

LARGE SIZE QUICK MEASUREMENT SYSTEM CODE QMS-A450



SPECIFICATION

| | | | |
|----------------------------------|---------------------------------|---|---------------------------|
| Optical lens | | dual-field dual-telecentric low-distortion lens | |
| Measurement range | | wide view field | small view field |
| | | 500×400mm | 430×350mm |
| Measurement Accuracy | without stitching | ±3μm ^① | ±1μm ^② |
| | with stitching | ±(5+0.02L)μm ^③ | ±(3+0.02L)μm ^④ |
| Repeatability | without stitching | ±1μm | ±0.5μm |
| | with stitching | ±2μm | ±1.5μm |
| Travel range (X×Y×Z) | | 410×340×250mm | |
| Magnification | | 3.6X | 14.2X |
| Illumination system | transmission light | telecentric illuminator, green light | |
| | surface light | vertical illuminator, high angle ring white light vertical illuminator, 4-zone low and medium angle ring white light (electric) vertical illuminator, circular (directional) green light (electric) | |
| | coaxial light (optional) | vertical illuminator, white light | |
| Glass stage size | | 520×420mm | |
| Max. weight of workpiece | | 25kg | |
| Measurement time | | <2s | |
| Measurement data | | 2D measurement | |
| Environmental requirement | | temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz | |
| Power supply | | 220V, 50Hz, 1200W | |
| Dimension (L×W×H) | | 1060×824×1818mm | |
| Weight | | 800kg | |

* The optimum temperature is 20°C±1°C

- ① Within 73×49mm, on focal position and environment temperature at 20°C±1°C
- ② Within 16×12mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 450×360mm, on focal position and environment temperature at 20°C±1°C
- ④ Within 387×315mm, on focal position and environment temperature at 20°C±1°C

To be continued

Continued from previous page

- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically

STANDARD DELIVERY

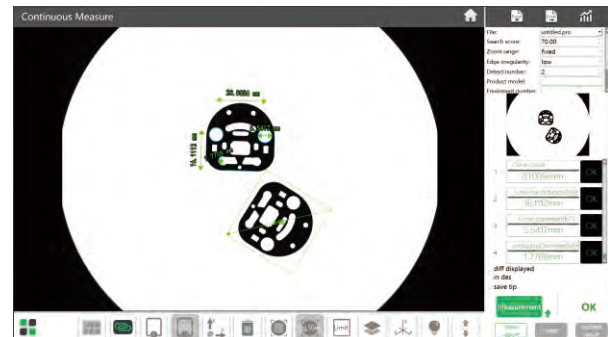
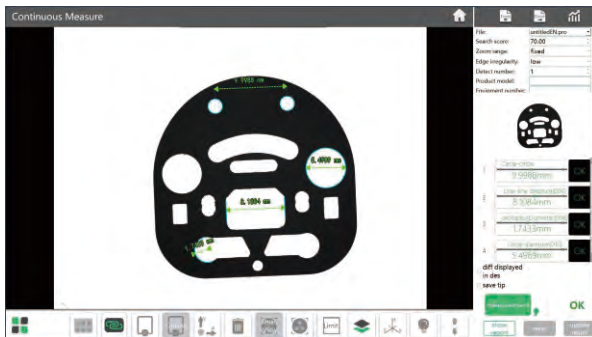
| | |
|-----------|------|
| Main unit | 1 pc |
| Computer | 1 pc |
| Software | 1 pc |

OPTIONAL ACCESSORY

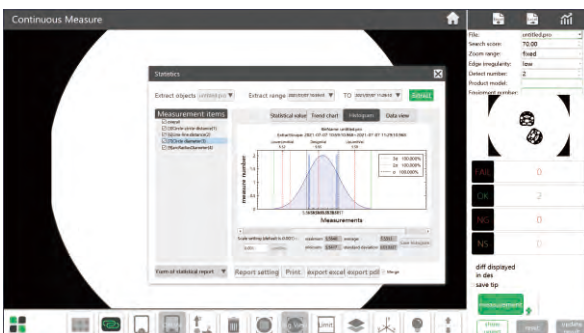
| | |
|--|------------|
| Coaxial light illumination | QMS-43-A1 |
| Data transmission function of software | QMS-23-D1 |
| CAD import function of software | QMS-23-C1 |
| Laser sensor | QMS-43-SJ1 |
| Foot-switch | QMS-43-FS1 |

Software (included)

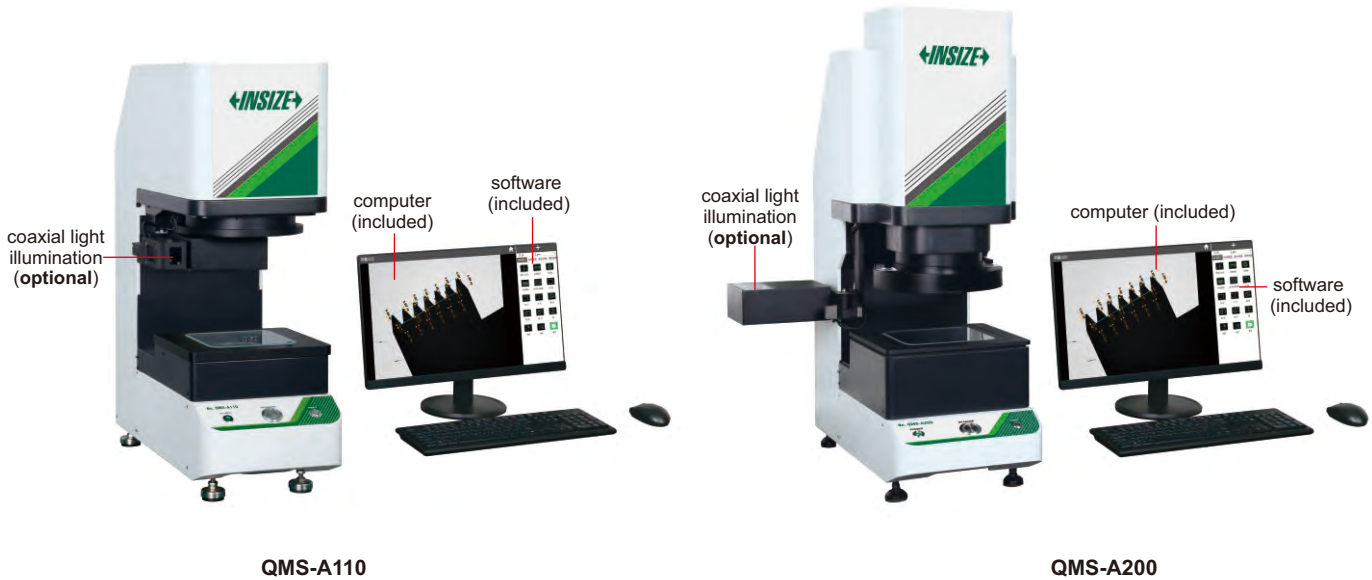
- Automatically measure widths, holes, rings, angles at the same time, simple and efficient.



