Quality | Innovation | Service | Value



INSIZE CO., LTD.

www.insize.com

V.2 11.2026



INSIZE - Founded in 1995, is a dedicated supplier of measuring instruments. To enable us to serve the world-wide market, we are setting up an INSIZE distribution network on a global basis. INSIZE headquarter is located in China. We have branch companies in Canada, USA, Mexico, Brazil, India, Bangladesh, Pakistan, Vietnam, Thailand, Malaysia, Indonesia, Turkey, Taiwan, China, Italy, Czech Republic, Spain, France, UK, Romania, Slovenia, Poland, Australia and distributors in over 120 countries. We ensure that wherever you are, our INSIZE products have service and support that are within hands reach. Our dedication to Quality, Innovation, Service and Value has created a worldwide demand for the INSIZE products.

INSIZE is our standard quality, made in China

INSIZE PLUS is our premium quality, made in Europe

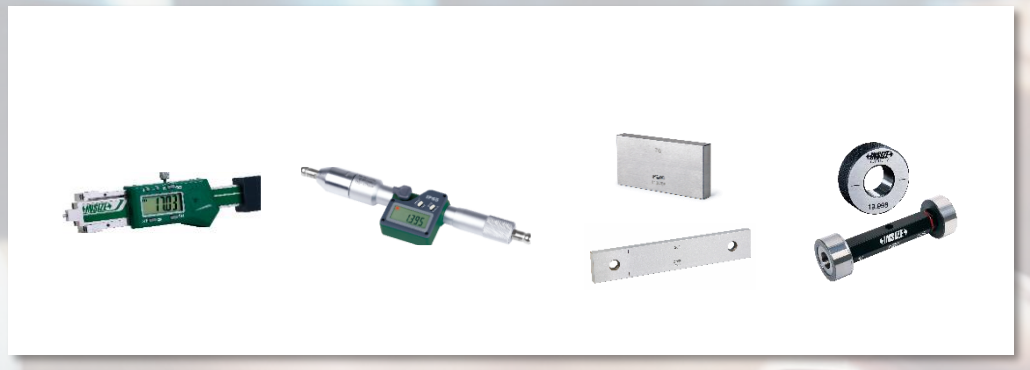
INSIZE

MEASUREMENT SOLUTION PROVIDER

To become the world's leading supplier of industrial measurement solutions, providing measurement products and services for industrial production, addressing measurement challenges, continuously innovating, and contributing to social development.



Customized Services

















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1 Data Output And Software

Wireless Data Transmission



Wired Data Transmission



Measurement Data Management and Analysis Software



Inspection Table



Data Transmission And Management — Improve productivity

Supports multiple measurement tools for real-time data collection. One-click transfer of measurement data to Excel, measurement software or mobile APP after measurement. This process is efficient and accurate, and facilitates data management and sharing to improve productivity.

Transfer To Excel





Transfer To Data Management Software

Transfer To Phone APP



Advantages of Data Transmission (P1)

Traditional Measurement



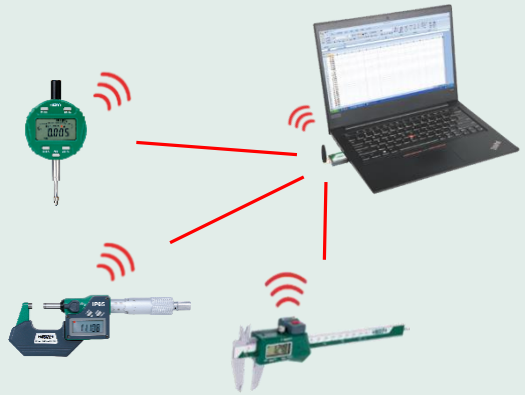
Traditional measurement is manual recording is inefficient, you need to measure and record at the same time; sometimes you need two operators for operation, one to measure and the other to record.

Traditional measurements are made by manually recording data to a paper file or manually entering it into a computer, which inevitably results in recording errors.

Traditional measurements use paper forms, which are difficult to save , circulate and trace at a later stage.

VS

Communication Transfer Data



Timeliness

Data can be transmitted directly to a computer /phone through wired or wireless data transmission, improving efficiency.

Validity

The direct transmission of measurement data to the computer, eliminating human error and ensuring that the data is true.

Paperless

Compared to paper forms, electronic forms of data transmission are more convenient for storage, transferring between each other and later reference.

Advantages of Data Management (P2)

Data Acquisition

Supports multiple data collection methods, compatible with mainstream measuring tools

data transmission | file parsing | screen capture

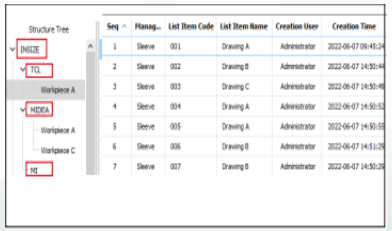
Work Station 1 | Work Station 2 | Work Station 3 | Supplier 1 | Supplier 2 | Supplier 3

OEMs

can be connected with PDM, ERP, MES and other systems

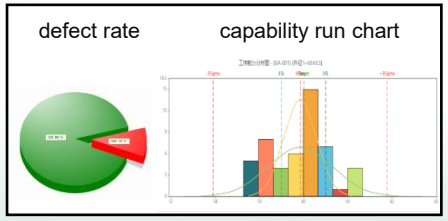
Data Management

Manages measurement data for easy traceability and review.



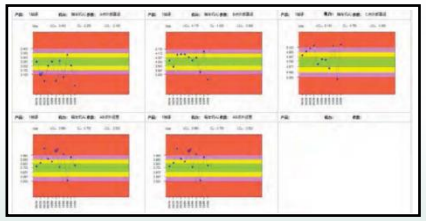
SPC analysis

Analyzes measurement data to identify production inefficiencies and optimize workflows.



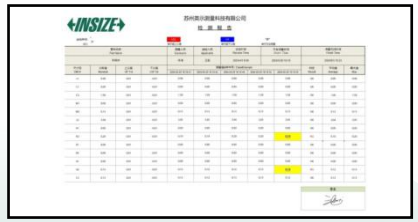
Panel

Real-time monitoring of process quality to address risks promptly.



Reports

Provides inspection reports upon production completion, enhancing quality credibility.



OEMs can conduct random inspections to verify if results align with those from suppliers and ensure full production traceability.

