



Australian Government

Department of Industry,
Science and Resources

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4C/256

Issued by the Chief Metrologist 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 instruments herein described.

Rinstrum Model XS30A-R420 Weighing Instrument

submitted by Rinstrum Pty Ltd
 41 Success Street
 Acacia Ridge QLD 4110

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.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

DOCUMENT HISTORY

| Rev | Reason/Details | Date |
|------------|--|-------------|
| 0 | Pattern & variants 1 to 5 approved – certificate issued | 1/10/08 |
| 1 | Pattern & variants 1 to 5 amended (Tables 2 to 4) – notification of change issued | 24/01/09 |
| 2 | Variant 5 amended (explanation of Max₁ Max₂) – notification of change issued | 16/07/09 |
| 3 | Pattern & variants 1 to 5 reviewed & updated – certificate issued | 25/08/16 |
| 4 | Variant 6 approved – certificate | 28/05/19 |
| 5 | Variant 5 amended and variant 7 approved – certificate issued | 17/02/23 |
| 6 | Table 5b amended (error) – certificate issued | 30/08/23 |

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/256' 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.

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

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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

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



Darryl Hines
Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/4C/256

1. Description of Pattern

approved on 26/09/08

A Rinstrum model XS30A-R420 (#) class III multiple range self-indicating non-automatic weighing instrument (Figure 1) with a verification scale interval (e_1) of 0.005 kg up to 15 kg and a verification scale interval (e_2) of 0.01 kg from 15 kg up to the maximum capacity of 30 kg.

Instruments are configured so that the weighing range can change automatically with increasing load and when the indication remains at rest at zero.

Instruments are NOT FOR TRADING DIRECT WITH THE PUBLIC and shall be so marked.

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

(#) The instrument may also be known according to the basework only (e.g. XS30A) or according to the basework series (e.g. XS).

1.1 Basework

The Rinstrum model XS30A basework has the load receptor directly supported by a single load cell. The load receptor has maximum nominal dimensions of 300 x 300 mm, and typically uses a stainless steel type 304 construction.

1.2 Load Cell

A Flintec model PC1-50kg-C3 load cell of 50 kg maximum capacity is used.

1.3 Indicator

A Rinstrum model R420 digital indicator is used (Figure 1). The indicator is also described in the documentation of approval NMI S463. The indicator may be mounted on a column attached to the base.

1.4 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.5 Sealing Provision

Sealing of the instrument is as described in the approval documentation for the indicator.

1.6 Verification Provision

Provision is made for the application of a verification mark.

1.7 Descriptive Markings and Notices

Instruments carry the following markings:

| | |
|--|-------------------|
| Manufacturer's mark, or name written in full | Rinstrum |
| Indication of accuracy class | |
| Maximum capacity | Max kg #1 |
| Minimum capacity | Min kg #1 |
| Verification scale interval | e = kg #1 |
| Maximum subtractive tare | T = - kg #2 |
| Serial number of the instrument | |
| Pattern approval mark for the instrument | NMI 6/4C/256 |
| Pattern approval mark for other components | #3 |

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

#2 This marking is required if T is not equal to Max .

#3 May be located separately from the other markings.

In addition, instruments shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

Note:

For multiple range instruments the markings shall be as above, with the exception that the maximum capacity, minimum capacity and verification scale interval for each range shall be marked, with an indication of the range to which they apply, as shown in the instrument display (e.g. ' $\leftarrow 1 \rightarrow$ ')

| Range | 1 | 2 | (*) |
|-------|---------|---------|-----|
| Max | kg | kg | |
| Min | kg | kg | |
| e = | kg | kg | |

- (*) The markings for each weighing range shall be clearly associated with an indication of the corresponding range (i.e. ' $\leftarrow 1 \rightarrow$ ') to correspond to the weighing range designations shown in the instrument display.

2. Description of Variant 1

approved on 26/09/08

Certain other Rinstrum XS**A-##### instruments, similar to the pattern but having various capacities, using various Rinstrum XS##A series baseworks (some of which use HBM model PW15A load cells) and having characteristics as listed in Table 1.

3. Description of Variant 2

approved on 26/09/08

Certain Rinstrum XT**A-##### instruments of various capacities, as listed in Table 2, which are similar to the pattern but the baseworks of which use Flintec model PC6 or HBM model PW15AH load cells. Typically these baseworks have a stainless steel type 304 construction.

