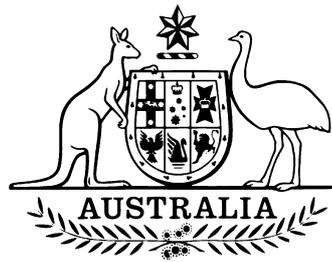


6/9C/253
19 November 2001



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Cancellation Certificate of Approval

No 6/9C/253

Issued 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

Mettler Toledo Model KB60.2 Weighing Instrument

submitted by Mettler Toledo Limited
220 Turner Street
Port Melbourne VIC 3207

has been cancelled in respect of new instruments as from 1 December 2001.

Signed by a person authorised under Regulation 60
of the National Measurement Regulations 1999 to
exercise the powers and functions of the Commission
under this Regulation.





National Standards Commission

Certificate of Approval

No 6/9C/253

Issued under Regulation 63
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

Mettler Toledo Model KB60.2 Weighing Instrument

submitted by Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

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 September 2001, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/253 and only by persons authorised by the submittor.

It is the submittor'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 106.

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

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

DESCRIPTIVE ADVICE

Pattern: approved 12 August 1996

- A Mettler Toledo model KB60.2 multi-interval weighing instrument of 60 kg maximum capacity.

Variants: approved 12 August 1996

1. With a Mettler Toledo model ID1 *Plus* indicator.
2. Other models and capacities of multi-interval weighing instruments as listed in Table 1.
3. Certain models and capacities of single-interval weighing instruments as listed in Table 2.

Technical Schedule No 6/9C/253 describes the pattern and variants 1 to 3.

Variants: approved 17 November 1999

4. Certain other models and capacities of multi-interval weighing instruments as listed in Table 3.
5. Certain other models and capacities of single-interval weighing instruments as listed in Table 4.

Technical Schedule No 6/9C/253 Variation No 1 describes variants 4 and 5.

FILING ADVICE

Certificate of Approval No 6/9C/253 dated 12 February 1997 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

- Certificate of Approval No 6/9C/253 dated 20 January 2000
- Technical Schedule No 6/9C/253 dated 12 February 1997 (incl. Tables 1 & 2, and Test Procedure)
- Technical Schedule No 6/9C/253 Variation No 1 dated 20 January 2000 (incl. Tables 3 & 4)
- Figures 1 to 4 dated 12 February 1997

Signed and sealed by a person authorised under Regulation 63 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Bush'. The signature is written in a cursive style with a large, looping initial 'J'.

National Standards Commission

TECHNICAL SCHEDULE No 6/9C/253

Pattern: Mettler Toledo Model KB60.2 Multi-interval Weighing Instrument.

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Pattern

A Mettler Toledo model KB60.2 multi-interval weighing instrument of 60 kg maximum capacity (Figure 1 and Table 1).

Instruments have a verification scale interval (e_1) of 0.005 kg up to 15 kg, a verification scale interval (e_2) of 0.01 kg from 15 kg up to 30 kg, and a verification scale interval (e_3) of 0.02 kg from 30 kg up to the maximum capacity of 60 kg

1.1 Basework

The K series baseworks (Figure 1) use a lever system to support the load receptor and use a measuring cell which operates on the magnetic force compensation principle.

The KB60.2 basework has maximum nominal dimensions of 500 x 400 mm. The basework is provided with 4 adjustable feet and a level indicator.

1.2 Indicator

A Mettler Toledo model ID5 digital indicator (Figure 2) is used.

Zero is automatically corrected to within $\pm 0.25 e_1$ whenever power is applied and whenever the instrument comes to rest within $0.5e_1$ of zero.

The initial zero-setting device has a nominal range of 25 kg.

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

A display check is initiated whenever power is applied.

The indicator has a secondary display for management purposes which is differentiated from the primary display and which is marked LOWER DISPLAY NOT FOR TRADE USE, or similar wording.

The indicator may be used with a Mettler Toledo model GD31 Multiplexer unit which enables up to 3 baseworks to share a single indicator.

1.3 Tare

A semi-automatic and/or a non-automatic taring device, each of up to maximum capacity, may be fitted.

