

Profile Projector V-20b with Ø 500mm Screen

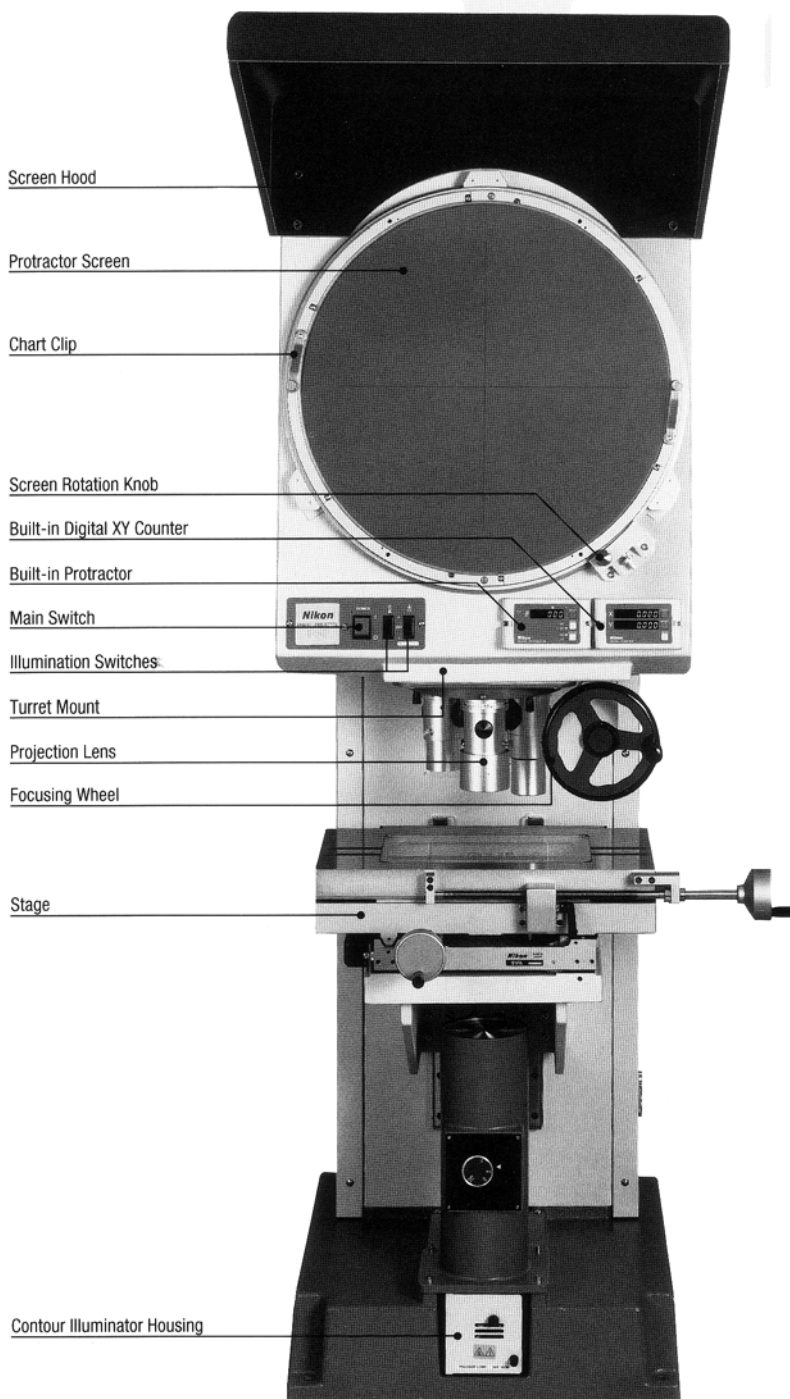


The Nikon Profile Projector V-20B is rugged and heavyweight and incredibly accurate, reliable, and simple to use. Like all other Nikon profile projectors, the Model V-20B offers superb image definition, uniform edge-to-edge magnification and bright screen illumination. The large 500mm diameter screen is combined with a heavy duty stage to accommodate larger, heavier specimens. Contour and surface inspections can be done separately or simultaneously. And there is a wide variety of Nikon, Acu-Rite and Ryf accessories to increase its versatility.



