

JT12A-B

φ 300 Digital Measuring Projector

Characteristics

- Clear image, accurate magnification, easy operation for comparing measurement
- With a non-spherical collector lighting system, the visual field of the projector screen would be all the more bright and homogeneous; thus reducing measurement errors and further securing the accuracy.
- Imported long-life halogen tungsten lamps are adopted to satisfy the requirement of long-time uses of the projector. With axial flow blower fans, the bilateral heat radiation can provide super-strong radiating power.
- JT12A-B has a DS401SM multi-function digital meter and micro-printer available as an optional parts.

Technical Parameters

Projection screen

Screen diameter: φ 300 mm

Rotation range: 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle: 6'

Worktable

Worktable area: 340mm × 152mm

Range of X-coordinate: 0~150 (mm) Resolution : 0.001 (mm)

Range of Y-coordinate: 0~50 (mm) Resolution : 0.001 (mm)

Range of Z-coordinate (Focusing): 0~90 (mm)

Accuracy of the instrument: $(4+L/25) \mu m$, of which, L = length of the workpiece measured (unit: mm)

Load capacity of the worktable: 5kg

Lighting source

Transmission lighting: 12V 100W Halogen tungsten lamp

Indirect lighting: 24V 150W Halogen tungsten lamp



Objective

Magnification Power	10 ×	20 ×	50 ×	100 ×
Object Visual Field	φ 30mm	φ 15mm	φ 6mm	φ 3mm
Object Working Distance	74mm	69mm	44mm	26mm
Errors of magnifying power	0.08%			

Errors of magnifying power: 0.08%

Ambient environment of the instrument service

Room temperature: 20°C ± 5°C

Relative humidity: 40%~70%

Overall sizes of the instrument (mm): 480 × 780 × 1150

Mainframe weight: 135 kg

Remarks on the Power Source

Rated voltage for the instrument is 220V/110V

Frequency: 50HZ/60HZ

JT20 (Built-in Readout)

φ 300 Digital Measuring Projector

JT20A (External Readout)

φ 300 Digital Measuring Projector

Characteristics

- The up-and-down hoisting structure adopted for the projecting box can provide with a large focusing stroke in Z-direction.
- The worktable is provided with three different travels for selection in accordance with the dimensions of the measured workpiece.
- Precious built in objective, rotated button for changing the surface light and profile light.
- Optical path could be adjusted based on different objective for changing the magnification.
- Beautiful in its outward appearances, with the accuracy of $(3+L/75) \mu m$

Technical Parameters

Projection screen

Screen diameter: φ 300 mm

Rotation range: 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle: 6'

Objective

Magnification Power	10 ×	20 ×	50 ×
Object Visual Field	φ 30mm	φ 15mm	φ 6mm
Object Working Distance	74mm	69mm	63 mm
Errors of magnifying power	0.08%		

Worktable (Three Optional)

Type	Small	Medium	Large
Range of X-coordinate	0~150	0~200	0~250
Range of Y-coordinate	0~100	0~150	0~150
Load capacity of the worktable	10kg	15kg	20kg
Worktable area	350 × 240	400 × 280	450 × 286



Resolution: 0.001 (mm)

Stroke of Z-coordinate (Focusing): 0~100 (mm)

Accuracy of the instrument: $(3+L/75) \mu m$, of which, L = length of the workpiece measured (unit: mm)

Lighting source

Transmission lighting: 24V 150W Halogen tungsten lamp

Reflecting lighting: 24V 150W Halogen tungsten lamp

Overall sizes of the instrument (mm): L/410 × W/650 × H/1100

Mainframe weight: 80 kg

JT300

φ 300 Digital Measuring Projector

Characteristics

- Use circular arc curve modeling, beautiful and easy to operate
- Use linear guide and no interference in the nut on the up and down system, more stable and easy to operate
- Patent coating process used on the reflective mirror, better performance of the dustproof.
- The two high-and-low adjustable light intensities for transmission lighting can be adaptable for different measuring requirements.
- Imported long-life halogen tungsten lamps are adopted to satisfy the requirement of long-time uses of the projector.
- In high quality in its optical system, the objectives are clear in imaging and accurate in multiplying factors.
- With axial flow blower fans, the bilateral heat radiation can provide super-strong radiating power.