1 Wireless Data Transmission

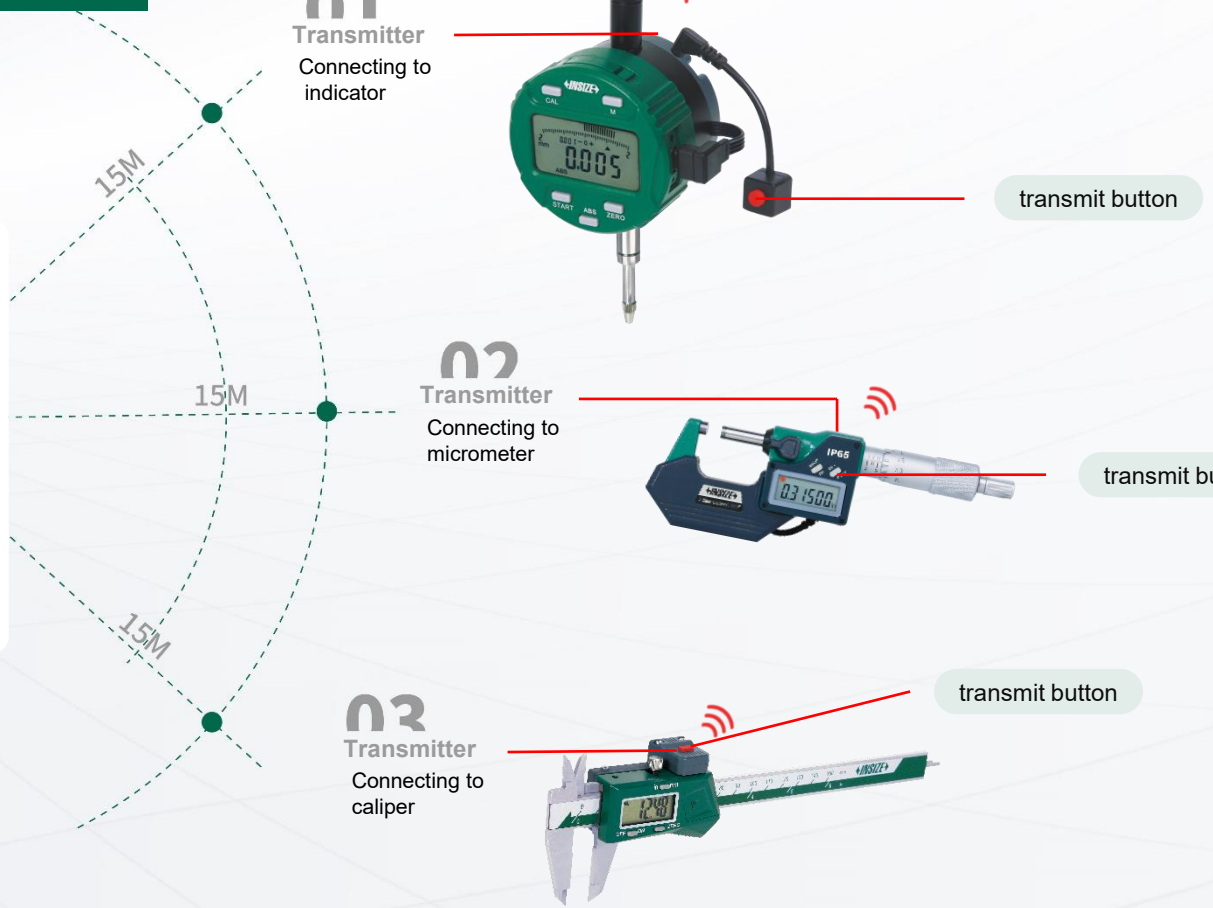


Wireless Data Transmission System
External Transmitter

- Measuring tool connects to a transmitter to send data , and receiver received data
- Trigger the transmit button of transmitter to wirelessly transfer measurement data to a computer /phone
- Transmission distance : 15m (unobstructed, no electromagnetic interference)
- Customizable AES128 data encryption to enhance data security



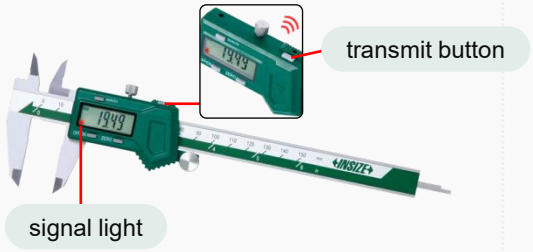
Connects to PC/Phone/Tablet



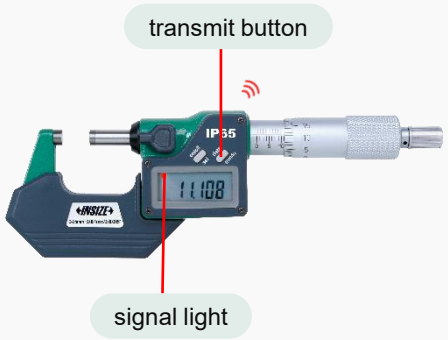
Wireless Data Transmission System Built-in Wireless

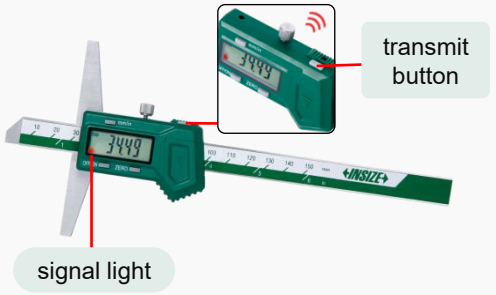
- The built-in wireless measuring tool sends data, and receiver received data
- Transmission distance 10m(unobstructed, no electromagnetic interference)
- Trigger the transmit button of measuring tool to wirelessly transfer data to the PC/phone











Receiver

- The receiver connects to the transmitter or built-in wireless measuring tool, receiving data wirelessly.



Single Channel Receiver (Keyboard Signals)

can be connected to 1 transmitter



Multichannel Receiver (Keyboard Signals)

can be connected to 6 transmitters

- For computers and mobile phone with Windows, Android, and iOS system
- Recognized as HID keyboard device, the transmitted data is recognized by computers or mobile phones as keyboard input data and press enter key, such as 12.34 ↙
- No need to install drivers and softwares.
- Data can be transmitted to excel, word, txt etc.
- For any softwares which can receive keyboard signal.



Multichannel Receiver (virtual com port)

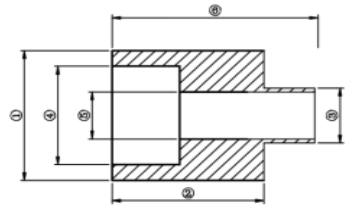
can be connected to 16 transmitters, each has an unique identification code

- For computers with windows system.
- Outputs serial port signals, to be used with software.

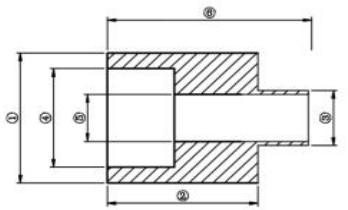
The data entry jump direction can be switched according to needs, either downwards or to the right.
Custom output formats can also be tailored.

Excel Directional Input Software (7315-2 Receiver Included)

- The readings of measuring tools can be transmitted to the designated area of excel, which facilitates data management and improves efficiency.



Projects	Extemnal diameter1	Height2	Extemnal diameter3	Intemnal diameter4	Intemnal diameter5
Specifications	60±0.5	45±0.5	21±0.05	30±0.06	15±0.1
Measuring tool	Built-in Wireless Transmission Caliper	Caliper	Micrometer	Bore gauge	Bore Plug Gauge
Transmission Type	Wireless Data Transmission				
1	60.19	45.20	20.967	30.012	14.996
2	60.49	45.24	20.945	30.235	14.996
3	60.13	45.32	20.956	30.145	15
4	60.45	45.22	20.945	30.233	14.996
5	60.45	45.21	20.975	30.141	15
6	60.44	45.08	20.847	30.000	14.993
7	60.44	45.03	20.955	30.056	14.993
8	Channel1 to be written	Channel2 to be written	Channel3 to be written	Channel4 to be written	Channel5 to be written
9					