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FEATURES



Features

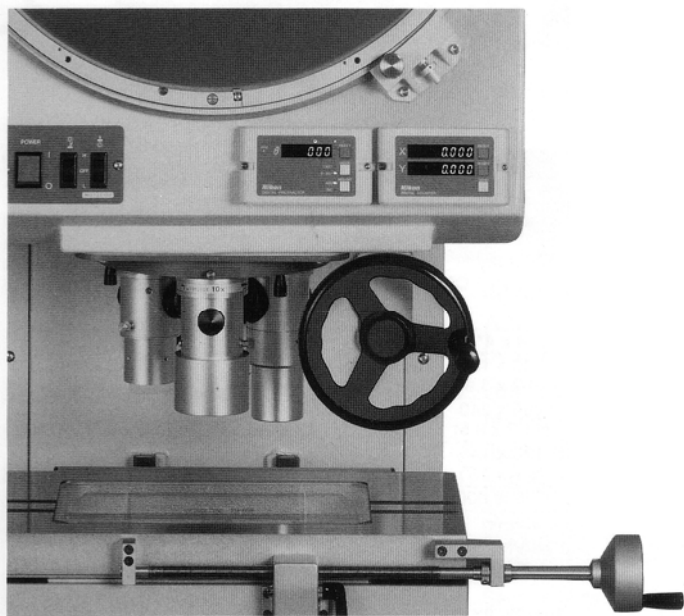
- Large 500mm diameter protractor screen inclined 8° for convenient fatigue-free observation.
- Large stages (250mm x 150mm, 200mm x 150mm) for handling large and heavy specimens (20-25kg).
- Improved ease of use with built-in digital counter and built-in digital protractor.
- Halogen lamp illuminators provide brighter, sharper screen images in both contour and surface illuminations - and simplify observation of low-reflectivity specimens under high magnification.
- Precise focusing system with convenient, easy-to-operate focusing wheel, three-lens rotating turret; linear encoder built into the stage makes measuring work more simple, accurate, and efficient.
- Newly designed projection lenses assure higher resolving powers, parfocality, parcentricity, and magnification accuracy. Magnification range - 5x to 100x.

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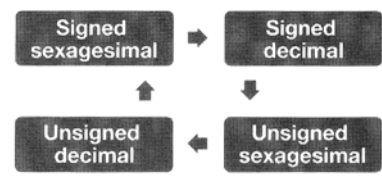
Built-in Digital Protractor Counter, Built-in Digital XY Counter and Focusing Wheel

Operation unit (focusing wheel) and display (protractor counter and XY counter) are located close to each other for optimal operability.



Protractor Counter

- Digital angle display: Sexagesimal (degree, minute)/Decimal (degree) switchable.
- ABS (absolute)/INC (incremental) mode selectable.
- Angle display range: $\pm 450^\circ$ from datum point (zero-reset point) in ABS mode.
- Easy zero resetting: In resetting the ABS mode, the datum point for both the ABS and INC modes is set simultaneously. When you reset in the INC mode, you only set the datum point for the INC mode.
- Four different switchable modes:

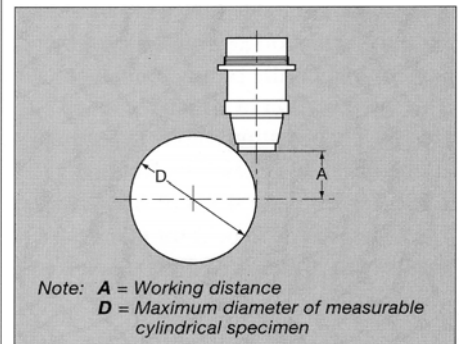


XY Counter

- Digital length display: metric/inch switchable.
- Zero-resetting provided.
- DRO (digital readout) minimum reading - With 9VA, 8 x 6, 6 x 4, 4 x 4, 03L and 2 x 2 stages: 0.001 mm (0.00005 in.)/0.0005mm (0.00002 in.) selectable.