Technical Parameters

Projection screen

Screen diameter (mm) : φ300

Rotating range : 0° ~ 360°

resolution of the rotary angle : 1'

Accuracy of the rotary angle : 6'

Objective

Magnification Power	10 ×	20 ×	50 ×	100 ×
Object Visual Field	φ 30mm	φ 15mm	φ 6mm	φ 3mm
Object Working Distance	75.201mm	69.599mm	44.4 mm	26.243
Errors of magnifying power	0.08%			

Worktable

Size of worktable : (400 × 225) mm

worktable travel (optional) : X= 200mm Y= 100mm Z= 80mm

Resolution: 1 um



Accuracy of X and Y coordinate value: (3+L/75) um, of which,
L=length of the work piece measured (unit:mm)

Load weight of worktable : 5kg

Illumination source

Transmission illumination 12V 100W Tungsten halogen lamp

Reflecting illumination 24V 150W Tungsten halogen lamp

Outer dimensions of the instrument(mm)

L694 × W380 × H1065

Operating environments: Room temperature is 20°C ± 5°C and the relative humidity does not exceed 60%.

Instrument weight: 180kg

JT24

φ 300 Digital Measuring Projector

Characteristics

- This instrument is in conformity with the design of update molding, compact in structures and convenient for operations.
- The highlight and long-life halogen tungsten lamps are adopted for the lighting source, homogeneous in lighting.
- Beautiful in its outward appearances, this instrument is of super-precision; casting aluminum is selected for the processing of worktables, light in weight.
- In high quality in its optical system, the objectives are clear in imaging and accurate in multiplying factors.
- The fiber transmission is adopted for the indirect lighting, which is small in dimensions, high in its brightness and convenient for uses.
- The two high-and-low adjustable light intensities for transmission and indirect lightings can be adaptable for measuring requirements of different workpieces.

Technical Parameters

Projection screen

Screen diameter: φ 300 mm

Rotation range: 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle: 4'

Worktable

Worktable area: 326mm × 150mm

Range of X-coordinate: 0~200 (mm) Resolution: 0.001 (mm)

Range of Y-coordinate: 0~80 (mm) Resolution: 0.001 (mm)

Range of Z-coordinate (Focusing): 0~100 (mm)

Accuracy of the instrument: $(3+L/75) \mu m$, of which,

L = length of the work piece measured (unit: mm)

Load capacity of the worktable: 5kg



Lighting source

Transmission lighting: 24V 150W Halogen tungsten lamp

Indirect lighting: 24V 150W Halogen tungsten lamp

Objective

Magnification Power	10 ×	20 ×	50 ×	100 ×
Object Visual Field	φ 30mm	φ 15mm	φ 6mm	φ 3mm
Object Working Distance	75.201mm	69.599mm	26.990 mm	26.243
Errors of magnifying power	0.08%			

Operating environments: Room temperature is 20°C ± 5°C and the relative humidity does not exceed 60%.

Overall sizes of the instrument (mm): L/746 × W/420 × H/980

Mainframe weight: 105 kg

JT21A

φ 350 Digital Measuring Projector

Characteristics

- ① The inverted projector is in conformity with the human-based design and convenient for operation.
- ② Two-way radiation used for the axial blower can provide super-strong power for radiation.
- ③ Especially suitable for the comparative measurement detection of projection drawings, observation of the contour forms, etc..
- ④ The in-line type is adopted for the objective replacement, with much convenience in replacement.
- ⑤ This instrument equipped with multiple-function digital display meters is very convenient for the measurement of complicated parts.