4. Description of Variant 3

approved on 26/09/08

Certain Rinstrum XK**A-##### instruments of various capacities, as listed in Table 3, which are similar to the pattern but the baseworks of which use Flintec model PC6 or HBM model PW15AH load cells. Typically these baseworks have a stainless steel type 316 construction.

5. Description of Variant 4

approved on 26/09/08

Certain Rinstrum XA**A-##### instruments of various capacities, as listed in Table 4, which are similar to the pattern but the baseworks of which use Flintec model PC42 or HBM model SP4 load cells. Typically these baseworks have a mild steel type of construction.

6. Description of Variant 5

approved on 26/09/08

amended on 17/02/23

Certain baseworks of this approval used with a compatible approved (by Supplementary Certificate) indicator provided the conditions set out below are met. In this case instruments may be known according to the basework model number (e.g. model XS30A).

In addition to the markings specified in clause **1.7 Descriptive Markings and Notices**, instruments are marked with the NMI approval number for the indicator used, together in the same location.

The approved baseworks and their limiting characteristics are given in Tables 1 to 6.

The conditions to be met are given below, and include calculations using the following terms:

Ex = Excitation from indicator (V)

LC_Sens = Load cell sensitivity (mV/V)

E_{max} = Load cell maximum capacity (kg)

Indicator Sensitivity = Minimum sensitivity value per verification scale interval for the indicator (μV)

e = verification scale interval of the instrument (kg). ***In the case of multiple range instruments, any reference to 'e' refers to the smallest verification scale interval (i.e. e₁).***

e_1, e_2, \dots = verification scale interval of each range for multiple range instruments. e_1 refers to the smallest verification interval.

Max = the maximum capacity of the instrument. This refers to the maximum capacity of the highest range (i.e. Max_r for multiple range instruments).

Max_r = the maximum capacity of the instrument for a multiple range instrument, i.e. the maximum capacity of the highest range.

$\text{Max}_1 \text{ Max}_2 \dots$ = the maximum capacity of the various ranges for a multiple range instrument. Max_r refers to the maximum capacity of the smallest range.

n_{LC} = the maximum number of verification intervals for which the load cell or basework is approved (e.g. 3000 for a ‘class C.3’ load cell).

DR = dead load return value for the load cell. Note: Many load cells do not have a specified DR value.

The conditions are:

- The excitation voltage used is within the range approved for the baseworks.
- The maximum load applied to the basework (live load plus any dead load) does not exceed the load cell maximum capacity.
- The verification scale interval is not less than the minimum value specified.
In the case of multiple range instruments, the verification scale interval refers to the smallest verification scale interval (i.e. e₁).
- The number of verification scale intervals is less than or equal to the nmax value specified. *In the case of multiple range instruments, the number of verification scale intervals refers to the largest number in any weighing range or partial weighing range (i.e. the largest of Max₁/e₁, Max₂/e₂ etc).*
- The signal voltage per verification scale interval is not less than the minimum sensitivity value per verification scale interval for the indicator (as specified in the approval documentation for the indicator), i.e.

$$\text{Indicator Sensitivity} \leq 1000 \times E_x \times LC_Sens \times e / E_{\max}$$

Additional requirement for multiple range operation:

In the case of indicators which are configured to form a multiple range weighing instrument the instrument shall comply with one of the following conditions:

- (i) ***The smallest verification scale interval (e₁) shall satisfy the following:***
 $e_1 \geq 0.4 \ Max_r/n_{LC}$
- (ii) ***Or, the smallest verification scale interval (e₁) shall satisfy the following:***
 $e_1 \geq DR \cdot Max_r/E_{\max}$

Of course (ii) cannot apply where a value of 'Deadload return' DR is not given.

7. Description of Variant 6

approved on 28/05/19

Rinstrum model XS**A-#### and XT**A-#### instruments having an alternative stainless steel basework with maximum nominal dimensions of 300 x 300 mm as shown in Figure 2.

7.1 Levelling

Instruments are provided with adjustable feet and a level indicator. The level indicator (bubble) is located on basework underneath the weighing receptor. A notice indicating the location of the level indicator (e.g. "Level bubble provided under platform", or similar) shall be provided in a location clearly visible to the operator.