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OBJEKTIVE



These high-resolution projection lenses provide accurate magnifications. The Model V-20B profile projector uses five interchangeable screw-mount projection lenses ranging from 5x to 100x, with the highest resolution. The projected images are virtually distortion-free. All lenses are parfocal. A three-lens rotating turret makes magnification changes easy. Magnification accuracy: $\pm 0.1\%$ for contour illumination, ± 0.1511 for surface illumination.

Magnification	Diameter of area covered mm (in.)	Working distance mm (in.) A	Maximum diameter of measurable cylindrical specimen mm (in.) D
5x	100 (3.94)	73 (2.88)	149 (5.87)
10x	50 (1.97)	79 (3.11)	215 (8.47)
20x	25 (0.98)	85 (3.35)	313 (12.33)
50x	10 (0.39)	50.5 (1.99)	130 (5.12)
100x	5 (0.20)	50.5 (1.99)	130 (5.12)

ILLUMINATION SYSTEM

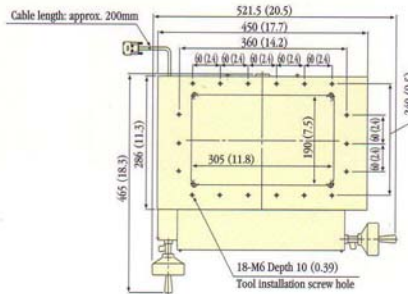
Bright, efficient illumination. Like all Nikon profile projectors, the Model V-20B permits inspection of exact surface details of specimens, as well as contours - independently or simultaneously. Both surface and contour illuminators incorporate a 24V/150W halogen lamp, a heat-absorbing filter, and a cooling fan. A combination of contour and surface illumination provides just the right lighting for an extra-bright, extra-sharp screen image.

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Precision stages x-/y- with integrated glass scales for QC200/220

Stage Type 10x6

For MM-60



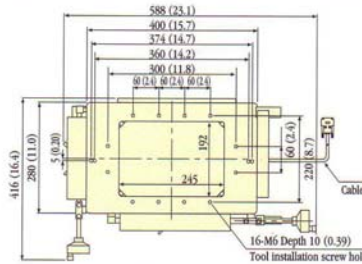
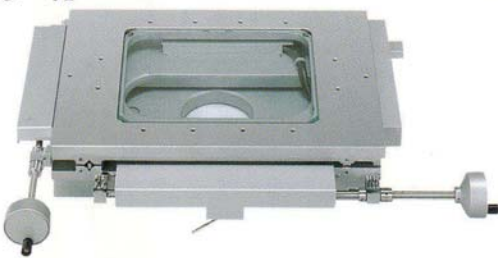
Stage 250 x 150mm



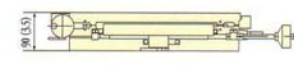
mm (in.)

Stage Type 8x6

For MM-60



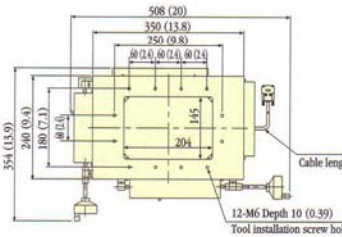
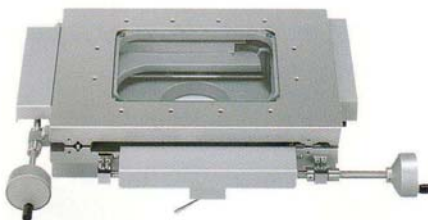
Stage 200 x 150mm



mm (in.)

Stage Type 6x4

For MM-60/40



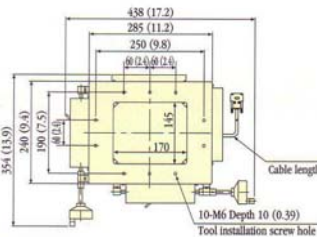
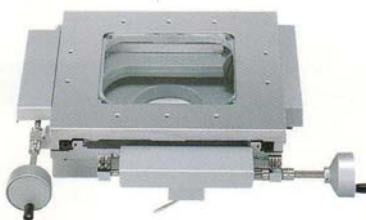
Stage 50 x 100mm



mm (in.)