- Measuring result can be stored automatically. OK items and NG items can be counted automatically.



QUICK MEASUREMENT SYSTEMS (WITHOUT STITCHING)



QMS-A110

QMS-A200

SPECIFICATION

| Code | QMS-A110 | QMS-A200 | |
|---------------------------|---|---|------------------------------------|
| Optical lens | low-distortion lens, single-field telecentric Ø100mm | dual-field dual-telecentric low-distortion lens wide view field: Ø150mm small view field: Ø50mm | |
| View field range | 100×80mm | wide view field 150×110mm | small view field 50×35mm |
| Measurement range (X×Y) | 98×78mm | 148×108mm | 48×33mm |
| Measurement accuracy* | ±3µm ^① | ±5µm ^② | ±2µm ^③ |
| Repeatability | ±1µm | ±1µm | ±0.5µm |
| Magnification | 3.5X | 1.9X | 5.75X |
| Z axis travel range | 75mm | 75mm | |
| Glass stage size | 150×150mm | 175×175mm | |
| Max. weight of workpiece | 5kg | | |
| Measurement time | <2s | | |
| Measurement data | 2D measurement | | |
| Power supply | 220V, 50Hz, 600W | | |
| Illumination system | back light | telecentric illuminator, green light | |
| | ring light | 4-zone circular white high light circular (directional) low-angle green light (electric) | |
| | coaxial light (optional) | vertical illuminator, white light | |
| Environmental requirement | temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz | | |
| Dimension (L×W×H) | 560×234×685mm | 638×336×885mm | |
| Weight | 45kg | 60kg | |

* The optimum temperature is 20°C±1°C

- ① Within 80×64mm, on focal position and environment temperature at 20°C±1°C
- ② Within 120×88mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 40×28mm, on focal position and environment temperature at 20°C±1°C

To be continued

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically

STANDARD DELIVERY

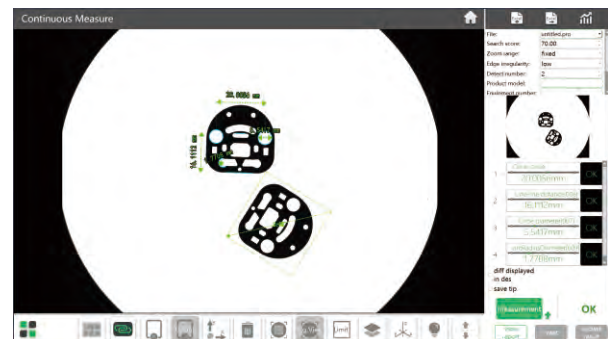
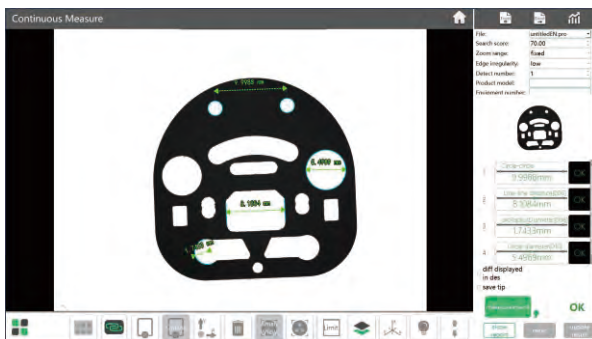
| | |
|-----------|------|
| Main unit | 1 pc |
| Computer | 1 pc |
| Software | 1 pc |

OPTIONAL ACCESSORY

| | |
|--|--|
| Coaxial light illumination | QMS-23-A3 (for QMS-A110) QMS-23-A4 (for QMS-A200) |
| Data transmission function of software | QMS-23-D1 |
| CAD import function of software | QMS-23-C1 |
| Foot-switch | QMS-43-FS1 |

Software (included)

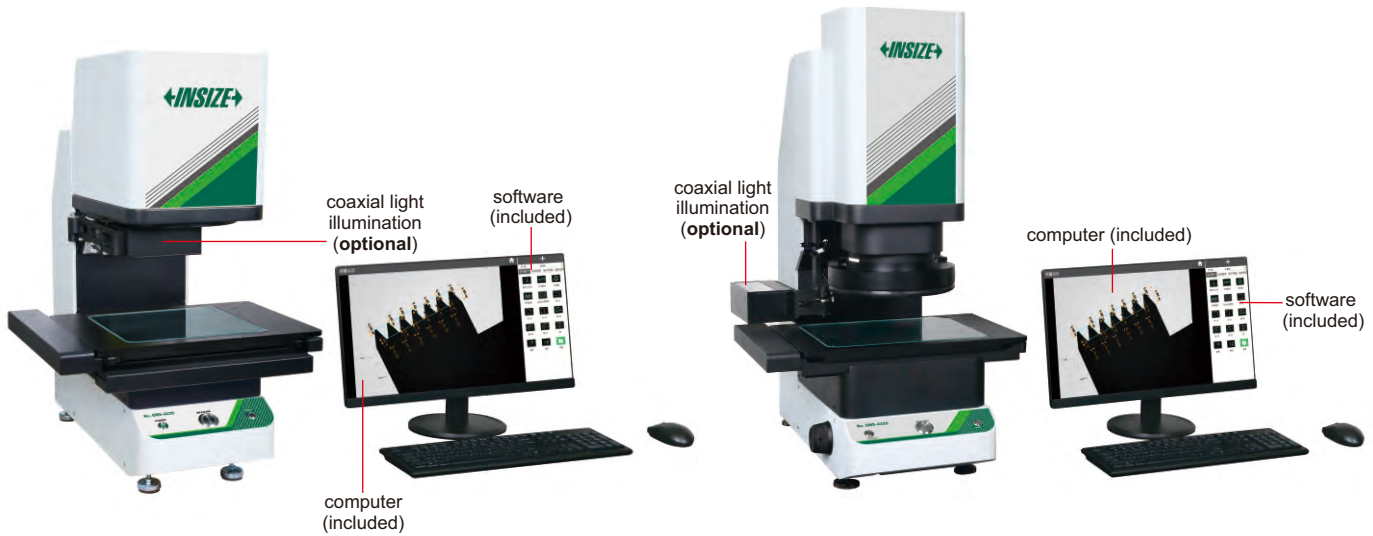
- Automatically measure widths, holes, rings, angles at the same time, simple and efficient.



