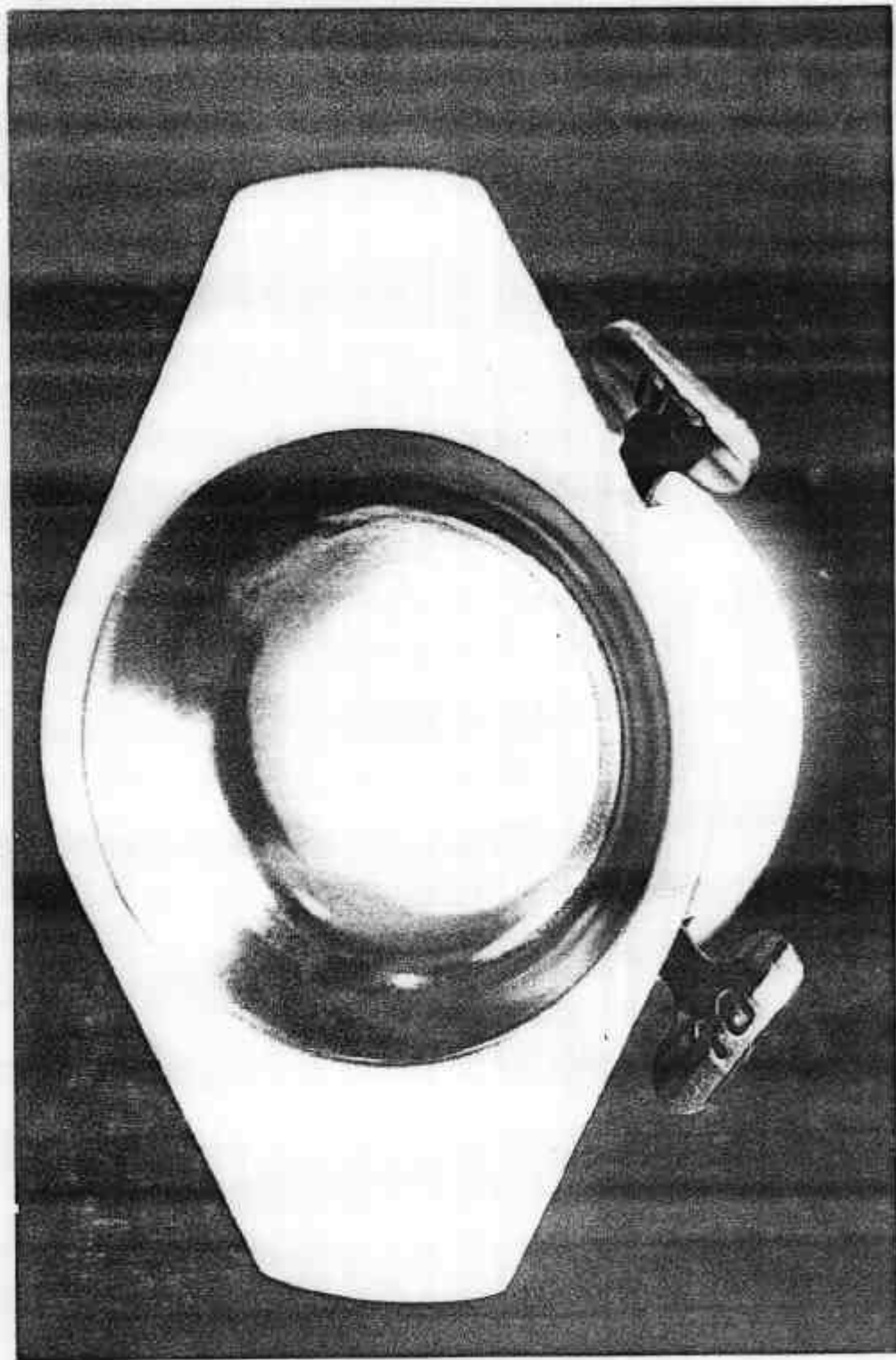
FIGURE 6/40/14-3



Mettler C400 — Schematic Diagram

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FIGURE 6/4C/14-4



Unit Weight of 10 CM and 20CM located beneath the Load Receptor

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