Stage Type 4x4

For MM-60/40



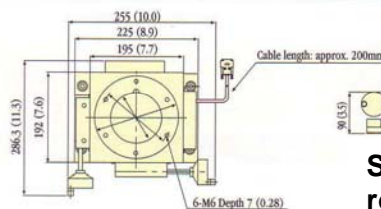
Stage 100 x 100mm



mm (in.)

Stage Type 2x2

For MM-60/40



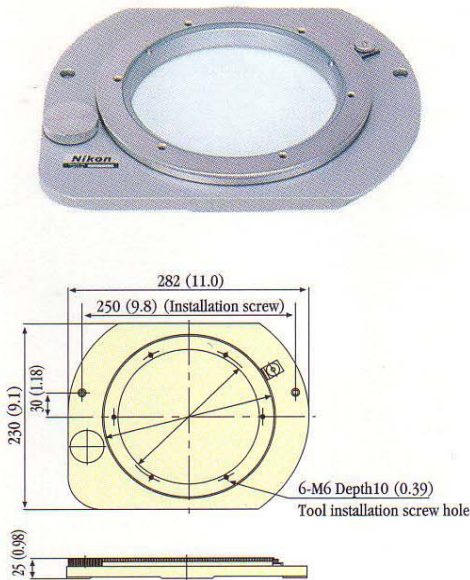
Stage 50 x 50mm with rotating table



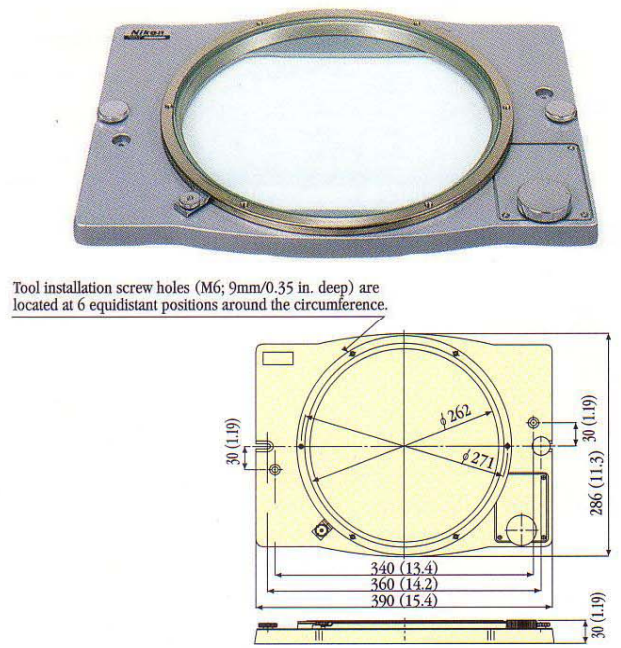
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Rotating Tables for Stages