- Measuring result can be stored automatically. OK items and NG items can be counted automatically.



QUICK MEASUREMENT SYSTEMS (WITH STITCHING)



QMS-A220

QMS-A320

SPECIFICATION

| Code | QMS-A220 | | QMS-A315 | | QMS-A320 | |
|---------------------------|---|---|---|---|---|---|
| Optical lens | dual-field dual-telecentric low-distortion lens | | | | | |
| View field range | wide view field: Ø100mm small view field: Ø25mm | wide view field: Ø100mm small view field: Ø25mm | wide view field: Ø100mm small view field: Ø25mm | wide view field: Ø150mm small view field: Ø50mm | wide view field: Ø150mm small view field: Ø50mm | wide view field: Ø150mm small view field: Ø50mm |
| Measurement range | 200×200mm | 130×130mm | 300×200mm | 230×130mm | 300×210mm | 200×135mm |
| Measurement accuracy | without stitching: ±3µm ^① with stitching: ±(5+0.02L)µm ^⑤ | without stitching: ±1µm ^② with stitching: ±(3+0.02L)µm ^⑥ | without stitching: ±3µm ^① with stitching: ±(5+0.02L)µm ^⑦ | without stitching: ±1µm ^② with stitching: ±(3+0.02L)µm ^⑧ | without stitching: ±5µm ^③ with stitching: ±(7+0.02L)µm ^⑨ | without stitching: ±2µm ^④ with stitching: ±(4+0.02L)µm ^⑩ |
| Repeatability | without stitching: ±1µm with stitching: ±2µm | without stitching: ±0.5µm with stitching: ±1.5µm | without stitching: ±1µm with stitching: ±2µm | without stitching: ±0.5µm with stitching: ±1.5µm | without stitching: ±1µm with stitching: ±2µm | without stitching: ±0.5µm with stitching: ±1.5µm |
| Magnification | 2.8X | 11X | 1.9X | 5.75X | 1.9X | 5.75X |
| Travel range (X×Y×Z) | 120×140×75mm | | 205×125×75mm | | 150×100×75mm | |
| Glass stage size | 249×229mm | | 318×268mm | | 318×268mm | |
| Max. weight of workpiece | 5kg | | | | | |
| Measurement time | <2s | | | | | |
| Measurement data | 2D measurement | | | | | |
| Power supply | 220V, 50Hz, 600W | | | | | |
| Illumination system | back light | telecentric illuminator, green light | | | | |
| | ring light | 4-zone circular white high light circular (directional) low-angle green light (electric) | | | | |
| | coaxial light (optional) | vertical illuminator, white light | | | | |
| Environmental requirement | temperature: 20°C±2°C, relative humidity: 30%~80%, vibration: <0.002g, less than 15Hz | | | | | |
| Dimension (L×W×H) | 532×480×766mm | | 532×497×766mm | | 669×510×883mm | |
| Weight | 50kg | | 60kg | | 68kg | |

* The optimum temperature is 20°C±1°C

- ① Within 80×64mm, on focal position and environment temperature at 20°C±1°C
- ② Within 20×16mm, on focal position and environment temperature at 20°C±1°C
- ③ Within 120×88mm, on focal position and environment temperature at 20°C±1°C
- ④ Within 40×28mm, on focal position and environment temperature at 20°C±1°C
- ⑤ Within 180×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑥ Within 117×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑦ Within 270×180mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑧ Within 207×117mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑨ Within 270×189mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage
- ⑩ Within 180×121mm, on focal position, environment temperature at 20°C±1°C, and workpiece is less than 2kg, L is the travel of stage

To be continued

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- One or more workpieces can be measured by one step operation
- Place workpieces at any position
- Focus and measure automatically

STANDARD DELIVERY

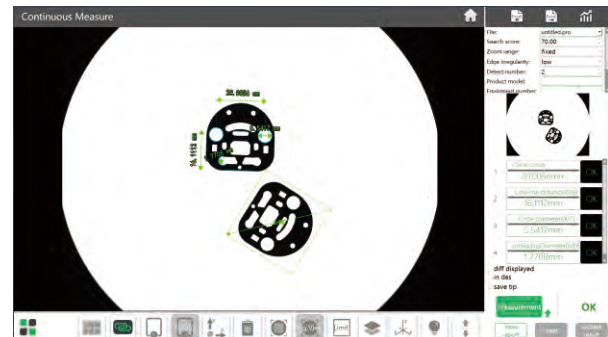
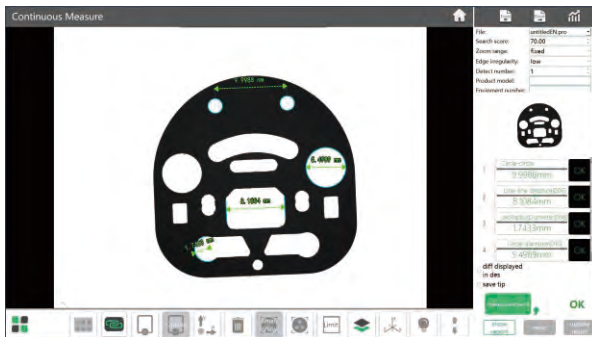
| | |
|-----------|------|
| Main unit | 1 pc |
| Computer | 1 pc |
| Software | 1 pc |

OPTIONAL ACCESSORY

| | |
|--|---|
| Coaxial light illumination | QMS-23-A3 (for QMS-A220C, QMS-A315C) QMS-23-A4 (for QMS-A320C) |
| Data transmission function of software | QMS-23-D1 |
| CAD import function of software | QMS-23-C1 |
| Laser sensor | QMS-43-SJ1 (for QMS-A315C) |
| Foot-switch | QMS-43-FS1 |

Software (included)

- Automatically measure widths, holes, rings, angles at the same time, simple and efficient.