1.4 Verification/Certification Provision

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

1.5 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible label and the special bracket provided with the instrument and fitted as shown in Figures 2 and 3.

1.6 Markings

An instrument shall carry the following markings, in the form shown at right:

| | |
|----------------------------------------------|-----------------------------|
| Manufacturer's mark, or name written in full | |
| Indication of accuracy class | Ⓜ |
| Maximum capacity | Max / / kg * |
| Minimum capacity | Min kg * |
| Verification scale interval | e = / / kg * |
| Serial number of the instrument | |
| Serial number of the load cell (#) | |
| Pattern approval mark for the instrument | NSC No 6/9C/253 |

* These markings shall also be shown near the display of the result if they are not already located there.

Alternatively, this may be marked adjacent to the verification mark.

2. Description of Variants

2.1 Variant 1

With a Mettler Toledo model ID1*Plus* indicator (Figure 3). This indicator has the features of the model ID5 of the pattern but without the non-automatic taring device.

This model is also fitted with a single point non-programmable linearity correction facility.

2.2 Variant 2

Various multi-interval models of the K series with specifications as listed in Table 1. Figure 4 shows a model KC600.

2.3 Variant 3

Various single-interval models of the K series with specifications as listed in Table 2.

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 $2\,000 < m \leq 10\,000$.

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

TABLE 1

| | | | | | | | |
|----------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Model: (#) | KB60.2 | KCC150 | KC300 | KCC300 | KCS300 | KC600 | KCS600 |
| Max ₁ / e ₁ (kg) | 15/0.005 | 30/0.01 | 60/0.02 | 60/0.02 | 60/0.02 | 150/0.05 | 150/0.05 |
| Max ₂ / e ₂ (kg) | 30/0.01 | 60/0.02 | 150/0.05 | 150/0.05 | 150/0.05 | 300/0.1 | 300/0.1 |
| Max ₃ / e ₃ (kg) | 60/0.02 | 150/0.05 | 300/0.1 | 300/0.1 | 300/0.1 | 600/0.2 | 600/0.2 |
| Initial zero range (kg) | 25 | 58 | 52 | 140 | 65 | 160 | 175 |
| Load receptor (mm) | 500x400 | 800x600 | 1000x800 | 800x600 | 800x800 | 1000x800 | 800x800 |

Approved Models and Capacities of Multi-interval Instruments

TABLE 2

| | | | | | | | | |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Model: (#) | KB60.2 | KB60.2 | KB60.2 | KB60.2 | KB60.2 | KCC150 | KCC150 | KCC150 |
| Max / e (kg) | 15/0.005 | 30/0.01 | 30/0.005 | 60/0.02 | 60/0.01 | 30/0.01 | 60/0.02 | 150/0.05 |
| Initial zero range (kg) | 34 | 34 | 45 | 25 | 25 | 80 | 80 | 58 |
| Load receptor (mm) | 500x400 | 500x400 | 500x400 | 500x400 | 500x400 | 800x600 | 800x600 | 800x600 |
| Model: (#) | KCC150 | KC300 | KC300 | KC300 | KC300 | KCC300 | KCC300 | KCC300 |
| Max / e (kg) | 150/0.02 | 60/0.02 | 150/0.05 | 300/0.1 | 300/0.05 | 60/0.02 | 150/0.05 | 300/0.1 |
| Initial zero range (kg) | 58 | 92 | 92 | 52 | 52 | 184 | 184 | 140 |
| Load receptor (mm) | 800x600 | 1000x800 | 1000x800 | 1000x800 | 1000x800 | 800x600 | 800x600 | 800x600 |
| Model: (#) | KCC300 | KCS300 | KCS300 | KCS300 | KCS300 | KC600 | KC600 | |
| Max / e (kg) | 300/0.05 | 60/0.02 | 150/0.05 | 300/0.05 | 300/0.1 | 150/0.05 | 300/0.1 | |
| Initial zero range (kg) | 140 | 105 | 105 | 65 | 65 | 240 | 240 | |
| Load receptor (mm) | 800x600 | 800x800 | 800x800 | 800x800 | 800x800 | 1000x800 | 1000x800 | |
| Model: (#) | KC600 | KC600 | KCS600 | KCS600 | KCS600 | KCS600 | | |
| Max / e (kg) | 600/0.2 | 600/0.1 | 150/0.05 | 300/0.1 | 600/0.2 | 600/0.1 | | |
| Initial zero range (kg) | 160 | 160 | 255 | 255 | 175 | 175 | | |
| Load receptor (mm) | 1000x800 | 1000x800 | 800x800 | 800x800 | 800x800 | 800x800 | | |