rotating table type 3 for stages 4x4 and 6x4



rotating table type 2 for stage 8x6

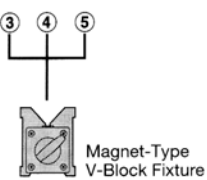
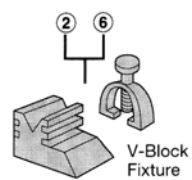
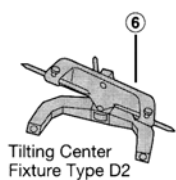
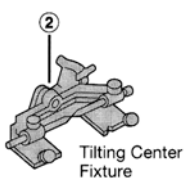
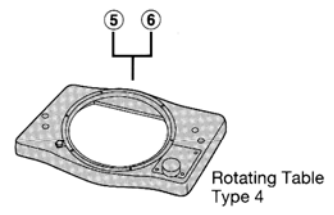
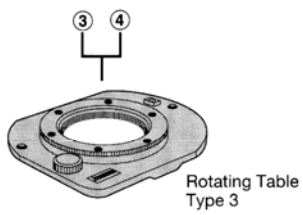
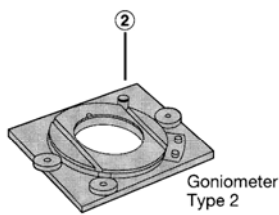
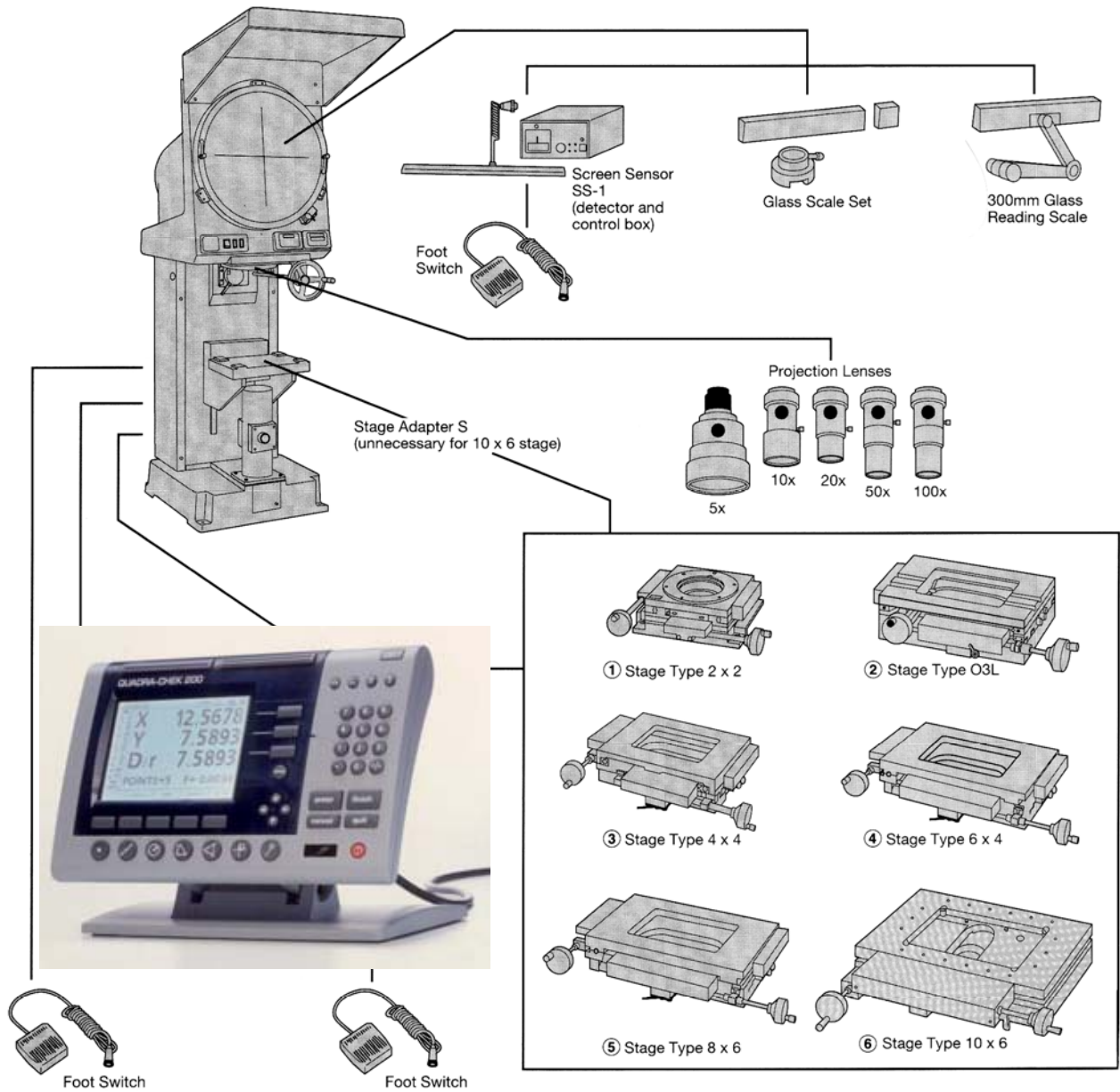