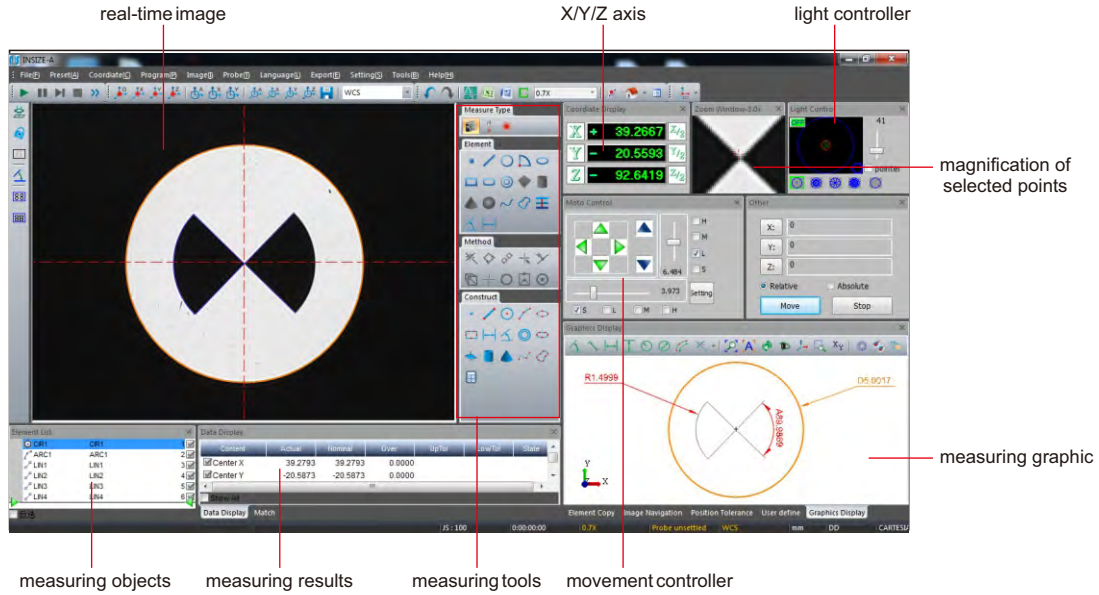
- Measuring result can be stored automatically. OK items and NG items can be counted automatically.



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SOFTWARE (INCLUDED)

- Refer to page 409~410 for details

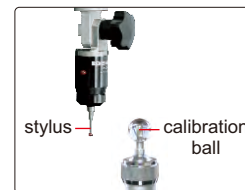
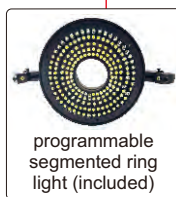


CNC VISION MEASURING SYSTEMS



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- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement
- Measuring software is included (page 395~396)



probe (optional), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10µm

STANDARD DELIVERY

| | |
|-------------------------|------|
| Main unit | 1 pc |
| Software | 1 pc |
| Computer | 1 pc |
| 24" Display | 1 pc |
| Len with coaxial light | 1 pc |
| Controller | 1 pc |
| Calibration glass chart | 1 pc |
| Laser positioner | 1 pc |
| Clay | 1 pc |
| Anti-dust cover | 1 pc |

To be continued

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SPECIFICATION

| Code | ISD-V220CNCA | ISD-V270CNCA | ISD-V370CNCA |
|------------------------------|---|--|---|
| Measuring range (X×Y×Z) | 220×120×150mm | 270×170×150mm | 370×270×150mm |
| Stage size | 450×280mm | 500×330mm | 606×466mm |
| Glass stage size | 306×196mm | 350×250mm | 450×350mm |
| Resolution of X/Y/Z axis | 0.5µm | | |
| Accuracy of X/Y axis | ≤(2.5+L/100)µm (L is the measuring length in mm) | | ≤(3.5+L/100)µm (L is the measuring length in mm) |
| Repeatability of X/Y axis | 2µm | | |
| Objective | 0.7X~4.5X (zoom) | | |
| Working distance | 92mm | | |
| Magnification | 33.0X~208.6X (on 24" monitor) | | |
| Camera | Giga-bit network camera | | |
| Illumination | surface | coaxial light, programmable segmented ring light | |
| | contour | adjustable LED light | |
| View field (diagonal length) | 1.5~10.8mm | | |
| Max. height of workpiece | 150mm | | |
| Max. weight of workpiece | 30kg | | |
| Operation system | Windows 7/8/10 | | |
| Drive method | automatic | | |
| Power supply | 220V, 50/60Hz | | |
| Dimension (L×W×H) | 760×600×900mm | 760×600×900mm | 970×670×940mm |
| Weight | 146kg | 168kg | 266kg |