Technical Parameters

Projection screen

Screen diameter: φ 350 mm

Rotation range: 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle: 4'

Objective

Magnification Power	5 ×	10 ×	20 ×	50 ×
Object Visual Field	φ 70mm	φ 35mm	φ 17.5mm	φ 7mm
Object Working Distance	163.m	89mm	76 mm	60 mm
Errors of magnifying power	0.08%			

Worktable

Worktable area: 380mm × 230mm

Range of X-coordinate: 200 (mm)

Range of Y-coordinate: 100 (mm)

Resolution: 0.001 (mm)

Range of Z-coordinate: 0~100 (mm) (Focusing)

Accuracy of the instrument: (3+L/75) μ m, of which, L = length of the workpiece measured (unit: mm)

Load capacity of the worktable: 5kg

Lighting source

Transmission lighting: 12V 100W Halogen tungsten lamp

Vertical Reflection lighting: 12V 100W Halogen tungsten lamp

Obligue reflection lighting:

24V 100W Halogen tungsten lamp (only use on 5 × lens)

Overall sizes of the instrument (mm): 854 × 480 × 1401

Mainframe weight: 138kg

JT26

φ 400 Digital Measuring Projector

Characteristics

- The product structures are strong in commonality, this instrument is beautiful in its outward appearances and convenient for operations.
- Imported V-type straight-line slide-way is adopted for the hoisting driving of the worktable, light and comfortable in driving.
- The two high-and-low adjustable light intensities for transmission and indirect lightings can be adaptable for measuring requirements of different workpieces.
- In high quality in its optical system, the objectives are clear in imaging and accurate in multiplying factors.
- The fiber transmission is adopted for the indirect lighting, which is small in dimensions, high in its brightness and convenient for uses.
- bigger screen size, horizontal light system, easy to measure the work piece with axis..
- This instrument is of super-precision, with stable and reliable performances.



Technical Parameters

Projection screen

Screen diameter: φ 400 mm

Rotation range: 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle: 4'

Worktable

Worktable area: 450mm × 150mm

Range of X-coordinate: 0~250 (mm) Resolution: 0.001 (mm)

Range of Y-coordinate: 0~80 (mm) (Focusing)

Range of Z-coordinate: 0~150 (mm) Resolution: 0.001 (mm)

Accuracy of the instrument: (3+L/75) μ m, of which, L = length of the workpiece measured (unit: mm)

Load capacity of the worktable: 5kg

Objective

Magnification Power	10 ×	20 ×	50 ×	100 ×
Object Visual Field	φ 35mm	φ 17.5mm	φ 7mm	φ 3.5mm
Object Working Distance	88mm	81mm	54 mm	45 mm
Errors of magnifying power	0.08%			

Lighting source

Transmission lighting: 24V 150W Halogen tungsten lamp

Reflecting lighting: 24V 150W Halogen tungsten lamp (with reflection cup)

Ambient environment of the instrument service

Room temperature: 20°C ± 5°C

Relative humidity: Not more than 60%

Overall sizes of the instrument (mm): 687 × 443 × 942

Mainframe weight: 150 kg

Remarks on the Power Source

Rated voltage for the instrument is 220V/110V

Frequency: 50HZ/60HZ

JT36

φ 600 Vertical Projector

Characteristics

- The projection screen is mounted by vertical ways, which is convenience for user's observation.
- The two high-and-low adjustable light intensities for transmission and indirect lightings can be adaptable for measuring requirements of different workpieces.
- In high quality in its optical system, the objectives are clear in imaging and accurate in multiplying factors.