The instrument is to be used in a level condition as indicated by the level indicator.

8. Description of Variant 7

approved on 17/02/23

Rinstrum model XG**-#### instruments of various capacities, as listed in Tables 5a, 5b to 6 and as shown in Figure 3, which are similar to the pattern but the baseworks

of which use Zemic model L6E3 or HBM model SP4MC3MR or Zemic model L6G load cells. Typically these baseworks have a stainless steel type 304 construction.

8.1 Levelling

Instruments are provided with adjustable feet and a level indicator. The level indicator (bubble) is located on basework underneath the weighing receptor. A notice indicating the location of the level indicator (e.g. "Level bubble provided under platform", or similar) shall be provided in a location clearly visible to the operator.

The instrument is to be used in a level condition as indicated by the level indicator.

TEST PROCEDURE No 6/4C/256

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

For multiple range instruments with verification scale intervals of e_1 , e_2 ..., apply e_1 for zero adjustment, and maximum permissible errors apply e_1 , e_2 ..., as applicable for the load.

TABLE 1

| Instrument model | XS15A-##### | XS30A-##### | XS60A-##### |
|---|--------------------------|--------------------------|--------------------------|
| Basework model | XS15A | XS30A | XS60A |
| Platform size (mm x mm) | 300 x 300 | 300 x 300 | 300 x 300 |
| Maximum capacity kg | 15 | 6/15 (#MR) | 30 |
| Typical verification scale interval kg | 0.005 | 0.002/0.005 | 0.01 |
| Maximum number of verification scale intervals (n_{max}), per range | 3000 | 3000 | 3000 |
| Load cell model used | Flintec PC1-30kg-C3 (#2) | HBM PW15A-20kg-C3MR (#1) | Flintec PC1-50kg-C3 (#1) |
| Load cell classification | C3 | C3 | C3 |
| Load cell maximum capacity kg | 30 | 20 | 50 |
| (E_{max}) | | | |
| Number of load cells | 1 | 1 | 1 |
| Minimum value of verification scale interval for basework (V_{min} of load cell) | 0.003 | 0.0013 | 0.005 |
| Load cell sensitivity (at E_{max}) mV/V | 2 | 2 | 2 |
| Input impedance ohm | 390 | 380 | 390 |
| Excitation voltage (maximum) V | 15 | 15 | 15 |
| Cable length ($\pm 0.1m$) m | 1 | 1.5 | 1.5 |
| Number of leads (plus shield) | 4 | 6 | 6 |

Notes: ##### – in the instrument model shown above is determined according to the attached indicator. The instrument may be known according to the full model (e.g. XS15A-R420), the basework only (e.g. XS15A), or the basework series only (e.g. XS).

#1 – instruments using this load cell may be either a single interval or a multiple range instrument.

#2 – instruments using this load cell may only be a single interval instrument.

#MR – MR represents a multiple range instrument.

TABLE 2

| Instrument model | XT15A-##### | XT30A-##### | XT60A-##### |
|---|--------------------------|---------------------------|---------------------------|
| Basework model | XT15A | XT30A | XT60A |
| Platform size (mm x mm) | 300 x 300 | 300 x 300 | 300 x 300 |
| Maximum capacity | kg 15 6/15 (#MR) | 30 15/30 (#MR) | 60 30/60 (#MR) |
| Typical verification scale interval | kg 0.005 0.002/0.005 | 0.01 0.005/0.01 | 0.02 0.01/0.02 |
| Maximum number of verification scale intervals (n_{max}), per range | 3000 | 3000 | 3000 |
| Load cell model used | Flintec PC6-20kg-C3 (#1) | HBM PW15AH-20kg-C3MR (#1) | HBM PW15AH-50kg-C3MR (#1) |
| Load cell classification | C3 | C3 | C3 |
| Load cell maximum capacity | kg 20 | 20 | 50 |
| (E_{max}) | | | |
| Number of load cells | 1 | 1 | 1 |
| Minimum value of verification scale interval for basework (V_{min} of load cell) | kg 0.0016 | 0.0013 | 0.0005 |
| Load cell sensitivity (at E_{max}) | mV/V 2 | 2 | 2 |
| Input impedance | ohm 1100 | 380 | 1100 |
| Excitation voltage (maximum) | V 15 | 15 | 15 |
| Cable length ($\pm 0.1\text{m}$) | m 3 | 3 | 3 |
| Number of leads (plus shield) | 4 | 6 | 4 |
| | | | 6 |

Notes: ##### – in the instrument model shown above is determined according to the attached indicator. The instrument may be known according to the full model (e.g. XT15A-R420), the basework only (e.g. XT15A), or the basework series only (e.g. XT).