Ryf precision Tilting centre Fixture RZSS-25



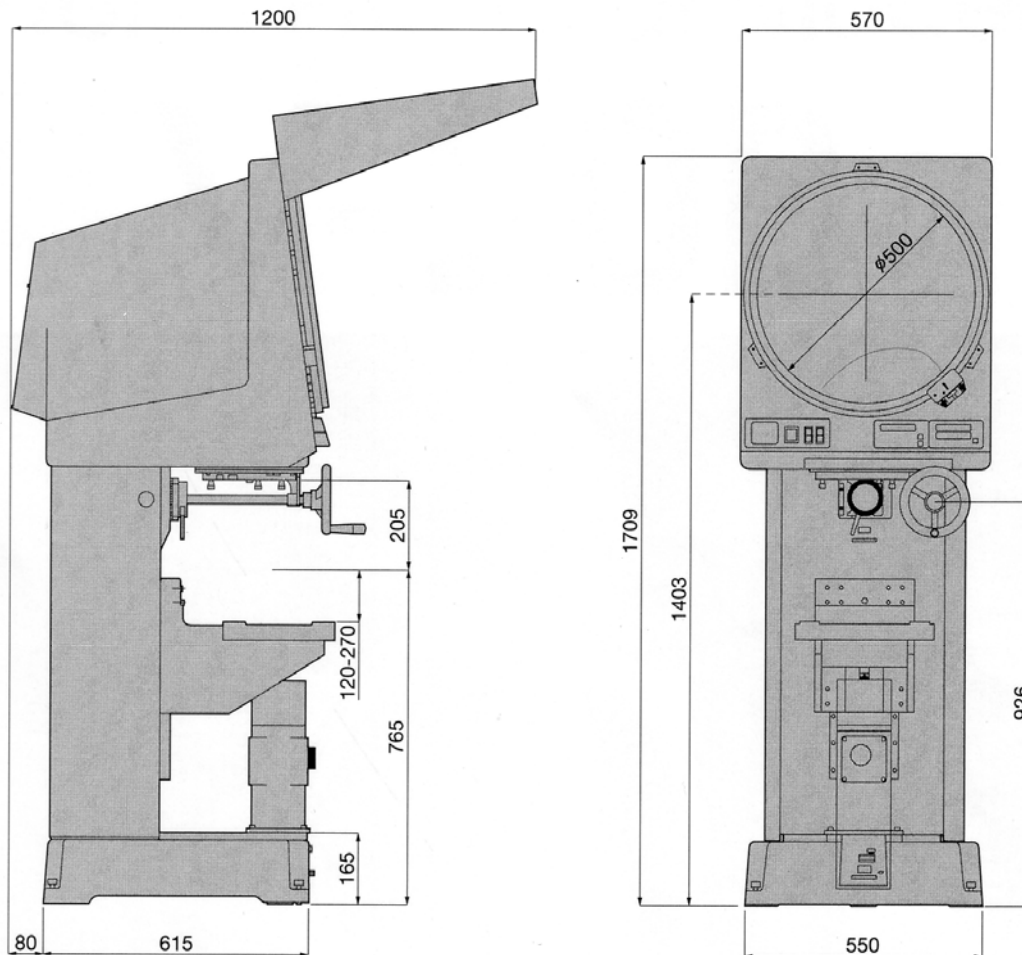
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SYSTEM DIAGRAM



Profile Projector V-20b with Ø 500mm Screen

DIMENSIONS



SPECIFICATIONS

Type	Vertical optical axis
Image	Inverted and reversed
Screen	500mm (19.7 in.) diameter, protractor screen, inclined 8°
Lens mount	3-lens turret mount
Projection lenses	5x 10x, 20x, 50x, 100x
Magnification accuracy	±0.1% in contour illumination, ±0.15% in surface illumination
Light source	24V-150W halogen lamp
Stages Directly mounted	10 x 6
With Stage Adapter S	8 x 6, 6 x 4, 4 x 4, O3L, 2 x 2
Max. specimen height	150mm (5.9 in.)
Power input	AC100-120V, 220-240V
Dimensions (W x D x H) and weight (approx.)	570 x 1200 x 1900mm (22.4 x 47.2 x 74.8 in.) 260kg (573 lbs.)