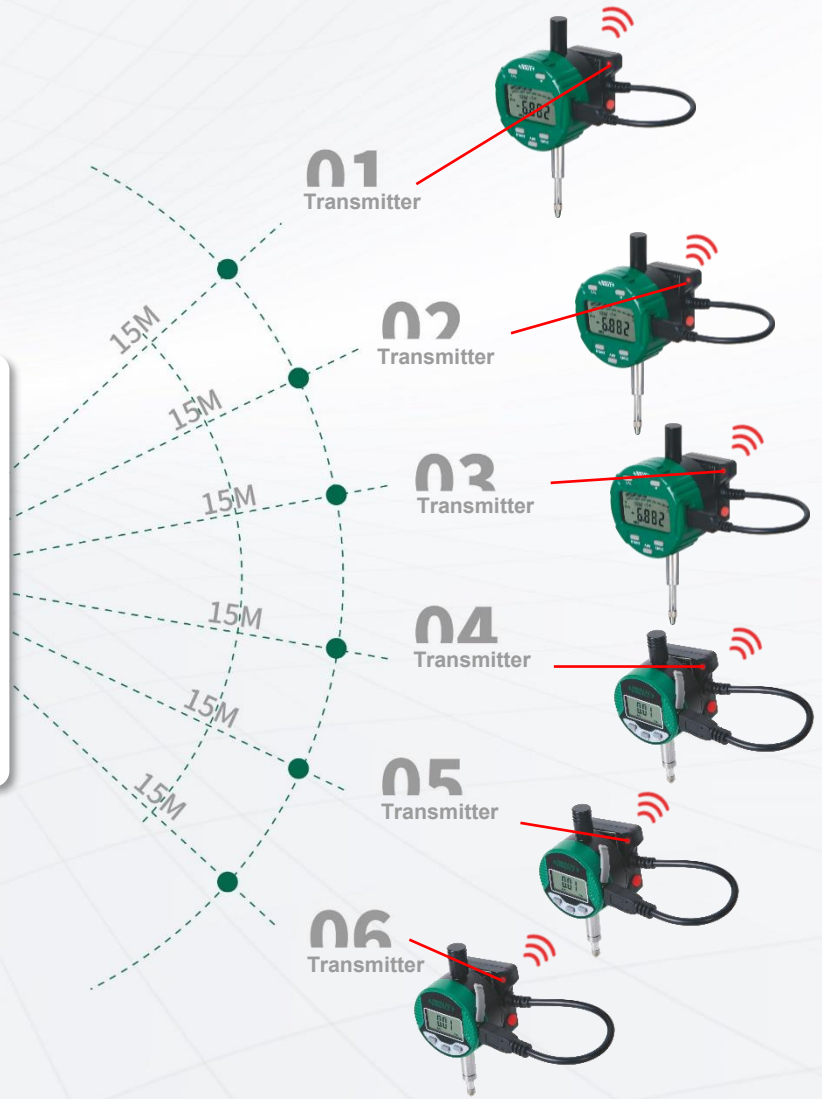


Projects	Extemnal diameter1	Extemnal diameter3	Height2	Intemnal diameter4	Intemnal diameter5
Specifications	60±0.5	21±0.05	45±0.5	30±0.06	15±0.1
Measuring tool	Micrometer	Micrometer	Caliper	Bore Plug Gauge	Bore Plug Gauge
Transmission Type	Wireless Data Transmission				
1	60.19	20.967	45.20	30.012	14.996
2	60.49	20.945	45.24	30.235	14.996
3	60.13	20.956	45.32	30.145	15
4	60.45	20.945	45.22	30.233	14.996
5	60.45	20.975	45.21	30.141	15
6	60.44	20.847	45.08	30.000	14.993
7	60.44	20.955	45.03	30.056	14.993
8	60.34	Channel1 to be written	Channel2 to be written	30.036	Channel3 to be written
9					

Wireless Data Transmission System of Digital Indicators (Remote control) 7213

- Digital indicator connects to a transmitter to send data, and receiver received data
- Trigger the transmit button of receiver to transfer data from multiple digital indicators to computer/phone





	channel 1	channel 2	channel 3	channel 4	channel 5	channel 6
	A	B	C	D	E	F
1	24.35	0.4045	57.72	1.949	0.4075	0.03568
2	24.45	0.5045	57.82	2.049	0.5075	0.13568
3	26.35	0.4045	57.72	1.949	0.4075	0.00078
4	27.35	0.4045	57.72	1.7575	0.4075	0.0762
5	28.35	0.4045	57.72	1.7575	0.4075	0.0762
6	29.35	0.4045	57.72	1.7575	0.4075	0.07618
7	30.35	0.4045	57.72	1.7575	0.4075	0.55334
8	31.35	0.4045	57.72	1.7575	0.4075	0.61198
9	24.35	0.4045	57.72	1.7575	0.4075	0.6172

The button on receiver is pressed once, the readings of all digital indicators are transmitted

Wireless Data Transmission VS. Competitor Brands Advantages

1 High Compatibility

Our receivers feature multiple interfaces (USB, Type C, Micro USB, and Lightning), compatible with various system terminals such as computers, tablets, or phones running Windows, Android, or iOS.

2 Comprehensive Coverage

Three product categories: built-in wireless transmitters, external wireless transmitters, and all-in-one transmitters. our wireless data transmission capability comprehensively covers commonly used measuring tools and instruments.

3 Diverse Communication Protocols

Supports both emulated keyboard signals and serial port signals to accommodate varied industrial scenarios.

4 User-Friendly Operation

Simplified device pairing, unpairing, and data transfer processes for effortless setup.

5 Persistent Binding Mechanism

Single-pairing ensures continuous data transmission—no re-pairing required when replacing terminals, instruments, or batteries.

6 Ultra-Low Power Consumption

Operates for over 400,000 transmissions on a single CR2032 battery.

7 Data Format

Supports multiple data fomats: e.g., Value + Enter, Value + TAB, ID number + Value + Enter, etc.

8 Data Security

Optional AES128 encryption for critical data protection.

9 Deep Customization

Provides bespoke data transmission solutions tailored to client specifications.

10 Advanced Analytics Capabilities

Mature supporting software collects, aggregates, and analyzes measurement data, enabling streamlined, intelligent, and visualized data management.

2 Wired Data Transmission

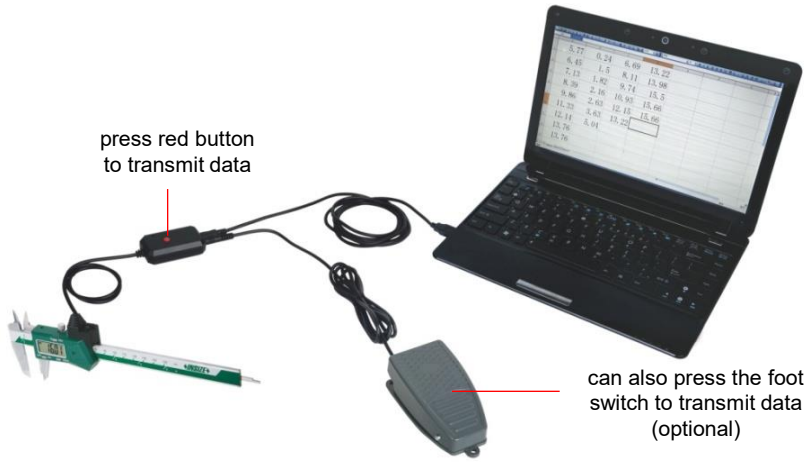


Wired Data Transmission 7302、7305

- Measuring tool connects to the data output cable, and trigger the transmit button to wired transfer data to a computer/tablet

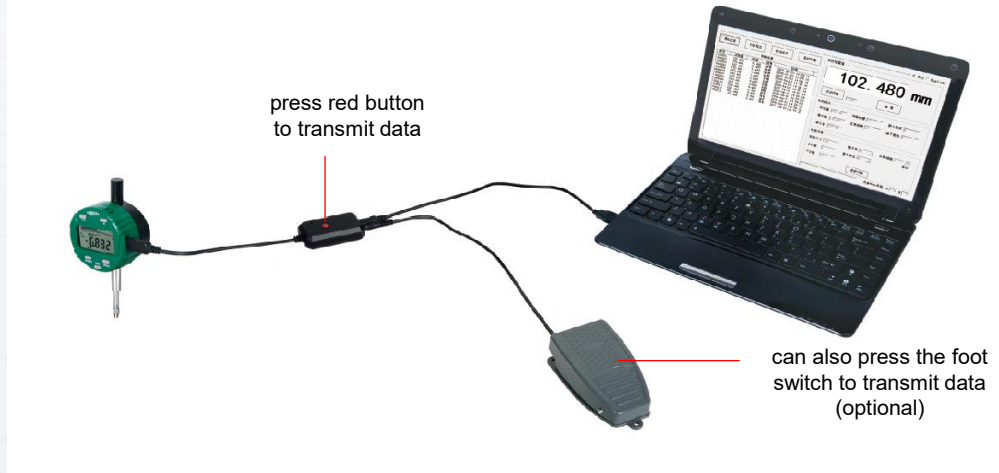
7302 series Data Output Cables (Keyboard Format)

- Recognized as HID keyboard device by computer, no need to install drivers and softwares.
- Data can be transmitted to Excel, Word, txt and other files (press transmit button, which is recognized by the computer as keyboard input data and press enter key, such as 12.34↙).
- For any softwares which can receive keyboard signal.
- Cursor movement direction after data input can be switched (down/right).
- Supports output of ID numbers if needed, e.g., 2023032265 12.34.



7305 series Data Output Cables (Text Format, Virtual Com Port)

- Output serial signals to transfer data to serial communication software.
- Supports output of ID numbers if needed.
- The optional 7210_2 multiplex interface boxes can transmit data to the designated area in Excel, facilitating data management and boosting work efficiency.