OPTIONAL ACCESSORY

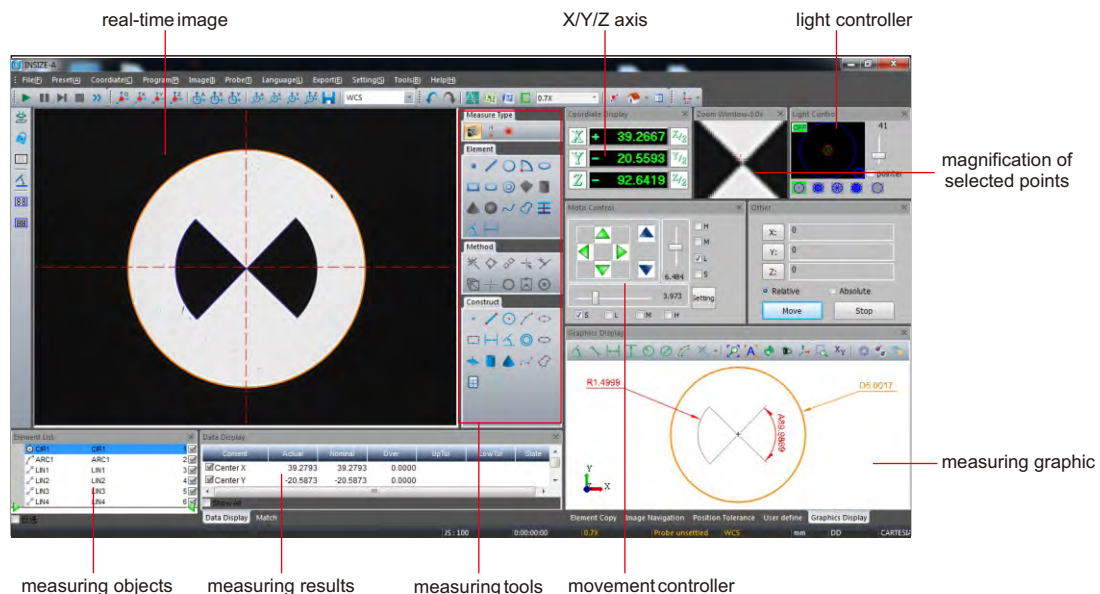
| | |
|--------------------------|--|
| 0.5X auxiliary objective | Code: ISD-V-OB05X Working distance: 175mm Magnification: 16.5~104.3X (on 24" monitor) |
| 2X auxiliary objective | Code: ISD-V-OB2X Working distance: 36mm Magnification: 66~417.2X (on 24" monitor) |
| Probe | Code: ISD-V-PROBE Includes Ø2mm and Ø3mm styli, Ø25mm calibration ball |
| Office software | Code: 7313-OFFICE |
| Desk | Code: ISD-V-DESK |

desk (optional)



SOFTWARE (INCLUDED)

- Refer to page 409~410 for details



CNC VISION MEASURING SYSTEMS



ISD-V500N



computer is included

- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement

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SPECIFICATION

| Code | ISD-V500N | ISD-V500HN |
|------------------------------|--|--|
| Measuring range (X*Y*Z) | 470×370×200mm | 470×370×400mm |
| Stage size | 786×636mm | |
| Glass stage size | 570×470mm | |
| Resolution of X/Y/Z axis | 0.5µm | |
| Accuracy of X/Y axis | ≤(2.5+L/200)µm (L is measuring length in mm) | |
| Repeatability of X/Y axis | 2µm | |
| Objective | 0.7X~4.5X (zoom) | |
| Working distance | 92mm | |
| View field (diagonal length) | 1.7~11.1mm | |
| Magnification | 20X~128X (on 19.5" monitor) | |
| Camera | 1/2" color CCD, 0.4M pixel | |
| Illumination | surface | coaxial light, programmable segmented ring light adjustable LED light |
| | contour | |
| Max. height of workpieces | 200mm | 400mm |
| Max. weight of workpieces | 30kg | |
| Operation system | Windows 7/10 | |
| Drive method | automatic | |
| Power supply | 220V, 50/60Hz | |
| Dimension (L*W*H) | 1270×1200×1870mm | 1270×1200×2070mm |
| Weight | 870kg | 900kg |

To be continued

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STANDARD DELIVERY

| | |
|-------------------------|------|
| Main unit | 1 pc |
| Video card with dongle | 1 pc |
| Software disc | 1 pc |
| Lens with coaxial light | 1 pc |
| Controller | 1 pc |
| Computer | 1 pc |
| Calibration glass chart | 1 pc |
| Laser positioner | 1 pc |
| Clay | 1 pc |
| Anti-dust cover | 1 pc |



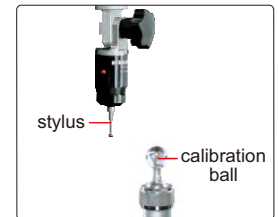
lens with coaxial light (included)



programmable segmented ring light (included)

OPTIONAL ACCESSORY

| | |
|--------------------------|---|
| 0.5X auxiliary objective | Code: ISD-V-OB05X Working distance: 175mm Magnification: 10~64X (on 19.5" monitor) |
| 2X auxiliary objective | Code: ISD-V-OB2X Working distance: 36mm Magnification: 40~256X (on 19.5" monitor) |
| Probe | Code: ISD-V-PROBE Includes Ø2mm and Ø3mm styli, Ø25mm calibration ball |
| Office software | Code: 7313-OFFICE |



stylus — calibration ball

probe (optional), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10µm

SOFTWARE (INCLUDED)

- Refer to page 409~410 for details

The screenshot shows the INSIZE software interface. Key components are labeled with red lines:

- image**: Points to the main image of the measuring object.
- X/Y/Z axis display**: Points to the coordinate system display showing values for X, Y, and Z.
- light control**: Points to the light control panel with various buttons and indicators.
- zoom**: Points to the zoom control panel with a slider and buttons.
- measuring object**: Points to the object being measured in the main image.
- measuring result**: Points to the data display table at the bottom left.
- tools**: Points to the toolbar with various measurement and construction tools.
- moto control**: Points to the motor control panel with directional buttons.
- graphic**: Points to the graphical representation of the measuring object and its features.

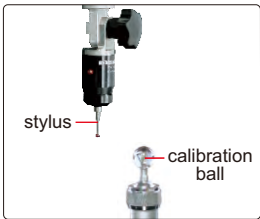
CNC VISION MEASURING SYSTEMS



lens with coaxial light (included)



programmable segmented ring light (included)



probe (optional), includes Ø2mm and Ø3mm styli, Ø25mm calibration ball, measuring accuracy is 10µm



VMM-L600CN



VMM-L1200CN

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- Automatic edge-detection, focus, measuring, contour scanning, calibration, etc.
- Servo motors for X, Y, Z axis
- SPC function for large quantity measurement

STANDARD DELIVERY

| | |
|-------------------------|------|
| Main unit | 1 pc |
| Video card with dongle | 1 pc |
| Software disc | 1 pc |
| Computer | 1 pc |
| 19.5" display | 1 pc |
| Lens with coaxial light | 1 pc |
| Controller | 1 pc |
| Calibration glass chart | 1 pc |
| Laser positioner | 1 pc |
| Clay | 1 pc |
| Anti-dust cover | 1 pc |