#1 – instruments using this load cell may be either a single interval or a multiple range instrument.

#MR – MR represents a multiple range instrument.

TABLE 3

| Instrument model | XK15A-##### | XK30A-##### | XK60A-##### |
|---|--------------------------|---------------------------|---------------------------|
| Basework model | XK15A | XK30A | XK60A |
| Platform size (mm × mm) | 300 × 300 | 300 × 300 | 300 × 300 |
| Maximum capacity | kg 15 | kg 30 | kg 60 |
| Typical verification scale interval | kg 0.005 | kg 0.002/0.005 | kg 0.005/0.01 |
| Maximum number of verification scale intervals (n_{max}), per range | 3000 | 3000 | 3000 |
| Load cell model used | Flintec PC6-20kg-C3 (#1) | HBM PW15AH-20kg-C3MR (#1) | HBM PW15AH-50kg-C3MR (#1) |
| Load cell classification | C3 | C3 | C3 |
| Load cell maximum capacity | kg 20 | kg 20 | kg 50 |
| Number of load cells | 1 | 1 | 1 |
| Minimum value of verification scale interval for basework (V_{min} of load cell) | kg 0.0016 | kg 0.0013 | kg 0.0033 |
| Load cell sensitivity (at E_{max}) | mV/V | 2 | 2 |
| Input impedance | ohm 1100 | ohm 380 | ohm 380 |
| Excitation voltage (maximum) | V 15 | V 15 | V 15 |
| Cable length (±0.1m) | m 3 | m 3 | m 3 |
| Number of leads (plus shield) | 4 | 6 | 4 |

Notes: ##### – in the instrument model shown above is determined according to the attached indicator. The instrument may be known according to the full mode (e.g. XK15A-R420), the basework only (e.g. XK15A), or the basework series only (e.g. XK).

#1 – instruments using this load cell may be either a single interval or a multiple range instrument.

#MR – MR represents a multiple range instrument.

TABLE 4

| Instrument model | XA15A##### | XA30A##### | XA60A##### |
|---|---------------------------|------------------------|---------------------------|
| Basework model | XA15A | XA30A | XA60A |
| Platform size (mm × mm) | 300 × 300 | 300 × 300 | 300 × 300 |
| Maximum capacity kg | 15 | 6/15 (#MR) | 30 |
| Typical verification scale interval kg | 0.005 | 0.002/0.005 | 0.01 |
| Maximum number of verification scale intervals (n_{\max}), per range | 3000 | 3000 | 3000 |
| Load cell model used | Flintec PC42-20kg-C3 (#1) | HBM SP4-20kg-C3MR (#1) | Flintec PC42-50kg-C3 (#1) |
| Load cell classification | C3 | C3 | C3 |
| Load cell maximum capacity kg | 20 | 20 | 50 |
| (E_{\max}) | | | |
| Number of load cells | 1 | 1 | 1 |
| Minimum value of verification scale interval for basework (V _{min} of load cell) | 0.002 | 0.0013 | 0.005 |
| Load cell sensitivity (at E_{\max}) mV/V | 2 | 2 | 2 |
| Input impedance ohm | 413 | 300...500 | 413 |
| Excitation voltage (maximum) V | 15 | 15 | 15 |
| Cable length (± 0.1 m) m | 1 | 3 | 3 |
| Number of leads (plus shield) | 4 | 6 | 4 |
| | | | 6 |

Notes: ##### – in the instrument model shown above is determined according to the attached indicator. The instrument may be known according to the full model (e.g. XA15A-R420), the basework only (e.g. XA15A), or the basework series only (e.g. XA).

#1 – instruments using this load cell may be either a single interval or a multiple range instrument.

#MR – MR represents a multiple range instrument.