485 Data Output Cables 7215

- Connect the measuring instrument to the data cable, and connect the data cable to the PLC to enable automated control of the measurement data.





Application

Modbus-RTU Protocol
- Configurable baud rates (9600, 19200, 38400)
- Can set communication address

Wired Data Transmission VS. Competitor Brands Advantages

1

Adapted Terminals

- Adaptable to multiple acquisition terminals
  a. Computers or tablets with Windows, Android or iOS systems b. PLC

2

Communication types

- Multiple data communication types to meet various production application scenarios:
  a. (Simulated keyboard signal) Directly transfer data to Excel reports or customer measurement software, MES, or ERP systems
  b. (Output serial port signal) Interface with serial communication software, or transfer measurement data from multiple gauges to the designated area of Excel for easier data management
  c. (485) Can be connected to a PLC to enable automated control of measurement data

3

Data Format

- Supports multiple data formats: e.g., Value + Enter, Value + TAB, ID number + Value + Enter, etc.

3 Measurement Data Management and Analysis Software

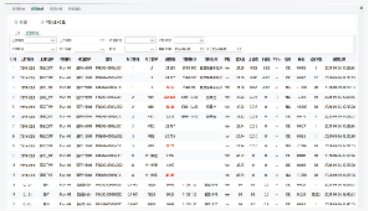


Measurement Data Management and Analysis Software (Basic Version)-- 7349

Measuring tools Management

Manage basic information and calibration dates of measuring tools.





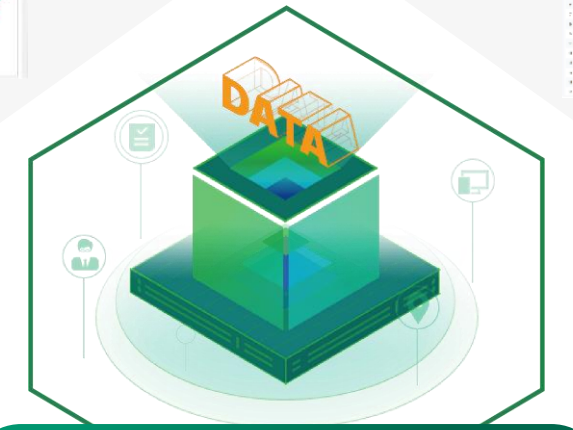
Data Management

Query measurement data (red display for out-of-tolerance) and result status (OK/NG, Rework, UpMax/LowMin).

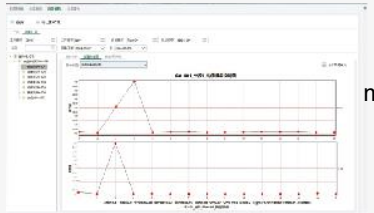
Management of inspection plan

- Workpiece definition
- Control plan
- Drawing analysis
- Data interaction





Can be connected with PDM, ERP, MES and other systems



SPC analysis

SPC Analysis: average, min value, max value, range, Cp, Cpk, variation, sigma, counts of OK/NG.
Quality Analysis Control Charts: Pie chart, X chart, Xbar-R chart, Xbar-S chart, I-MR chart and Run chart.

Data acquisition

Support multiple data acquisition methods:
- Manual input: data input with keyboard
- Data transfer: data collection with data output cable





Quality report

Generate quality reports with control plan information, SPC parameters, and measurement data, can export Excel.

Measurement Data Management and Analysis Software -- 7317

Make inspection plan

Define the dimensions, tolerances, control range and other parameters of workpieces



Inspection plan management

Follow company workflow
Test item management

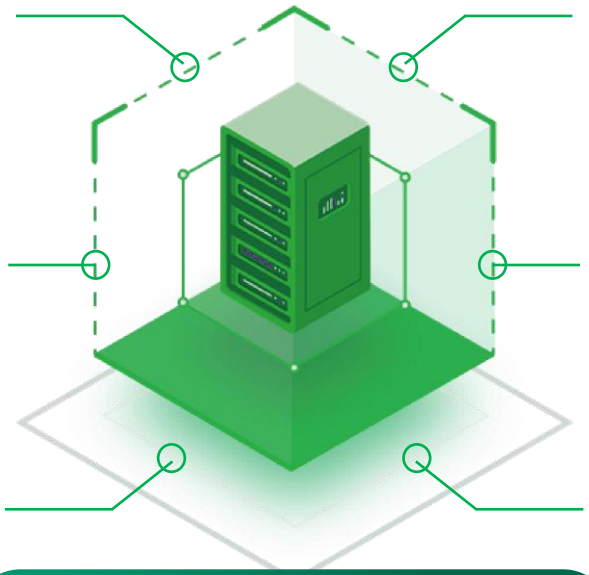


Data acquisition

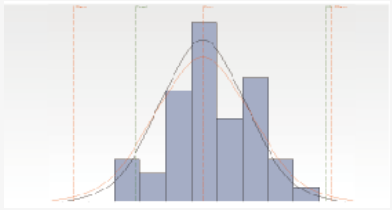
Supports multiple data acquisition methods:

- Manual input
- Data transmission
- File parsing
- Screen capture



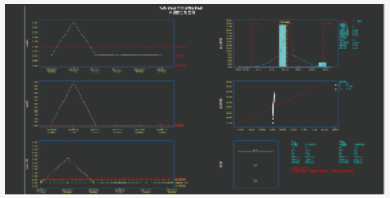


Can Be Connected With PDM, ERP, MES And Other Systems



SPC Analysis

Measurement data analysis helps identify engineering limitations and optimize workflows.



Real Time Monitoring

Quality control personnel can monitor real-time quality status for each process and address risks promptly.

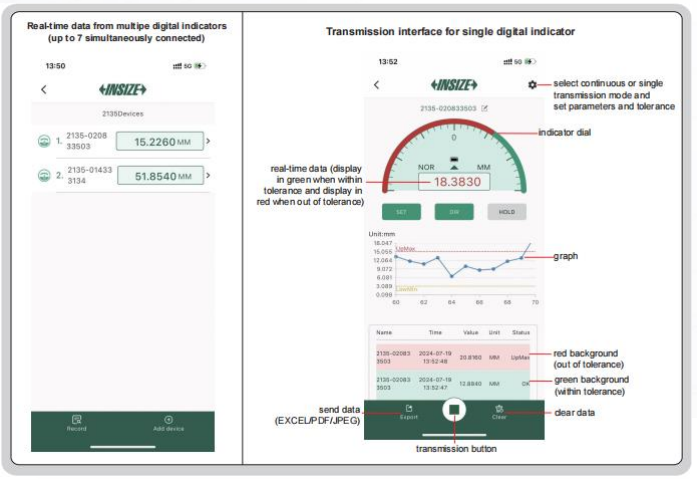


Reports

Quality reports increase quality credibility, reduce acceptance workload, and ensure traceable quality control.

Data Management APP

- Measuring tools connects to the mobile APP by Bluetooth for real-time data collection
- Displays synchronized data with automatic judgment (red display for out-of-tolerance)
- Data trend charts help quickly identify abnormal fluctuations
- Export data as PDF, JPEG, or Excel files
- Transmission distance: 10 meters





4 Inspection Table



Inspection Table

- Customers can choose the suitable inspection table based on different measurement applications.



7906-06C



7901



7911



7923

SPC Inspection Station Case

1. Customer needs to quickly measure the inner and outer diameters of automotive differentials.
2. Measuring tools were selected for quick on-site measurements and to minimize human errors: 4653 precision Bore plug gauge, 2186 quick dial snap gauge, and 4659 ring type inner/outer diameter plug gauge.
3. The 7315 wireless data transmission system was selected, and transmit data to the 7317 software.





transmitter



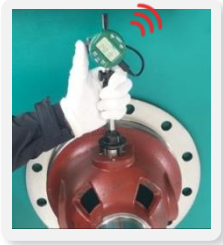
receiver

Ring Outer Diameter Plug Gage 4659-D250g6
(For measuring Ø250g6-0.015/-0.044)

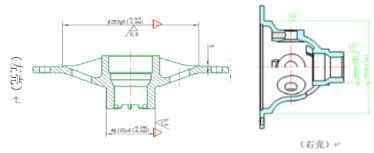




Dial snap Gage 2186-125/275
(For measuring Ø105n6+0.045/+0.023/ Ø270h7 0/-0.052)



Bore Plug Gage 4653-B34J8
(For measuring Ø34J8+0.024/-0.015)







Using the 7315 wireless transmission system, measurement data is directly transferred to the 7317 software.