Approved Models and Capacities of Single-interval Instruments

(#) The model number has an 's' suffix (e.g. KB60.2s) when the basework is constructed of stainless steel.

TECHNICAL SCHEDULE No 6/9C/253

VARIATION No 1

Pattern: Mettler Toledo Model KB60.2 Weighing Instrument.

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207

1. Description of Variants

1.1 Variant 4

Certain multi-interval models of the K series with specifications as listed in Table 3.

1.2 Variant 5

Certain single-interval models of the K series with specifications as listed in Table 4.

TABLE 3

| Model | KD600 | KD1500 | KE1500 | KES1500 | KE3000 | KES3000 | KG3000 | KG6000 |
|----------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Max ₁ / e ₁ (kg) | 150/0.05 | 300/0.1 | 300/0.1 | 300/0.1 | 600/0.2 | 600/0.2 | 600/0.2 | 1500/0.5 |
| Max ₂ / e ₂ (kg) | 300/0.1 | 600/0.2 | 600/0.2 | 600/0.2 | 1500/0.5 | 1500/0.5 | 1500/0.5 | 3000/1.0 |
| Max ₃ / e ₃ (kg) | 600/0.2 | 1500/0.5 | 1500/0.5 | 1500/0.5 | 3000/1.0 | 3000/1.0 | 3000/1.0 | 6000/2.0 |
| Initial zero range (kg) | 140 | 540 | 430 | 350 | 1170 | 1060 | 920 | 2000 |
| Load receptor (mm) | 1250x1000 | 1250x1000 | 1500x1250 | 1500x1500 | 1500x1250 | 1500x1500 | 2000x1500 | 2000x1500 |

