Image Measuring Instrument

SAVE
Time & Cost
Improved efficiency & accuracy

EASY
QUICK
ACCURATE
All new Image Measuring Instrument Top Series come with new innovative design in structural quality, functionality, and accuracy, a total upgrade to satisfy your upmost demand.

IMI-TOP series, precision optical measuring instruments made with the combination of precision mechanics, electronics, and optical measuring systems.

Best suitable for precision manufacturing industries such as the following: Molding, machining parts, tools, screws, gears, automobiles, watches, machines, aerospace parts, semi-conductor, rubber, plastic, auto lathe machining, precision spring, and etc.

IMI-TOP series is great for design & development, QC inspections, and educational purpose in schools.

IMI-TOP series is design specifically to measure length, angles, radius, points, line, circle, distance, and other geometric element measuring requirements. Magnified projection image for inspection and comparison of the workpiece contour and surface shape.

IMI-TOP series machine structure are made with combination of precision granite parts, linear roller bearings, high precision linear scale, high resolution lens, color camera, image measuring software. The exceptional quality is your number 1 choice for workshop inspection and QC department examination.
Hardware Structure Description  **TOP Series**

**Unbeatable precision combination**

- Granite base
- T-type granite Z-axis column
- Z-axis traveling device
- Linear roller guide
- Non-threaded screw fastener
- Precision glass measuring table
- Laser positioner
- High resolution optical lens
- High precision linear scale
- 2 in 1 image and probe
- Autofocus controller
- Autofocus and zoom lens
Image Measuring Instrument
IMI-P Series (Practical)

**Technical specification**

Resolution: 0.001mm/0.00005” (X-Y-Z axis high accuracy linear scale)
Measuring Accuracy: ±(3+L/200) µm (X, Y Axis)
Main structure: DIN 00 grade granite table master base & Z axis T type granite column
Image system: 1/3” 0.41M pixels high resolution CCD color camera
Image magnification: 18-120X (expendable to 9-240X)
Optical system: 0.7-4.5X ultra-low distortion lens.
Illumination system: Six adjustable LED top zones and a bottom LED light which can be directly altered via computer.
Computer system: Computer with 18.5” 16:9 LCD color Monitor,
Software system: Jingstone Metrology 2D image measuring system.
Measuring result output: Word, Excel, DXF, SPC
Accessories: Optical calibration plate. Steel instrument working table cover with marble surface

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Measuring Range (XYZ)</th>
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<tbody>
<tr>
<td>IMI-P250</td>
<td>250<em>150</em>150mm</td>
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<tr>
<td>IMI-P300</td>
<td>300<em>200</em>200mm</td>
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<tr>
<td>IMI-P400</td>
<td>400<em>300</em>250mm</td>
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Image Measuring Instrument

IMI-AF Series (Autofocus)

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<tr>
<td>IMI-AF250</td>
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<td>IMI-AF300</td>
<td>300<em>200</em>200mm</td>
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<tr>
<td>IMI-AF400</td>
<td>400<em>300</em>250mm</td>
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</tbody>
</table>

Technical specification

Resolution : 0.001mm/0.00005” (X-Y-Z axis high accuracy linear scale)

Measuring Accuracy : ±(2+L/200) µm (X, Y Axis)

Main structure: DIN 00 grade granite table master base & Z axis T type granite column

Image system: 1/2” , 1.3M pixels super high resolution SONY CCD sensor color camera

Image magnification: 20~125X (expendable to 10~250X)

Electronic system: PCI Multi-Axis Controller and Integrated light motor counter card.

Focus system: Z axis electric motor autofocus and cruise control by keyboard and panel.

Optical system: 0.7-4.5X Telecentric high proficient Autofocus lens.

Illumination system: Six adjustable LED top zones and a bottom LED light which can be directly altered via computer.

Computer system: Computer with 18.5” 16:9 LCD color Monitor,

Software system: Jingstone Metrology 2D image measuring system.