To be continued

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SPECIFICATION

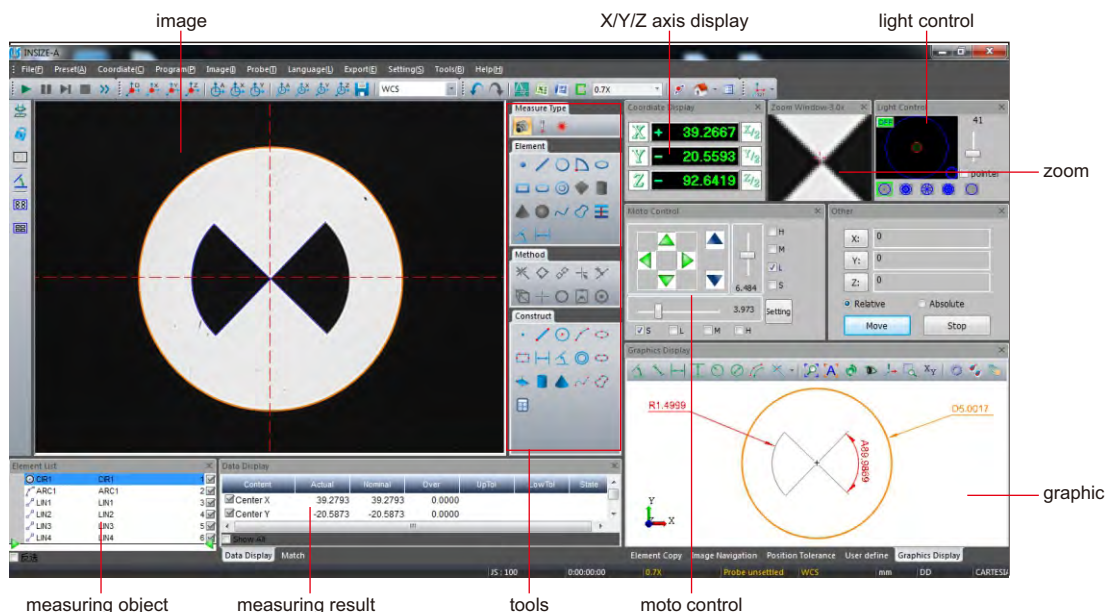
| | | | | | |
|-------------------------------------|---|--|-------------------|--------------------|--------------------|
| Code | VMM-L600CN | VMM-L601CN | VMM-L800CN | VMM-L1000CN | VMM-L1200CN |
| Measuring range (X*Y*Z) | 600×600×150mm | 600×900×150mm | 800×1000×200mm | 1000×1200×200mm | 1200×1500×200mm |
| Glass stage size | 640×770mm | 640×1070mm | 1208×885mm | 1408×1085mm | 1708×1285mm |
| Resolution of X/Y/Z axis | 0.5µm | | | | |
| Accuracy of X/Y axis | ≤(3.5+L/200)µm (L is measuring length in mm) | | | | |
| Repeatability of X/Y axis | 2µm | | | | |
| Objective | 0.7X~4.5X (zoom) | | | | |
| Working distance | 92mm | | | | |
| View field (diagonal length) | 1.7~11.1mm | | | | |
| Magnification | 20X~128X (on 19.5" monitor) | | | | |
| Camera | 1/2" color CCD, 0.3M pixel | | | | |
| Illumination | surface | coaxial light, programmable segmented ring light | | | |
| | contour | adjustable LED light | | | |
| Max. height of workpiece | 150mm | | 200mm | | |
| Max. weight of workpiece | 30kg | | | | |
| Operation system | Windows 7/8/10 | | | | |
| Drive method | automatic | | | | |
| Guide rail | linear guider | | | | |
| Power supply | 100~240V, 50/60Hz | | | | |
| Operation environment | temperature: 20±2°C, temperature variation: <1°C/h, <2°C/24h, <1°C/m; humidity: 55%~65% | | | | |
| Dimension (L×W×H) | 1500x1300x1510mm | 1800x1300x1510mm | 2170x2380x1560mm | 2370x2580x1560mm | 2570x2880x1560mm |
| Weight | 1281kg | 1500kg | 3260kg | 3750kg | 4520kg |

OPTIONAL ACCESSORY

| | |
|---------------------------------|---|
| 0.5X auxiliary objective | Code: ISD-V-OB05X Working distance: 175mm Magnification: 10~64X (on 19.5" monitor) |
| 2X auxiliary objective | Code: ISD-V-OB2X Working distance: 36mm Magnification: 40~256X (on 19.5" monitor) |
| Probe | Code: ISD-V-PROBE Includes Ø2mm and Ø3mm styli, Ø25mm calibration ball |
| Office software | Code: 7313-OFFICE |

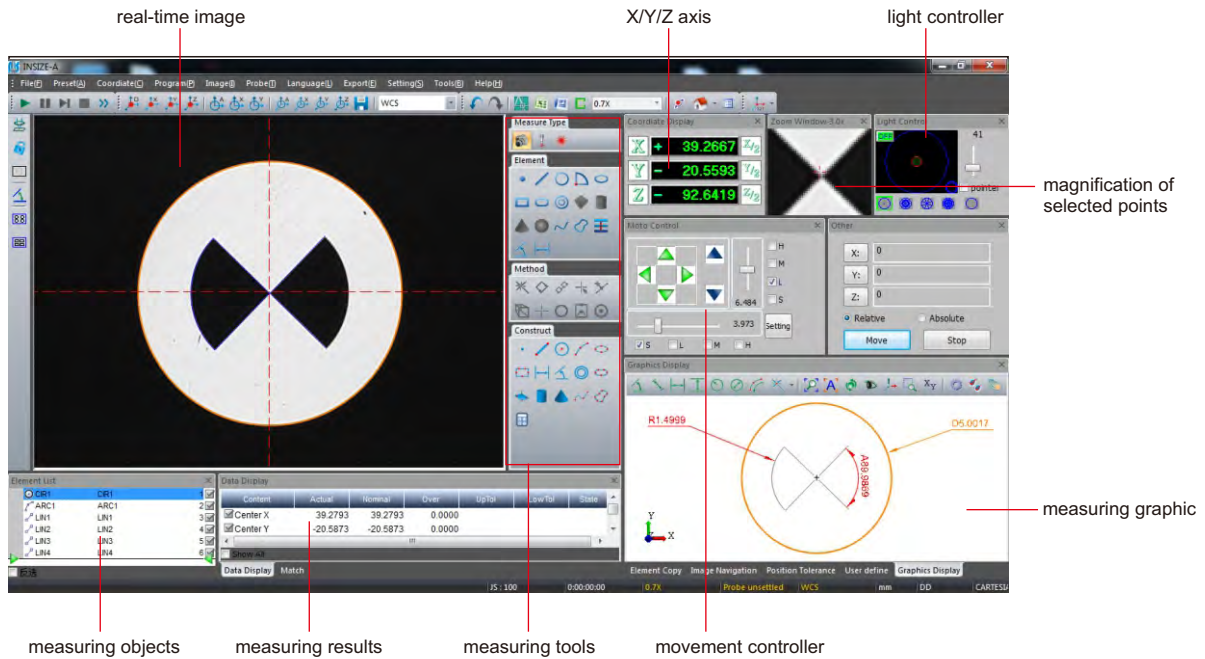
SOFTWARE (INCLUDED)