2

Smart Measurement

SPC Measurement Station



Key Products

SPC Measurement Station CMW-□□□



- Flexible instrument configuration: selection of air gauges, inductive probes (LVDT), and measuring tools (e.g., digital calipers, micrometers, digital Indicators) and Go/No-Go gauges based on specific requirements
- Visual software guidance: graphical interface functionality that provides step-by-step instructions and highlights the specific location of each dimension to be measured
- Light indicator guidance: signal lights to guide the operator to the specific gauge or instrument required for each measurement step
- Data analysis & reporting: software equipped with modules for real-time data processing and professional report generation

Optional measuring tools and instruments

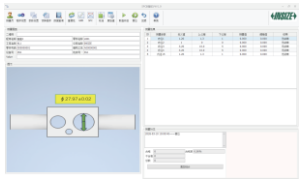

air gauges

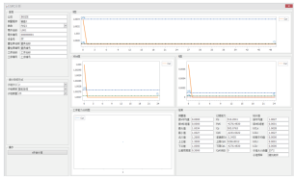

inductance probes

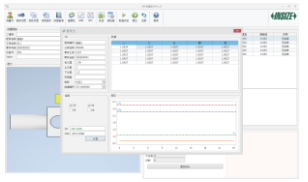

measuring tools

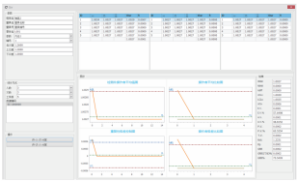

Go/No-Go gauges

SPC measurement software system (customizable)


measurement interface


SPC analysis


CG analysis


GRR analysis

3

Automatic Inspection

Robotic Arm-integrated Measuring System



Automatic Inspection System



Semi-auto Measurement Stations



Workpiece Torsion Fatigue Testing Machine



Automatic Vision Inspection Machine



AI Visual Inspection System (Local Deployment)



Key Products

Robotic Arm-integrated Measuring System (P1)



Automatic Measurement System RBT-CMM01



Automatic Scanner Measuring System RBT-LSM01

CUSTOM-MADE



Automatic Quick Measurement System RBT-VIM40



Workshop CMM Automatic Measurement System RBT-CMM02



Automatic Quick Measurement System RBT-QM01



Automatic Vision Measuring System RBT-ISD01

Key Products

Robotic Arm-integrated Measuring System (P2)



Automatic Profile Measurement System RBT-SPM01



Automatic Roundness Measurement System RBT-RCT01

CUSTOM-MADE



Automatic Roughness Measuring System RBT-ISR01



Automatic Laser Diameter Measuring System RBT-LDM01



Automatic Hardness Test System RBT-HDT01



Automatic XRF Plating Thickness Measurement System RBT-XRF01

Key Products

Automatic Inspection System ATU-MHV35 (P1)

CUSTOM-MADE

- Automatic inspection system: delivers unmanned inspection and automatic data collection, fundamentally cutting labor costs, maximizing equipment utilization, enhancing efficiency, ensuring quality, and ultimately achieving visual management of production progress and quality status



Key Products

Automatic Inspection System ATU-MHV35（P2）



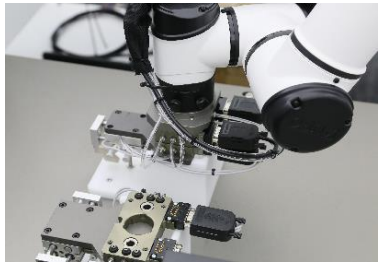
The palletizing elevator automatically takes the workpiece pallets from vertical storage system



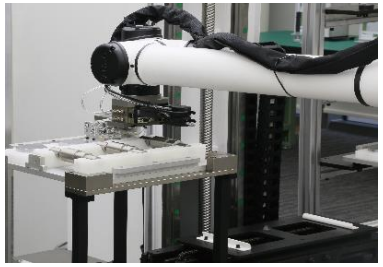
The palletizing elevator automatically conveys the workpiece pallets to the vision positioning station



The vision positioning station automatically verifies the workpiece placement position



The robot auto matically changes grippers



The robot automatically grips the workpiece on the vision positioning sation



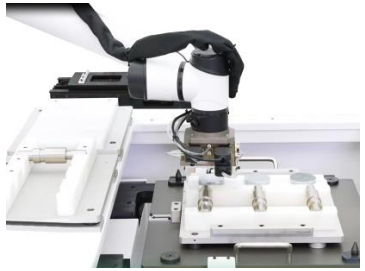
The robot automatically places the workpiece on the CNC vision measuring station for automatic measurement



The robot automatically places the workpiece on the CMM station for automatic measurement



The robot automatically places the workpiece on the hardness tester station for automatic measurement



The robot automatically places the workpiece into OK or NG positions on the servo stacking&unloading

Key Products

Semi-auto Measurement Stations

Semi-auto Measurement Station ATU-01A

CUSTOMIZED ACCORDING TO WORKPIECES



Measurement device





Workpiece fixing device

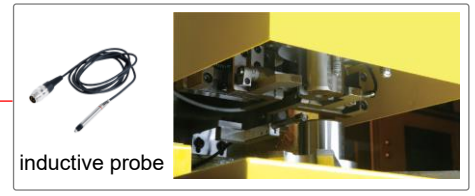
- Repeatability: 3μm
- Measurement cycle time: 8s

Semi-auto Rotary Measurement Station ATU-01B

CUSTOMIZED ACCORDING TO WORKPIECES



Measurement device





Workpiece fixture and rotating plate

- Repeatability: 10μm
- Measurement cycle time: 46s

Key Products

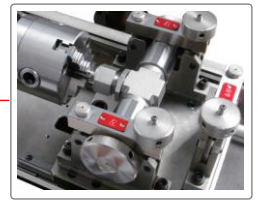
Workpiece Torsion Fatigue Testing Machine
ITU-A102

CUSTOMIZED ACCORDING TO WORKPIECES



built-in dynamic torque sensor
IST-TA10





workpiece fixture

Main unit
- Servo control mode: torque, angle and speed
- Range of test torque: 20%-100%FS
- Range of torsion angle: 0-9999°
- Max. Test RPM: 100rpm

Dynamic torque sensor
- Torque capacity: 10N.M
- Accuracy: 0.1%fs
- Hysteresis: 0.5%f.S.

Key Products

Automatic Vision Inspection Machine AVIM

- For testing fasteners, mobile phone parts, plastical products, electronic components and special-shaped hardware, etc.



AUTOMATIC INSPECTION OF LARGE QUANTITIES OF WORKPIECES

AUTOMATIC SORTING

SIZES MEASUREMENT AND DETECTION OF SURFACE DEFECTS

CUSTOM-MADE

Key Products

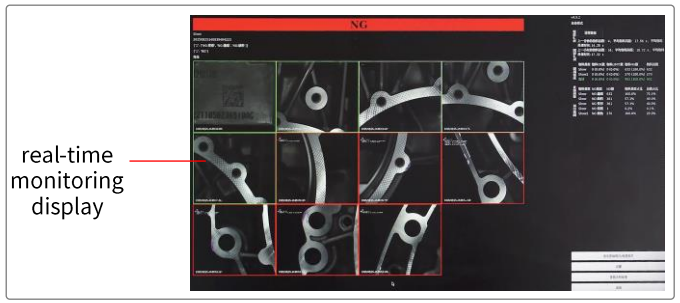
AI Visual Inspection System (Local Deployment)
AVS-20

- Equipped with a high-end NVIDIA dedicated graphics card
- Short AI model training time and fast algorithm deployment
- Compatible with mainstream industrial cameras and seamlessly integrable with AI inspection systems
- AI inspection system capable of stable 24 hours a day



DEFECT DETECTION | SCRATCH DETECTION | SCUFF DETECTION | CUSTOM-MADE

Software (included)