Measuring result output: Word, Excel, DXF, SPC

Accessories: Optical calibration plate. Steel instrument working table cover with marble surface.
Image Measuring Instrument
IMI-AF-P Series (Autofocus+Probe)

Resolution: 0.001mm/0.00005” (X-Y-Z axis high accuracy linear scale)
Measuring Accuracy: ±(2+L/200) µm (X, Y Axis)
Main structure: DIN 00 grade granite table master base & Z axis T type granite column
Image system: 1/2”, 1.3M pixels super high resolution SONY CCD sensor color camera
Image magnification: 20~125X (expendable to 10~250X)
Electronic system: PCI Multi-Axis Controller and Integrated light motor counter card.
Focus system: Z axis electric motor autofocus and cruise control by keyboard and panel.
Optical system: 0.7-4.5X Telecentric high proficient Autofocus lens.
Illumination system: Four adjustable LED top zones and a bottom LED light which can be direct altered via computer.
Probe system: Renishaw (U.K.) MCP touch trigger probe, reference sphere and tips.
Computer system: Computer with 18.5” 16:9 LCD color Monitor,
Software system: Jingstone Metrology 2D/3D image & probe coaxial measuring system.
Measuring result output: Word, Excel, DXF, SPC
Accessories: Optical calibration plate. Steel instrument working table cover with marble surface

Model No. | Measuring Range (XYZ) |
---|---|
IMI-AF250P | 250*150*150mm |
IMI-AF300P | 300*200*200mm |
IMI-AF400P | 400*300*250mm |
Image Measuring Instrument
IMI-CNC Series (CNC-Automatic)

Technical specification

Resolution: 0.0005mm/0.00002” (X-Y-Z axis high accuracy linear scale)
Measuring Accuracy: ±(2+L/200) µm (X, Y Axis)
Main structure: DIN 00 grade granite table master base & Z axis T type granite column
Motion system: High speed 3 axis AC servo motor control system.
Operation mode: Automatic CNC programming measuring system
Image system: 1/2”, 1.3M pixels super high resolution SONY CCD sensor color camera
Image magnification: AUTO ZOOM 20~125X (expendable to 10~250X)
Electronic system: PCI Multi-Axis Controller and Integrated light motor counter card.
Focus system: Z axis electric motor autofocus and cruise control by joystick and panel.
Optical system: 0.7-4.5X high precision & proficient telecentric Autofocus lens.
Illumination system: Four adjustable LED top zones and a bottom LED light which can be direct altered via computer.
Computer system: Computer with 18.5” 16:9 LCD color Monitor,
Software system: Jingstone Metrology 2D CNC image measuring system.
Measuring result output: Word, Excel, DXF, SPC
Accessories: Optical calibration plate. Steel instrument working table cover with marble surface

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Measuring Range (XYZ)</th>
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<tbody>
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<td>IMI-CNC300</td>
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<tr>
<td>IMI-CNC400</td>
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<tr>
<td>IMI-CNC600</td>
<td>600<em>500</em>300mm</td>
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</tbody>
</table>

*IMI-CNC600 bridge type structure, super high speed movement model.
Image Measuring Instrument
IMI-CNC-P Series (CNC+Probe)

Technical specification

Resolution : 0.0005mm/0.00002” (X-Y-Z axis high accuracy linear scale)
Measuring Accuracy : ±(2+L/200) µm (X, Y Axis)
Main structure: DIN 00 grade granite table master base & Z axis T type granite column
Motion system: High speed 3 axis AC servo motor control system.
Operation mode: Automatic CNC programming measuring system
Image system: 1/2” , 1.3M pixels super high resolution SONY CCD sensor color camera
Image magnification: AUTO ZOOM 20~125X (expendable to 10~250X)
Electronic system: PCI Multi-Axis Controller and Integrated light motor counter card.
Focus system: Z axis electric motor autofocus and cruise control by joystick and panel.
Optical system: 0.7-4.5X high precision & proficient telecentric Autofocus lens.
Illumination system: Four adjustable LED top zones and a bottom LED light which can be direct altered via computer.
Probe system: Renishaw (U.K.) MCP touch trigger probe, reference sphere and tips.
Computer system: Computer with 18.5” 16:9 LCD color Monitor,
Software system: Jingstone Metrology 2D/3D CNC image & probe coaxial measuring system.
Measuring result output: Word, Excel, DXF, SPC
Accessories: Optical calibration plate. Steel instrument working table cover with marble surface
Image Measuring Instrument
Measuring software guide (Manual model)