Technical Parameters

Screen diameter (mm) : Φ600

Rotating range : 0° ~ 360°

Resolution of the rotary angle: 1'

Accuracy of the rotary angle : 6'

Worktable (Three Optional)

Type	Small	Large
Worktable area (mm)	350 × 240	450 × 286
Range of X-coordinate (mm)	0~200	0~300
Range of Y-coordinate (mm)	0~100	0~200
Z-shaft(Focusing)mm	80	
Load capacity of the worktable (kg)	10	5

Measuring range (mm) :

X-coordinate 300, Resolution 0.001

Y-coordinate 200, Resolution 0.001

Z-shaft (Focusing) : 80

Accuracy of the instrument: (4+40L) μm, of which, L = length of the workpiece measured (unit: m)

Objective

Magnification Power	10 ×	20 ×	50 ×	100 ×
Object Visual Field	φ 120mm	φ 60mm	φ 30mm	φ 6mm
Object Working Distance	102mm	135mm	87mm	49mm
Errors of magnifying power	0.08%			

Lighting source :

Transmission lighting : 12V 150W Halogen tungsten lamp

Reflecting lighting : 12V 150W Halogen tungsten lamp

Overall sizes of the instrument (mm): 1420 × 1300 × 1940

Mainframe weight : 550kg

Room temperature : 20° C ± 5° C

Relative humidity : Not more than 60%

JT5A/B/E

Φ 800 Horizontal Projector

Characteristics

- Horizontal light system, suitable for the measurement of work piece on production line
- Worktable has a larger moving range and strong bearing capacity, suitable for measurement of large-sized parts.
- The deflection of worktable is $\pm 15^\circ$, convenient for measuring helical parts.
- The two high-and-low adjustable light intensities for transmission and indirect lightings can be adaptable for measuring requirements of different workpieces.
- Large area of projection screen can display the comparison indications of various large-sized complex parts in one time, with higher measurement efficiency.
- JT5A is equipped with digital display box to make data processing.
- JT5B is equipped with computer, 2-coordinate measurement software and hand controller, achieving the power operated measurement.
- JT5E is equipped with CNC automatic controller, achieving full-auto control measurement and data processing.

Technical Parameters

Projection screen

Projection screen: $\phi 800$ mm

Rotation range : 360°

Rotation division value of projection screen: 1°

Resolution of the rotary angle: $1'$

Worktable

Worktable area: 630mm \times 200mm

Measuring range

Longitudinal direction: 300mm

Vertical direction: 200mm

Transverse direction: 80mm

Resolution: 0.001mm



Light transmission size of plane worktable (mm) : 300 \times 200

Light transmission size of circular worktable (mm) : $\phi 90$

Rotation: $\pm 15^\circ$

Accuracy of the instrument: $(4+L/50) \mu m$, of which, L=length of the workpiece measured (unit: mm)

load capacity of the worktable: 50kg

Tailstock rack

Maximum diameter gripped: $\phi 200$ mm

Maximum length gripped : 300mm

Lighting source

Transmission lighting: 24V 250W Halogen tungsten lamp

Reflecting lighting: 16V 150W Incandescent lamp

Objective

Magnification Power	10 \times	20 \times	25 \times	50 \times
Object Visual Field	$\phi 80$ mm	$\phi 40$ mm	$\phi 16$ mm	$\phi 8$ mm
Object Working Distance	206mm	123.5mm	85mm	78mm

Overall sizes of the instrument (mm) : 2130 \times 1800 \times 1950

Mainframe weight: 1900kg

JT7A/B/E

Φ 1200 Horizontal Projector

Characteristics

- ➊ Imported Philip long-life halogen tungsten lamp is used to meet the requirement of long use time.
- ➋ Worktable has a larger moving range and strong bearing capacity, suitable for measurement of large-sized parts.
- ➌ Large area of projection screen can display the comparison indications of various large-sized complex parts in one time, with higher measurement efficiency.
- ➍ High-precision objective turntable is convenient for converting multiplying power and accurate in orientation.
- ➎ The deflection of worktable is $\pm 15^\circ$, convenient for measuring helical parts.
- ➏ Advanced raster sensor digital display technology and data processing system can achieve little error and high efficiency.