TABLE 5a

| Instrument model | XG-015S-##### | XG-015M-##### | XG-030S-##### | XG-030M-##### | XG-030L-##### | XG-60S-##### | XG-60M-##### |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| Basework model | XG-015S | XG-015M | XG-030S | XG-030M | XG-030L | XG-60S | XG-60M |
| Platform size (mm x mm) | 300 x 300 | 300 x 400 | 300 x 300 | 300 x 400 | 400 x 500 | 300 x 300 | 300 x 400 |
| Maximum capacity (Max) | kg | 15 | | 30 | | 60 | |
| Minimum capacity (Min) | kg | 0.1 | | 0.2 | | 0.4 | |
| Typical verification scale interval (ϵ) | kg | 0.005 | | 0.01 | | 0.02 | |
| Maximum number of verification scale intervals (n_{max}), per range | | 3000 | | 3000 | | 3000 | |
| Load cell model used | | Zemic L6E3 C3 50 kg | | Zemic L6E3 C3 50 kg | | Zemic L6E3 C3 100 kg | |
| Load cell classification | | C3 | | C3 | | C3 | |
| Load cell maximum capacity (E_{max}) | kg | 50 | | 50 | | 100 | |
| Number of load cells | | 1 | | 1 | | 1 | |
| Minimum value of verification scale interval for basework (V_{min} of load cell) | kg | 0.005 | | 0.005 | | 0.01 | |
| Load cell sensitivity (at E_{max}) | mV/V | 2 | | 2 | | 2 | |
| Input impedance | ohm | 406 | | 406 | | 406 | |
| Excitation voltage (maximum) | V | 18 | | 18 | | 18 | |
| Cable length | m | 2 | | 2 | | 2 | |
| Number of leads (plus shield) | | 4 | | 4 | | 4 | |

Note: ##### in the instrument model shown above is determined according to the attached indicator. The instrument may be known as the full model number (e.g., XG-015S-R420-K401) or base work only (e.g., XG-015S).

TABLE 5b

| Instrument model | XG-60L- ##### | XG-60XL- ##### | XG-150S- ##### | XG-150M- ##### | XG-150L- ##### | XG-150XL- ##### | XG-300L- ##### | XG-300XL- ##### |
|---|-------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|------------------------|
| Basework model | XG-60L | XG-60XL | XG-150S | XG-150M | XG-150L | XG-150XL | XG-300L | XG-300XL |
| Platform size (mm x mm) | 400 x 500 | 500 x 600 | 300 x 300 | 300 x 400 | 400 x 500 | 500 x 600 | 400 x 500 | 500 x 600 |
| Maximum capacity (Max) | kg | 60 | | 150 | | 150 | | 300 |
| Minimum capacity (Min) | kg | 0.4 | | 1 | | 1 | | 2 |
| Typical verification scale interval (e) | kg | 0.02 | | 0.05 | | 0.05 | | 0.1 |
| Maximum number of verification scale intervals (n_{max}), per range | | 3000 | | 3000 | | 3000 | | 3000 |
| Load cell model used | Zemic L6E3 C3 100 kg | Zemic L6G C3 100 kg | Zemic L6E3 C3 200 kg | Zemic L6E3 C3 200 kg | Zemic L6G C3 200 kg | Zemic L6E3 C3 200 kg | Zemic L6E3 C3 500 kg | Zemic L6G C3 500 kg |
| Load cell classification | C3 | | C3 | | C3 | | C3 | |
| Load cell maximum capacity (E_{max}) | kg | 100 | | 200 | | 200 | | 500 |
| Number of load cells | | 1 | | 1 | | 1 | | 1 |
| Minimum value of verification scale interval for basework (V _{min} of load cell) | kg | 0.01 | | 0.02 | | 0.02 | | 0.05 |
| Load cell sensitivity (at E_{max}) | mV/ V | 2 | | 2 | | 2 | | 2 |
| Input impedance | ohm | 406 | | 406 | | 406 | | 406 |
| Excitation voltage (maximum) | V | 18 | | 18 | | 18 | | 18 |
| Cable length | m | 3 | | 2 | | 3 | | 3 |
| Number of leads (plus shield) | | 6 | | 4 | | 6 | | 6 |

Note: ##### in the instrument model shown above is determined according to the attached indicator. The instrument may be known as the full model number (e.g., XG-015S-R420-K401) or base work only (e.g., XG-015S).