- Functions zone
- Drawing window
- Geometric measuring
- Coordinate Function
- Image window
- Size mark
- Measuring results
- Coordinate display
- Overview
- Partial image magnification

Image Measuring Instrument
Measuring software guide (Autofocus model)

- Functions zone
- Drawing window
- Coordinate Function
- Image window
- Geometric measuring
- Size mark
- Measuring results
- Coordinate display
- Overview
- Partial image magnification
Image Measuring Instrument
Measuring software guide (CNC Automatic model)

- Functions zone
- Illumination control
- Auto measuring program
- Geometric measuring
- Size mark

3D measuring functions
Drawing window
Coordinate Function
Image window

Jingstone metrology 2D/3D image measuring software

Powerful measuring software to satisfy your highest requirements
Measuring Software Guide  Unbelievable Measuring Functions

- **Function bars**
  ![Function bars image]

  Create new file, Open file, Save file, Word output, Excel output, DXF output, SPC output, Metric and Imperial conversion, Angle units conversion, Move, Zoom, Magnify, Full screen, Delete, Undo, Display object number, Display grid, Display, Display reticle line, Reticle line color, Reticle line style, Program setting, Illumination control

- **Geometric measuring functions**
  ![Geometric measuring functions image]

  Manual measuring and drawing: point, line, circle, arc, B-spline, rectangles, ellipse, polygon, slot

  Auto-capture measuring: point, line, circle, arc

  Auto-select: points group, circle, auto control, shutdown, focus indicator

- **Other combination functions**
  2 points distance line center, point-line distance, point-circle tangents, 2 lines intersection, angle bisector, distance of two lines, circle-line distance, circle-line intersection, circle-circle intersection, circle-circle distance, circle-circle tangents

- **Dimension mark functions**
  ![Dimension mark functions image]

  angle, angle level, vertical, symmetry, radius, diameter, coordinate, text, edit, input coordinate, circle of 2 lines

- **Coordinates setup**
  ![Coordinates setup image]

  Mechanical origin, Coordinate translation, 2 points to determine X-Axis, 2 points to determine Y-Axis, Coordinate translation and rotation
Unbelievable Measuring Functions

- **Measuring Software Guide**

- **SPC statistical analysis functions**
  
  Chart, histogram, grid chart, deviation table and grouping statistics, SPC control chart, export to Excel, setting and print

- **Optical lens auto function**

- **3D probe measuring function**

  1. Height, Plane, Sphere, Cylinder, Cone, Circle

  2. Space line-line distance, plane-plane distance, space line-plane angle, plane-plane angle, space line-plane intersection, and other combination measurements

  3. Tolerance function: parallelism, verticality, angularity, position, concentricity, radial runout, axial runout
## Image Measuring Instrument

### Unbelievable Measuring Functions

**High performance TELECENTRIC LENS**

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### Jingstone Metrology 2D/3D Measuring Software

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<thead>
<tr>
<th>Function</th>
<th>1MI Model</th>
<th>P</th>
<th>AF</th>
<th>AF-P</th>
<th>CNC</th>
<th>CNC-P</th>
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<tbody>
<tr>
<td>2D basic geometric measuring</td>
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<td>Partially zoom in window</td>
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P : Practical  AF : Autofocus  AF-P : Autofocus+Probe  
CNC : CNC-Automatic  CNC-P : CNC-Automatic+Probe

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- **Telecentric autofocus lens**
- **Telecentric lens diagram**
- **Normal lens diagram**

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[Image of Unbelievable Measuring Functions]