model	configuration
JT7-A	digital display box
JT7-B	computer, PCI card, hand controller 2-coordinate measurement software
JT7-E	Renishaw metal encoder, CNC automatic controller



Technical Parameters

Projection screen

Projection screen: $\phi 1200$ mm

Rotation range :360°

Rotation division value of projection screen: 1°

Resolution of the rotary angle: 1'

Worktable

Worktable area: 800mm x 230mm

Measuring range

Longitudinal direction: 300mm

Vertical direction: 200mm

Transverse direction: 60mm

Resolution: 0.001mm

Light transmission size of vertical square worktable: 310 x 205

Light transmission size of vertical circular worktable: $\phi 130$

stage deflection angle: $\pm 15^\circ$

Accuracy of the instrument: $(4+L/50) \mu m$, of which, L=length of the workpiece measured (unit: mm)

load capacity of the worktable: 100kg

Objective

Magnification Power	10 x	20 x	50 x	100 x
Object Visual Field	$\phi 120$ mm	$\phi 60$ mm	$\phi 24$ mm	$\phi 12$ mm
Object Working Distance	300mm	195mm	120mm	50mm

optic axis of lens

Maximum distance from stage: 255mm

Minimum distance from stage: 55mm

Tailstock

Maximum diameter gripped: $\phi 300$ mm

Maximum length gripped: 450mm

Lighting source

Transmission lighting: 24V 250W Halogen tungsten lamp

Reflecting lighting: 16V 150W Incandescent lamp

Overall sizes of the instrument (mm) : 3500 x 2320 x 2250

Mainframe weight: 4000kg

JT35A/B/E

① 1500 Horizontal Projector

Characteristics

- High-precision objective turntable is convenient for converting multiplying power and accurate in orientation.
- Worktable has a larger moving range and strong bearing capacity, suitable for measurement of large-sized parts.
- The deflection of worktable is $\pm 15^\circ$, convenient for measuring helical parts.
- Advanced raster sensor digital display technology and data processing system can achieve little error and high efficiency.
- square workstage, rotary workstage available to satisfy different work piece measuring requirement.
- special coating process used on the reflective mirror, better performance of the dustproof and easy to clean.
- SLR lens optical path design, less energy loss during transmission, better quality of the image on the screen.

model	configuration
JT35-A	digital display box
JT35-B	computer, PCI card, hand controller 2-coordinate measurement software
JT35-E	Renishaw metal encoder, CNC automatic controller



Technical Parameters

Projection screen

Projection screen: ϕ 1500 mm

Rotation range :360°

Rotation division value of projection screen: 1°

Resolution of the rotary angle: 1'

Worktable

Worktable area: 800mm x 230mm

Measuring range

Longitudinal direction: 400mm

Vertical direction: 250mm

Transverse direction: 150mm

Resolution: 0.001mm

Light transmission size of vertical square worktable: 560 x 255

Light transmission size of vertical circular worktable: ϕ 330

stage deflection angle: $\pm 15^\circ$

Accuracy of the instrument: $(4+L/50) \mu m$, of which, L=length of the workpiece measured (unit: mm)

load capacity of the worktable: 100kg

Objective

Magnification Power	10 x	20 x	50 x
Object Visual Field	ϕ 150mm	ϕ 75mm	ϕ 30mm
Object Working Distance	300mm	195mm	120mm

optic axis of lens

Maximum distance from stage: 255mm

Minimum distance from stage: 55mm

Tailstock

Maximum diameter gripped: ϕ 400mm

Maximum length gripped: 450mm

Lighting source

Transmission lighting: 24V 250W Halogen tungsten lamp

Reflecting lighting: 24V 150W Incandescent lamp

Overall sizes of the instrument (mm) : 4009 x 2905 x 2418

Mainframe weight: 6000kg

Multi-Functional Digital Display Meter



- Multipoint acquisition can determine the straight line and the circular.
- Various geometric elements can be preset.
- Various geometric elements can be determined in the combination forms.
- Having the functions of coordinate rotation and motion of translation.
- The length of sensor or the angular value of the coder may be set in Z-axial.
- Having the translation function between the pole coordinate and the rectangular coordinate.
- Having the function of error correction.
- Having the function of RS232 output.
- Having the function of page output.
- Having the function of power failure memory.
- Various geometric elements can be stored and called.