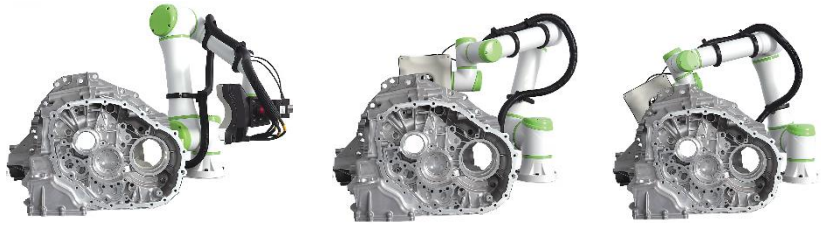


Application

coordinating with a robot arm to capture real-time images and detect defects on rotating gears



integrated with a robot arm for multi-angle and multi-directional defect and flaw detection



- Defective samples: 5~10pcs
- Model training time: 10min
- Frame rate: 75fps
- Lighting combination: 236types
- Multi-channel independent control: 40pcs
- System: local AI inspection system

4 Automatic Tool Compensation System

Automatic Tool Compensation System



Key Products

Automatic Tool Compensation System ATU-03A

- Improve production efficiency, reduce human misjudgment, lower product reject rate and maintain stable controllable machining quality
- Auto-measure workpieces, transmit measured data to the CNC, auto-calculate compensation values and update CNC tool compensation



Tool compensation software (included)

CUSTOMIZED ACCORDING TO REQUIREMENTS



- Measuring range*: workpiece length: 100mm
  workpiece diameter: 1~30mm
- Accuracy (at 25ºC): ±(0.5+10%D)μm, D is measuring diameter in mm
- Repeatability (at 25ºC): (0.3+5%D)μm, D is measuring diameter in mm
- CNC system type*: FANUC, Siemens etc.

* can be customized according to customer workpieces and CNC systems

5

Measuring Tools (P1)

Calipers



Depth Measuring Tools



Hight Measuring Tools



Comparison Measuring Tools



Micrometers



Bore Diameter And Circumference Measuring Tools



ARC Radius Measuring Tools



Keyway And Chamfer Measuring Tools



5

Measuring Tools (P2)

Indicators And Dial Indicator Stands



Indicating Measuring Tools



Standards And Gauge Blocks



Angle, Straightness, Flatness Measuring Tools



Concentricity And Runout Testers



Simple Measuring Tools



Set-up Tools



Calipers



Digital Calipers



Vernier Calipers



Dial Calipers



Caliper/Height Gauge Checkers



Caliper End Grinding Machines



Depth Base Attachments



Accessory Sets For Digital Calipers



Groove Points For Digital Calipers



Universal Calipers



Digital Calipers With Interchangeable Points



Special Purpose Calipers

Digital Calipers



Digital Calipers (Standard Type) 1108



IP67 Waterproof Digital Calipers 1195



Wireless Digital Calipers 1113



Digital Calipers 1114



Left Hand Digital Calipers 1130



Digital Calipers With Carbide Tipped Jaws 1110



Mini Digital Calipers 1111



Plastic Digital Caliper 1139

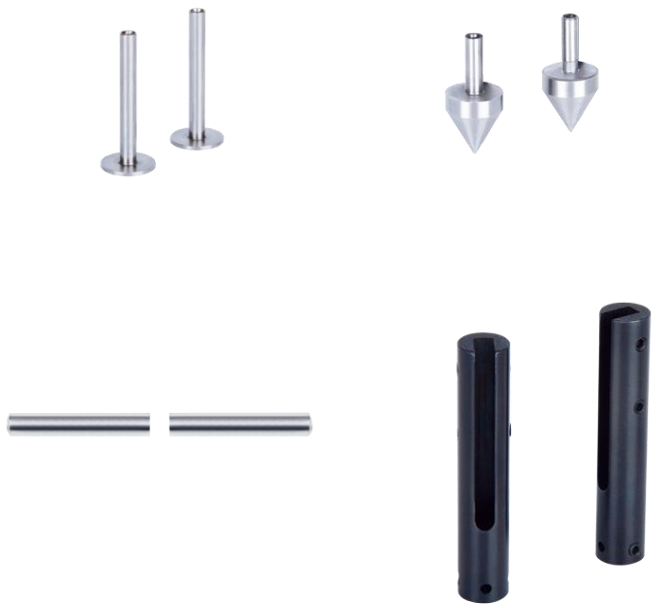


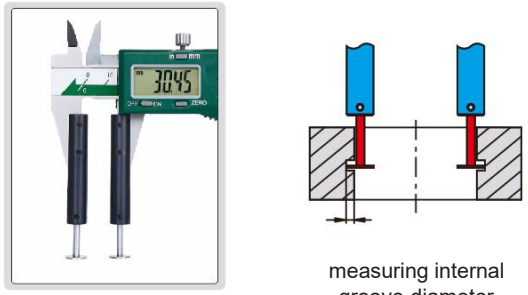
Digital Calipers 1106

Key Products

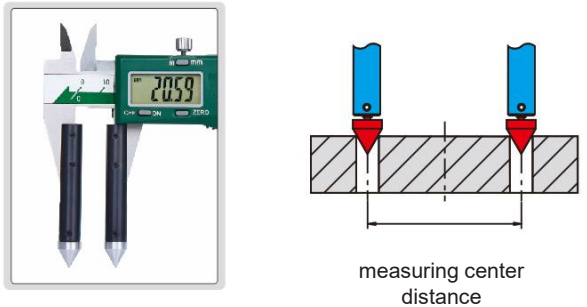
Accessory Set For Digital Calipers 6144

- Suitable for 0-150mm and 0-200mm digital calipers (thickness of lower jaws<3.7mm)
- Suitable for 0-300mm digital calipers (thickness of lower jaws<4.0mm)