TABLE 6

| Instrument model | XG-015AS- ##### | XG-015AM- ##### | XG-030AS- ##### | XG-030AM- ##### | XG-060AS- ##### | XG-060AL- ##### |
|---|-------------------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|
| Basework model | XG-015AS | XG-015AM | XG-030AS | XG-30AM | XG-60AS | XG-60AL |
| Platform size (mm × mm) | 300 × 300 | 300 × 400 | 300 × 300 | 300 × 400 | 300 × 300 | 500 × 600 |
| Maximum capacity (Max 1/Max ₂) or Max | kg 6/15 (#MR) or 15 | | 15/30 (#MR) or 30 | | 30/60 (#MR) or 60 | |
| Minimum capacity (Min ₁ /Min ₂) or Min | kg 0.04/0.1 (#MR) or 0.1 | | 0.1/0.2 (#MR) or 0.2 | | 0.2/0.4 (#MR) or 0.4 | |
| Typical verification scale interval (e ₁ /e ₂) or e | kg 0.002/0.005 (#MR) or 0.005 | | 0.005/0.01 (#MR) or 0.01 | | 0.01/0.02 (#MR) or 0.02 | |
| Maximum number of verification scale intervals (n _{max}), per range | | 3000 | | 3000 | | 3000 |
| Load cell model used | HBM SP4MC3MR 20kg | HBM SP4MC3MR 50kg | HBM SP4MC3MR 50kg | HBM SP4MC3MR 75kg | C3 | C3 |
| Load cell classification | | C3 | | | | |
| Load cell maximum capacity (E _{max}) | kg 20 | | 50 | | 75 | |
| Number of load cells | | 1 | 1 | 1 | 1 | 1 |
| Minimum value of verification scale interval for basework (V _{min} of load cell) | kg 0.002 | | 0.005 | | 0.005 | |
| Load cell sensitivity (at E _{max}) | mV/V | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Input impedance | ohm 400 | | 400 | | 400 | |
| Excitation voltage (maximum) | V 12 | | 12 | | 12 | |
| Cable length | m 3 | | 3 | | 3 | |
| Number of leads (plus shield) | | 6 | 6 | 6 | 6 | 6 |

Note: 1) ##### in the instrument model shown above is determined according to the attached indicator. The instrument may be known as the full model number (e.g., XG-015AS-R420-K401) or base work only (e.g., XG-015AS).

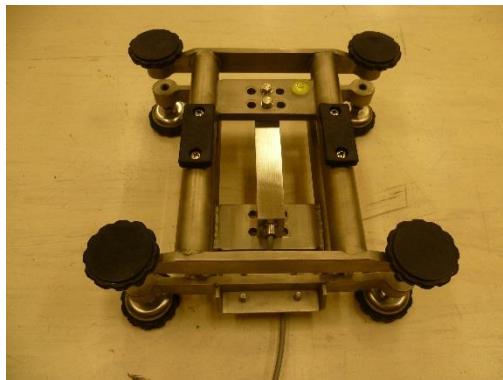
2) The instrument using the load cell may be either a single interval or a multiple range instrument.

3) #MR – MR represents a multiple range instrument.



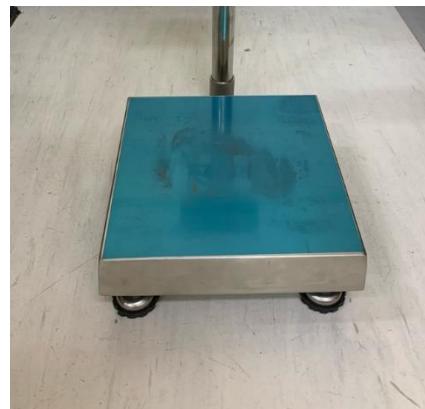
Rinstrum Model XS##A-R420 Weighing Instrument
Using a Rinstrum Model R420 Indicator

FIGURE 6/4C/256 – 2



Rinstrum Model XT**A / XS**A Alternative Basework

FIGURE 6/4C/256 – 3



Rinstrum Model XG**A Alternative Basework

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