2-D measuring software

Acquisition functions: Acquire dots, lines, circulars and arcs.

Construction functions: Construct the Line, the circular and the arc by acquired dots and calculate three parameters.

Combined computing functions:

The combination calculation between “dot” and “dot” gives their dot distance and midpoint coordinate;

The combination calculation between “dot and line” gives the distance between dot and line;

The combination calculation between “straight line and straight line for their crossing” gives their intersecting point coordinate and their included angle;

The combination calculation between “straight line and straight line for their centering” gives the central line information for the two lines;

The combination calculation between “circle and circle” gives the information of the crossing points and the center distance of the circle;

The combination calculation between “circle and straight line” gives the information of their crossing points and the distance from the center of the circle to the line.

Functions for the geometrical tolerance:

Measurement of the circularity between circular and arc;

Measurement of straightness;

Measurement of coaxial;

Measurement of symmetry;

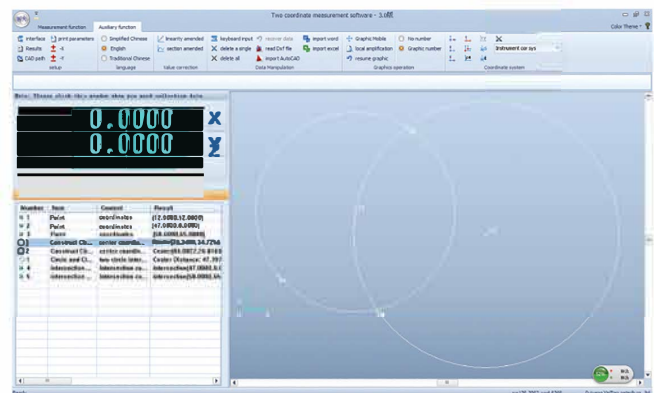
Measurement of displacement.

Exchange of the coordinate system:

The coordinate transition between the rectangular coordinate and the polar coordinate;

Establish the new coordinate and set the coordinate straight.

Data output: The data can be Outputting to AUTOCAD, EXCEL AND WORD .



Accessories of Profile Projector



Objectives



JT14 、 JT20
series Objectives



JT3 Objectives



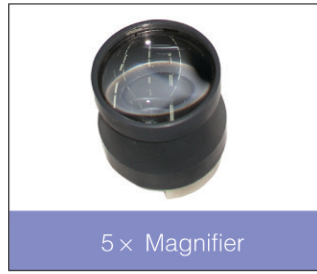
JT5 Objectives



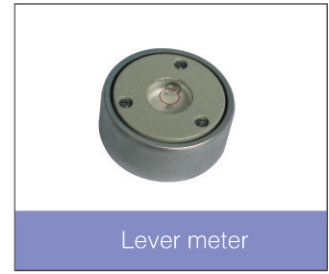
JT7 Objectives



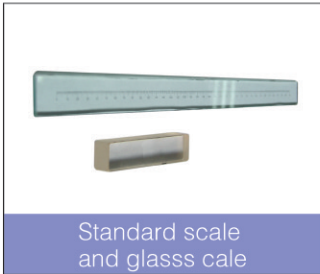
JT12 Series Semi-transmitted
mirror Group



5 × Magnifier



Lever meter



Standard scale
and glass scale



JT14 、 JT20
series plane worktable



JT14 、 JT20
series circular worktable



indirect lighting devices



Rotary worktable



vertical circular worktable



vertical plane worktable



V-type



Locating pressure
plate groups



Thimble cradle



Thimble cradle



V-type