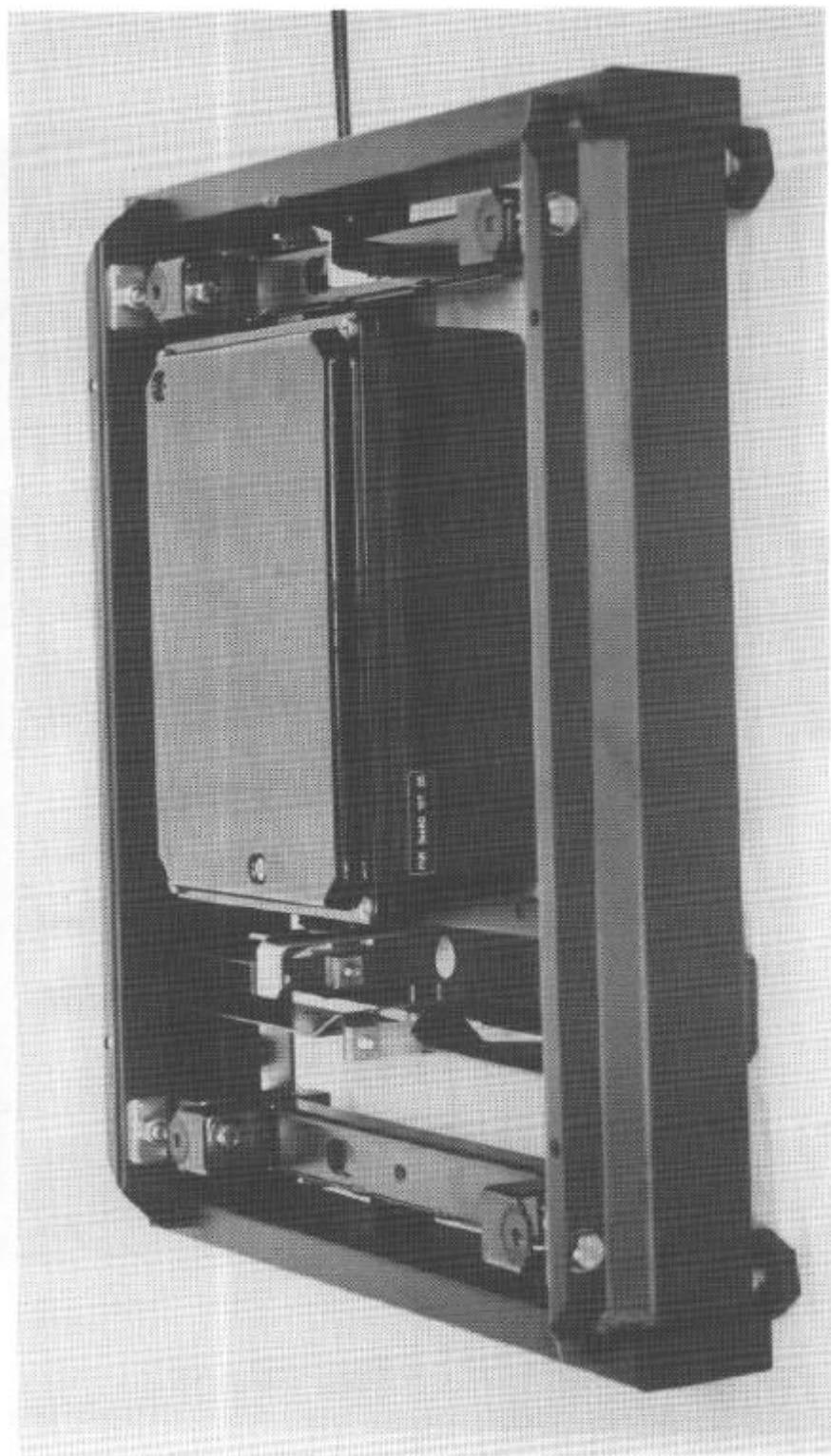
Approved Models and Capacities of Multi-interval Instruments - Variant 4

TABLE 4

| | | | | | | | | |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Model | KD600 | KD600 | KD600 | KD600 | KD1500 | KD1500 | KD1500 | KD1500 |
| Max / e (kg) | 150/0.05 | 300/0.1 | 600/0.2 | 600/0.1 | 300/0.1 | 600/0.2 | 1500/0.5 | 1500.0.2 |
| Initial zero range (kg) | 220 | 220 | 140 | 140 | 740 | 740 | 540 | 540 |
| Load receptor (mm) | 1250x1000 |
| Model | KE1500 | KE1500 | KE1500 | KE1500 | KES1500 | KES1500 | KES1500 | KES1500 |
| Max / e (kg) | 300/0.1 | 600/0.2 | 1500/0.5 | 1500/0.2 | 300/0.1 | 600/0.2 | 1500/0.5 | 1500/0.2 |
| Initial zero range (kg) | 630 | 630 | 430 | 430 | 550 | 550 | 350 | 350 |
| Load receptor (mm) | 1500x1250 | 1500x1250 | 1500x1250 | 1500x1250 | 1500x1500 | 1500x1500 | 1500x1500 | 1500x1500 |
| Model | KE3000 | KE3000 | KE3000 | KE3000 | KES3000 | KES3000 | KES3000 | KES3000 |
| Max / e (kg) | 600/0.2 | 1500/0.5 | 3000/0.5 | 3000/1 | 600/0.2 | 1500/0.5 | 3000/0.5 | 3000/1 |
| Initial zero range (kg) | 1570 | 1570 | 1170 | 1170 | 1460 | 1460 | 1060 | 1060 |
| Load receptor (mm) | 1500x1250 | 1500x1250 | 1500x1250 | 1500x1250 | 1500x1500 | 1500x1500 | 1500x1500 | 1500x1500 |
| Model | KG3000 | KG3000 | KG3000 | KG3000 | KG6000 | KG6000 | KG6000 | KG6000 |
| Max / e (kg) | 600/0.2 | 1500/0.5 | 3000/0.5 | 3000/1 | 1500/0.5 | 3000/1 | 6000/1 | 6000/2 |
| Initial zero range (kg) | 1320 | 1320 | 920 | 920 | 2800 | 2800 | 2000 | 2000 |
| Load receptor (mm) | 2000x1500 |