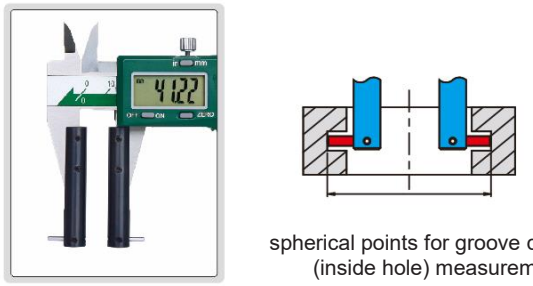




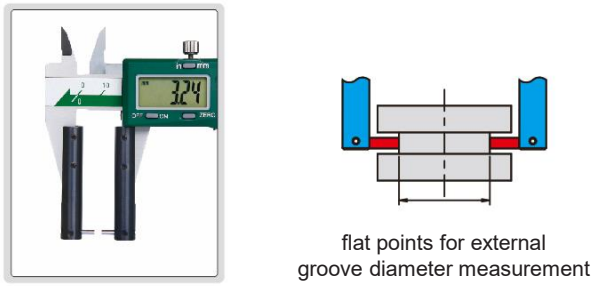
measuring internal groove diameter



measuring center distance



spherical points for groove diameter (inside hole) measurement



flat points for external groove diameter measurement

Key Products

Universal Calipers 1125

Working with stands

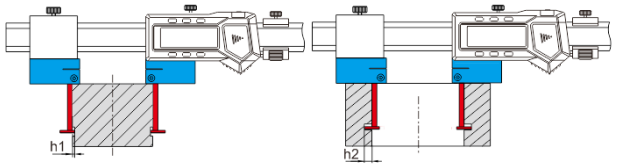


Working with measuring jaws





Half Disk Points

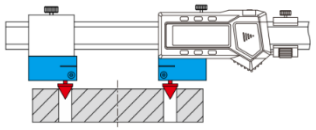


measuring external groove diameter with flat measuring face

measuring internal groove diameter with spherical measuring face



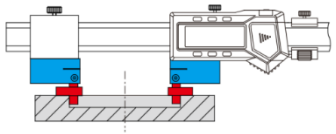
Conical Points



measuring center distance



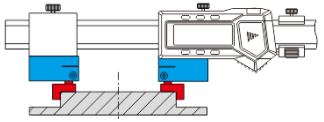
Round Shoulder Points



measure inside diameter of shallow hole



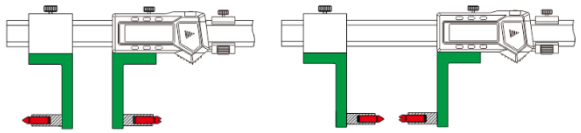
Flat Shoulder Points



measure outside diameter of low boss



Point Sleeve



working with multifunctional points, ball points and screw thread points

- Range: 0-1000mm
- Resolution: 0.01mm
- Accuracy: ±0.05mm/±0.07mm

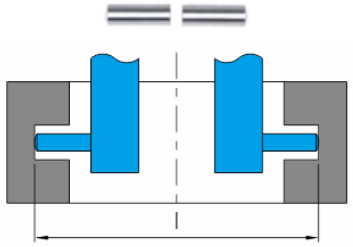
Key Products

Digital Calipers With Interchangeable Points

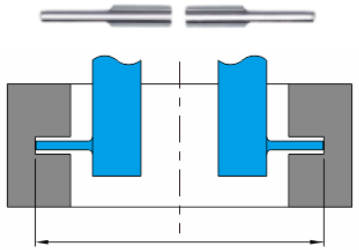
1526



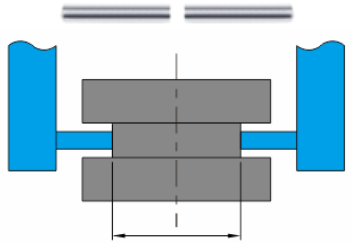
- Range: 0-200mm
- Resolution: 0.01mm
- Accuracy: ±0.03mm



spherical points for groove (inside hole) measurement



spherical blade points for narrow groove (inside hole) measurement



flat points for external groove measurement

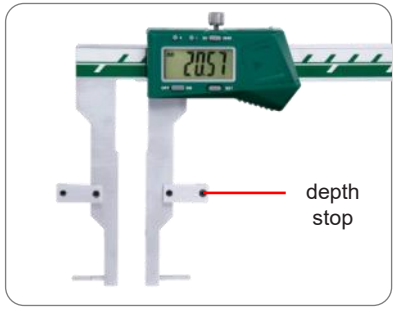
1124



- Range: 0-340mm
- Resolution: 0.01mm
- Accuracy: ±0.04mm

Multifunctional Points

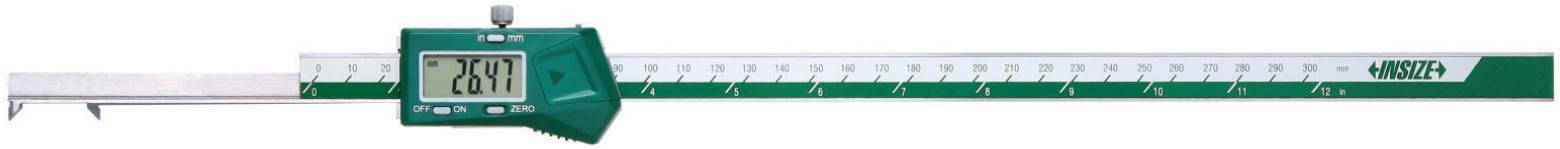


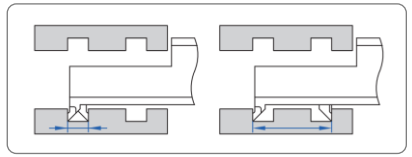


Key Products

Digital Hook Calipers 1122 / 1164

Measure width and distance of grooves inside bores

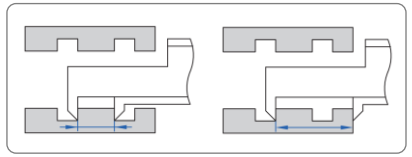




DATA OUTPUT

- Range: 3-300mm
- Resolution: 0.01mm
- Accuracy: ±0.03mm/±0.04mm

Measure width and distance of grooves inside bores





- Range : 0-300mm
- Resolution : 0.01mm
- Accuracy : ±0.03mm /±0.04mm

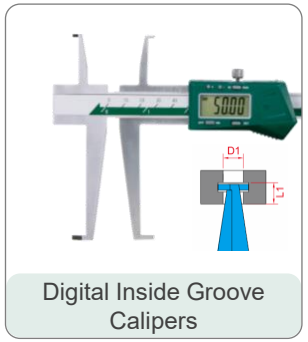
Special Purpose Calipers



Digital Inside Groove Calipers



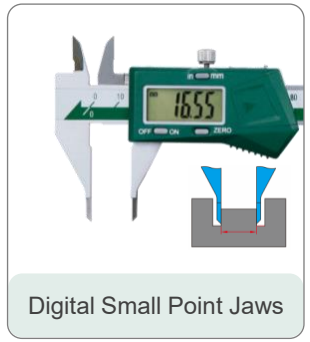
Digital Inside Point Calipers



Digital Inside Groove Calipers



Digital Outside Point Calipers



Digital Small Point Jaws



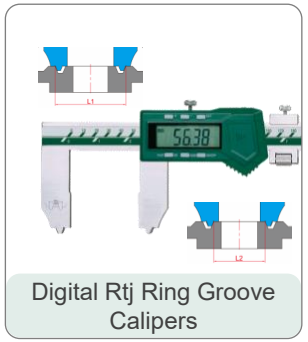
Digital Inside Knife-edge Calipers



Digital V Shape Caliper



Digital Offset Calipers



Digital Rtj Ring Groove Calipers



Digital Crimp Height Calipers



Digital Calipers With Large Measuring Faces

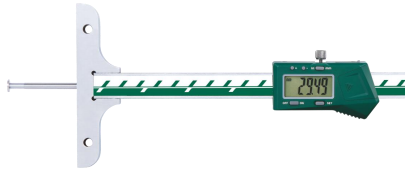


Digital Arc Radius Calipers

Depth Measuring Tools



Digital Depth Gauges



Digital Depth Gauges With Round Depth Bar



Dial Depth Gauges



Vernier Depth Gauges



Extension Bases



Mini Depth Gauges



Depth Gauges



Depth Micrometers



Measuring Tools Dynamometers



Depth Micrometer Checkers

Digital Depth Gauges



IP67 Waterproof Digital Depth Gauges 1149



Digital Depth Gauges (Standard Type) 1141



Digital Hook Depth Gauges 1142



Digital Double Hook Depth Gauges 1144



Digital Double Hook Depth Gauge 1540



Digital Point Depth Gauges 1143

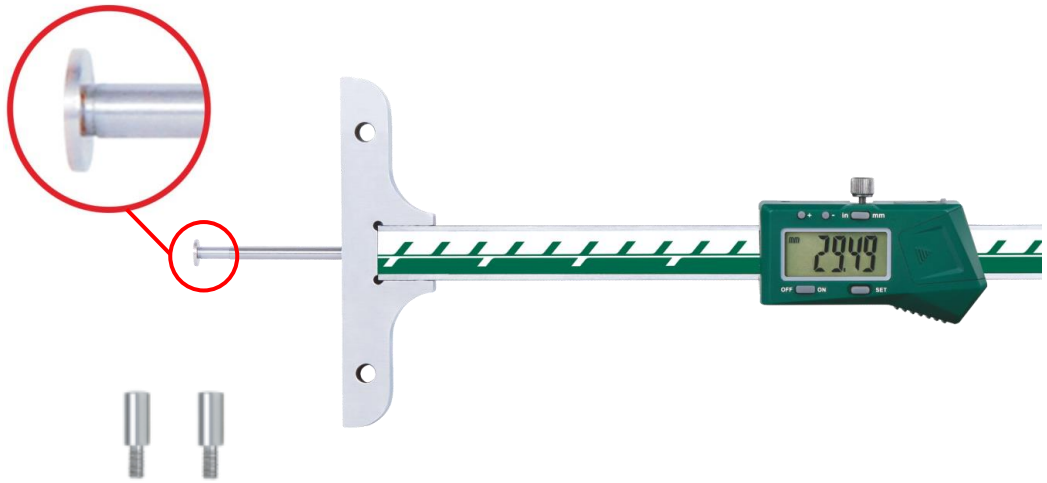


Mini Digital Depth Gauges With Round Bar 1140

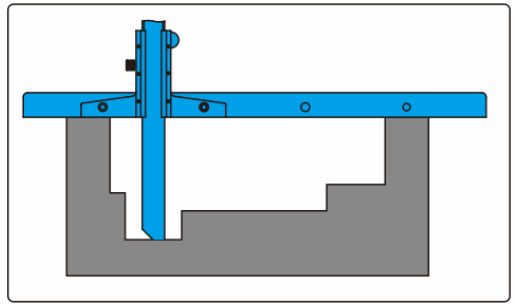
Key Products

Digital Depth Gauges With Round Depth Bar 1148

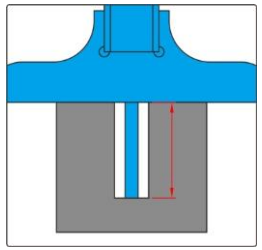
- Range: 0-100mm, 0-120mm (one-hand use), 0-200mm, 0-300mm
- Resolution: 0.01mm
- Accuracy: ±0.02mm~±0.03mm