- Refer to page 409~410 for details



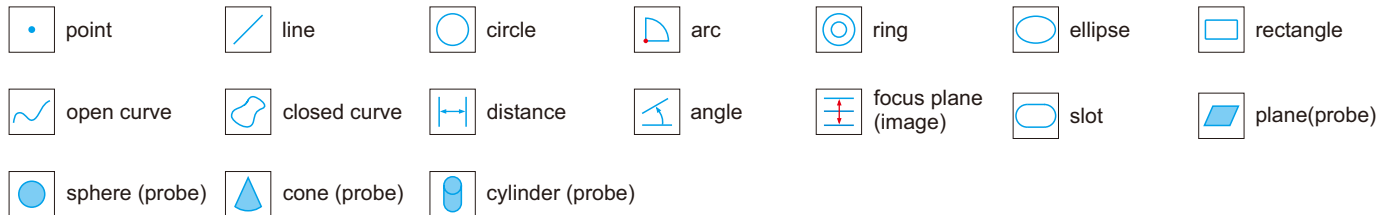
VISION MEASURING SOFTWARE

SOFTWARE FOR VISION MEASURING SYSTEMS
ISD-V SERIES, ISD-H SERIES, ISD-VMM SERIES
AND VMM-L SERIES

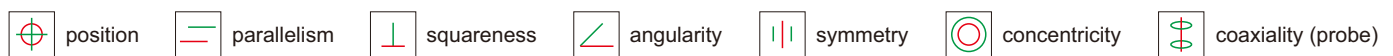


- Operation system: Windows 7/10
- Language: English
- Control features: assistant focus (manual machines), auto focus (CNC machines), auxiliary light control, motion controlled by mouse (CNC machines), auto zoom lens (CNC machines)
- Image measuring methods: intelligent automatic edge detect, select points of an area, select points from multiple parts, select points via mouse, select adjacent points, select points via cross line, magnify to select points, comparatively select points, select points via probe, edge point, contour point
- Constructable elements: point, line, circle, arc, ellipse, rectangle, distance, angle, ring, slot, plane, cone, open curve, closed curve
- Support fixture (CNC machines), scanning, image navigation, user define, pixel calibration
- Measuring by image and probe, image and probe can be synchronized
- Measuring data can export to Excel, Word, SPC, measuring elements can export to dxf

Dimension measuring tools:



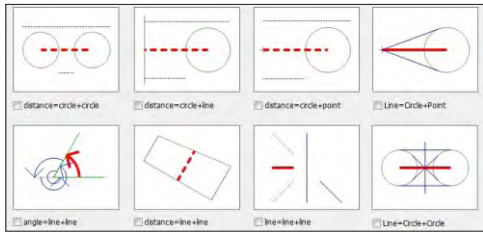
Geometric measuring tools:



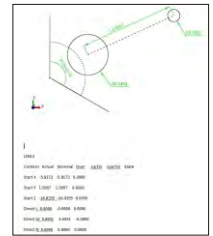
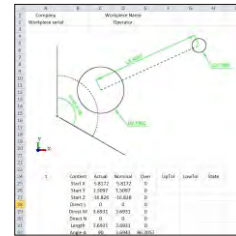
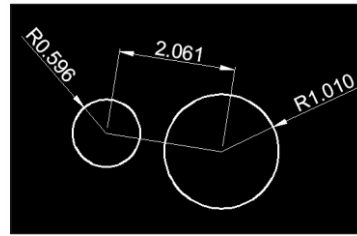
To be continued

Continued from previous page

Measuring and element construct methods:



Export to CAD, EXCEL, WORD



CAD

EXCEL

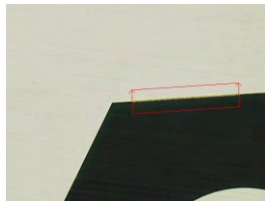
WORD

Edge-detection:

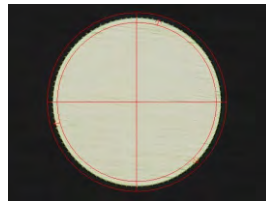
point tool



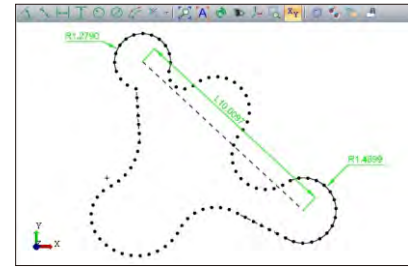
box tool



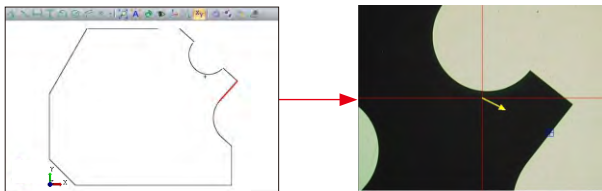
circle tool



Contour scanning:

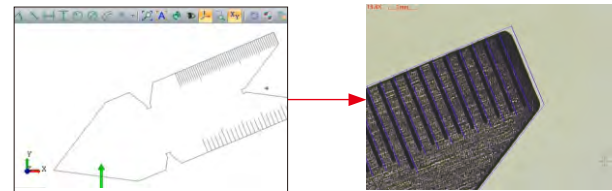


CAD measuring:



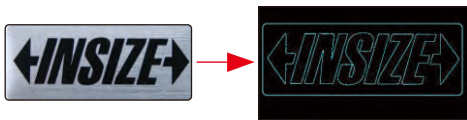
import CAD drawing, set the datum, establish coordinate system, then the software will automatically measure

CAD comparison:

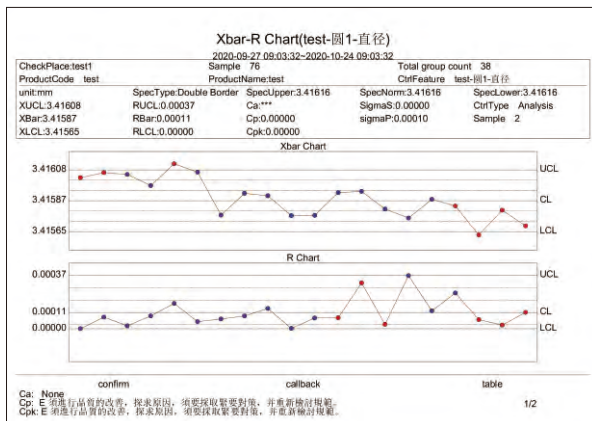


import CAD drawing, set the datum, then compare real-time image with CAD drawing

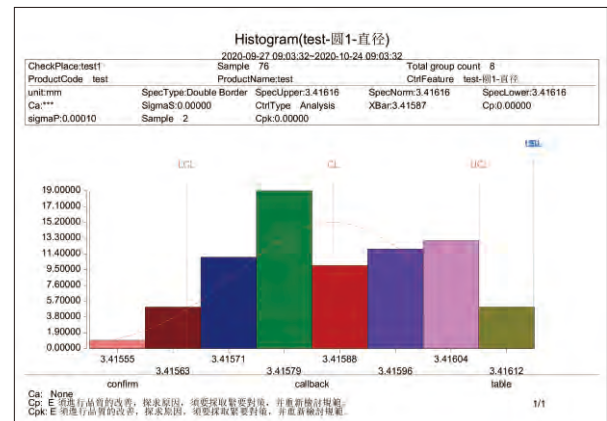
Profile scanning:



SPC analysis, import the measuring data to SPC module, generate Xbar-R chart, Xbar-S chart, Mid-R chart, X-Rs chart, Histogram, Sigma A and Sigma S chart, Cpk process chart, Process state analyse chart, Single process advice analyse chart

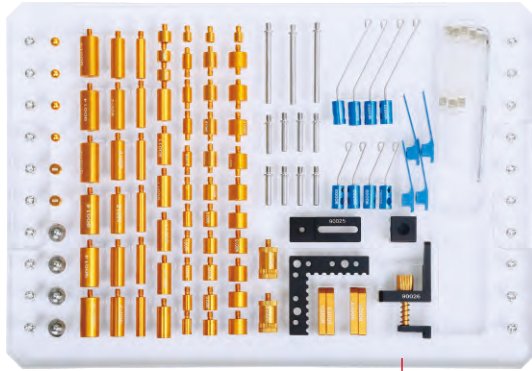


Xbar-R chart

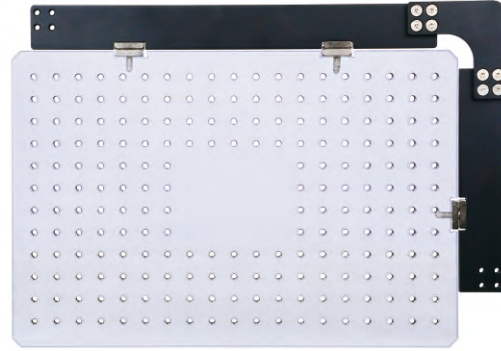


Histogram

JIG SET FOR VISION MEASURING SYSTEM CODE ISY-700

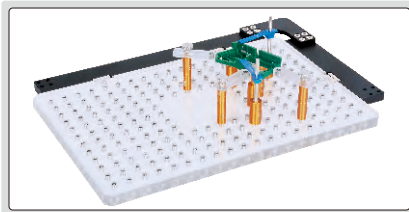










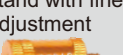
acrylic tray (included)



ISY-700

application example



| Product | Code | Size (mm) | Quantity |
|---|---------------|-----------|----------|
| clip  | ISY-700-90001 | 7×34 | 4 |
| clip  | ISY-700-90002 | Ø1.5×24 | 4 |
| | ISY-700-90003 | Ø1.5×50 | 4 |
| clip stand  | ISY-700-90004 | Ø4×20 | 8 |
| | ISY-700-90005 | Ø4×46 | 3 |
| spherical support head  | ISY-700-90006 | — | 4 |
| stand  | ISY-700-90007 | Ø6×10 | 6 |
| | ISY-700-90008 | Ø6×25 | 6 |
| | ISY-700-90019 | Ø6×6 | 3 |
| stand  | ISY-700-90009 | Ø9×7 | 3 |
| | ISY-700-90010 | Ø9×10 | 6 |
| | ISY-700-90011 | Ø9×20 | 6 |
| | ISY-700-90012 | Ø9×25 | 6 |
| stand  | ISY-700-90013 | Ø12×10 | 6 |
| | ISY-700-90014 | Ø12×25 | 6 |
| stand for slice parts  | ISY-700-90015 | Ø6×10 | 4 |
| | ISY-700-90016 | Ø9×10 | 4 |
| | ISY-700-90017 | Ø12×10 | 4 |
| stand with fine adjustment  | ISY-700-90018 | Ø12×20~25 | 2 |

| Product | Code | Size (mm) | Quantity |
|--|---------------|------------|----------|
| adapter for square support  | ISY-700-90020 | — | 2 |
| clamping screw  | ISY-700-90021 | — | 4 |
| L-shaped positioning plate  | ISY-700-90022 | 50×50×6 | 1 |
| sliding support plate  | ISY-700-90023 | 30×12×5 | 4 |
| square support  | ISY-700-90024 | 20×16×16 | 1 |
| base for square support  | ISY-700-90025 | 45×16×6 | 1 |
| spring stand  | ISY-700-90026 | — | 1 |
| acrylic sliding support plate  | ISY-700-90028 | 45×12×5 | 8 |
| wrench  | ISY-700-90029 | M3 | 1 |
| acrylic base plate  | ISY-700-90030 | 300×200×12 | 1 |