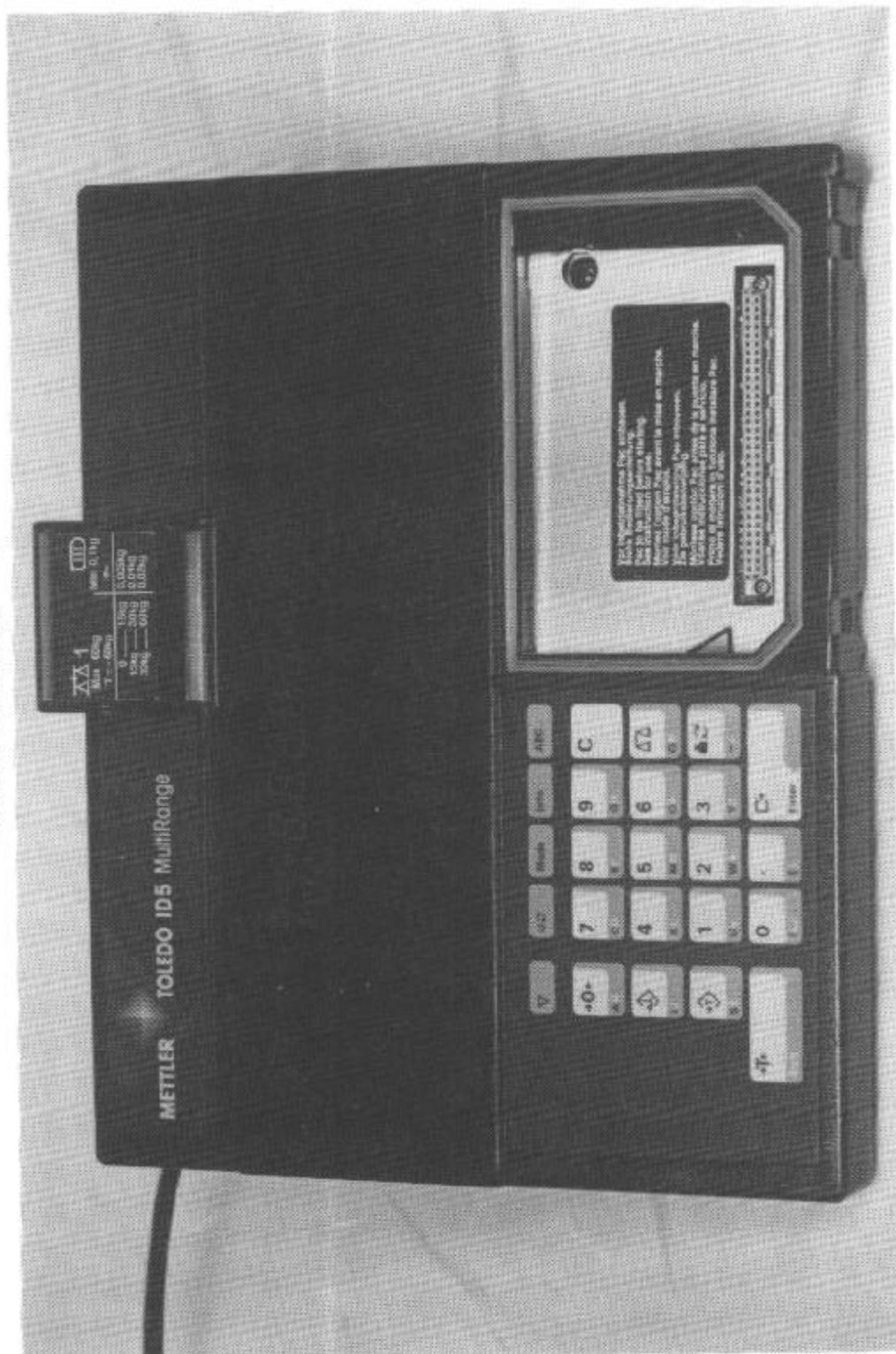
Approved Models and Capacities of Single-interval Instruments - Variant 5

FIGURE 6/9C/253 - 1



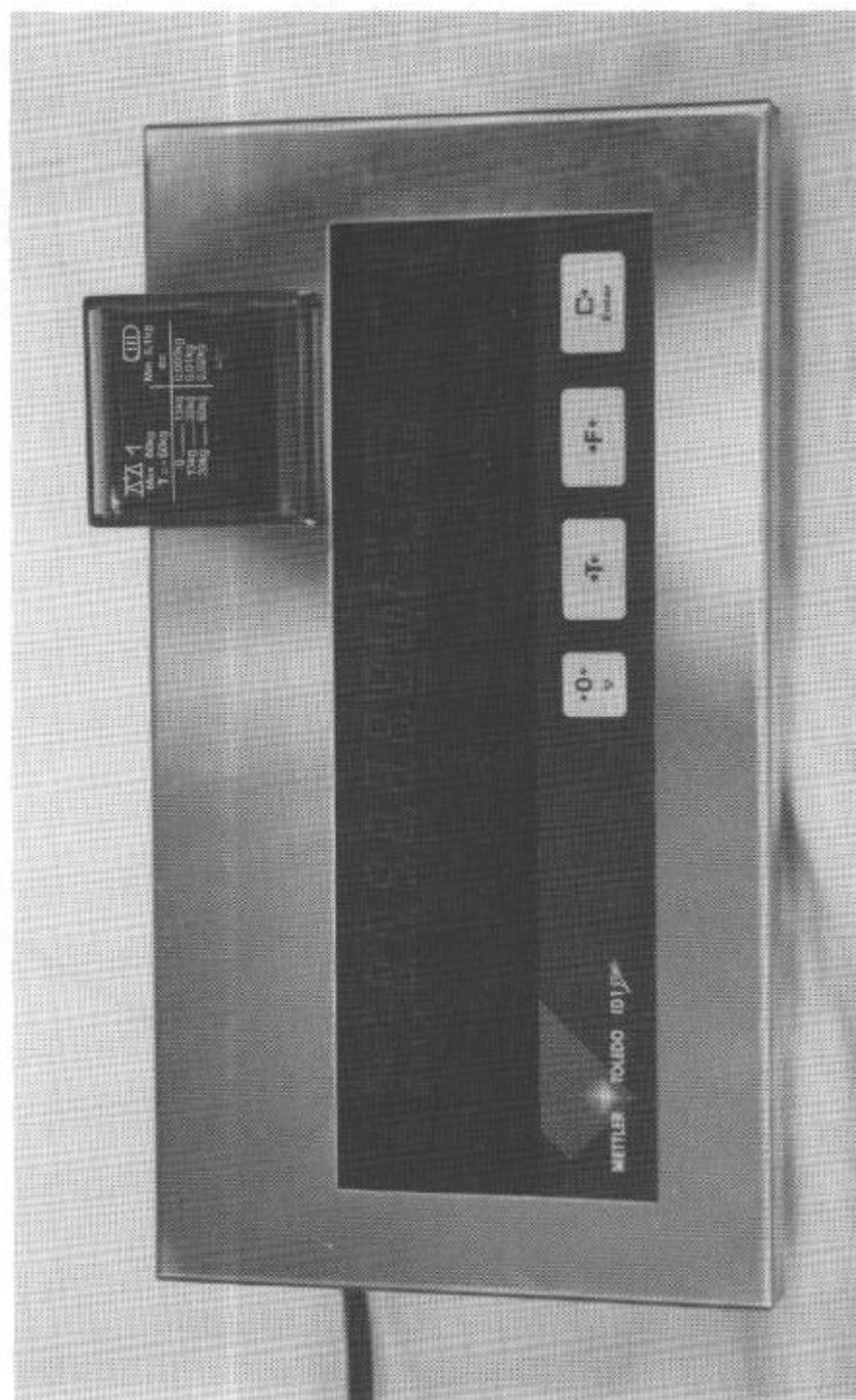
Mettler Toledo Model KB60.2 Basework

FIGURE 6/9C/253 - 2



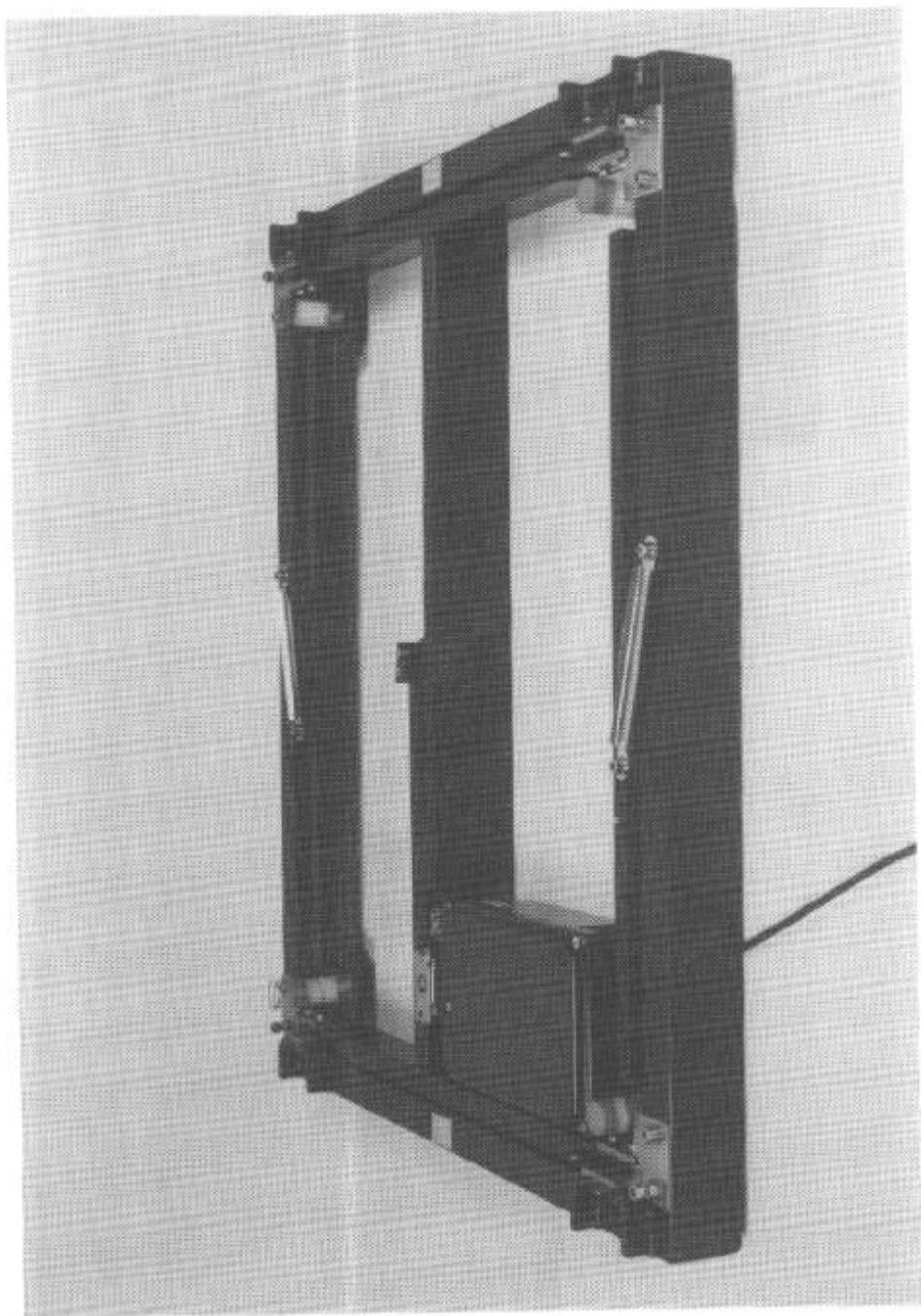
Mettler Toledo Model ID5 Digital Indicator

FIGURE 6/9C/253 - 3



Mettler Toledo Model ID1P/us Digital Indicator

FIGURE 6/9C/253 - 4



Mettler Toledo Model KC600 Basework