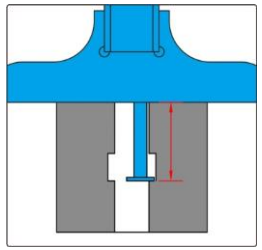
Extension base (optional)



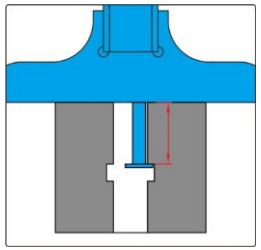
Measure depth of small holes (>ø4mm)



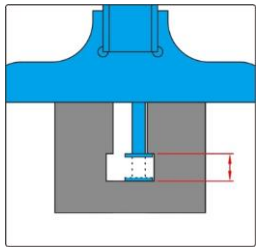
Measure depth of grooves inside bore



Measure depth of grooves inside bore



Measure width of grooves inside bore



Height Measuring Tools



Manual Height Gauges



Digital Height Gauges



Dial Indicator Stands



Height Gauges



Height Gauge Checkers

Key Products

Manual Height Gauges

2D



DHG-V410/V710

with air cushion

- Measuring range: 0-407mm/0-711mm
- Expandable measuring range: 719mm/1023mm
- Accaccuracy(at 20°C): 4.5μm/6μm

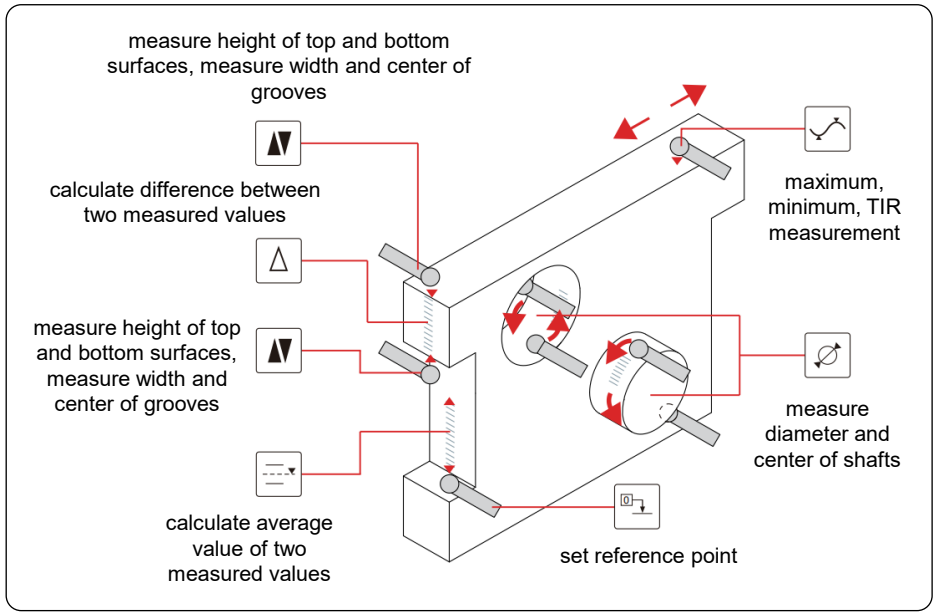
1D



ISHH-V400/V700

without air cushion

- Measuring range: 0-407mm/0-711mm
- Expandable measuring range: 508mm/812mm
- Accuracy(at 20°C): 5μm/6μm



Key Products

Digital Height Gauges

High Precision Digital Height Gauges 1155



- Range: 0-50mm
- Resolution: 0.5μm(can switch to: 1μm) / 0.1μm(can switch to: 1μm)
- Accuracy (20°C): 1.5μm/1μm

Digital Height Gauges 1157



- Range: 0-50mm
- Resolution: 1μm
- Accuracy (20°C): 3μm

Large Range Digital Height Gauge 1158



- Range: 0-100mm
- Resolution: 0.1μm (can switch to: 1μm)
- Accuracy (20 °C): 3μm

Height Gauges



Digital Height Gauges 1150



Digital Height Gauges With Driving Wheel 1156



Digital Height Gauges 1151



Dial Height Gauges 1351



Mini Digital Height Gauges 1154



Vernier Height Gauges 1250

Comparison Measuring Tools



Universal Comparison Gauges



Carbon Fiber Comparison Gauges



Horizontal Measuring Bench



Internal Comparison Measuring Bench



Universal Comparison Measuring Benches



Digital Comparison Gauges



Comparison Gauges



Internal/External Measuring Gauges



Digital Measuring Gauges (Large Range)



Ball Screw/Ball Nut Pitch Circle Diameter Comparators



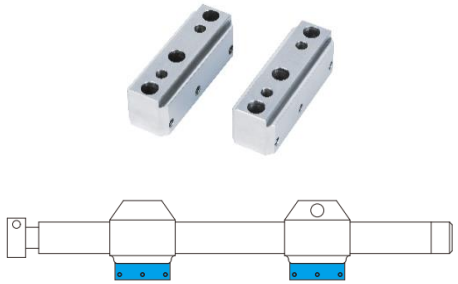
Screw Thread Comparators

Key Products

Universal comparison Gauge 2927 （P1）



internal/external diameter measurement switch

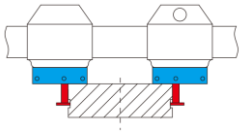


Stands (Optional, Supplied In Pair)

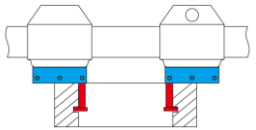
- Movable jaw stroke*: 10mm
- Fixed jaw movable range**: 140mm
- Repeatability: 2μm
- Accuracy: ±5μm



Half Disk Points (Optional, Supplied In Pair)



measuring external groove diameter with flat measuring face (depth≤2.5mm)



measuring internal groove diameter with spherical measuring face (depth≤7.5mm)

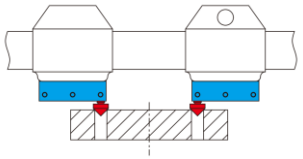
* After set zero, accuracy is ±5μm within range of ±2mm from zero position

** Extension rods can be optionally to increase the measuring range

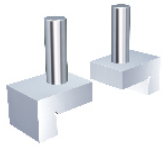
Universal comparison Gauge 2927 （P2）



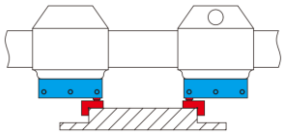
Conical Points



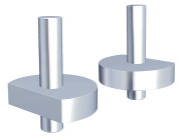
measuring center distance



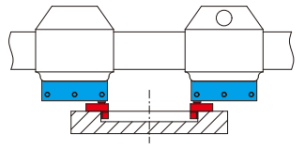
Flat Shoulder Points



measure outside diameter of low boss

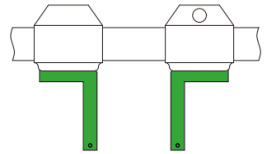


Round Shoulder Points



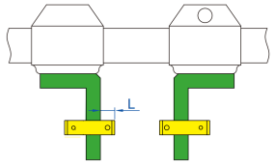
measure inside diameter of shallow hole





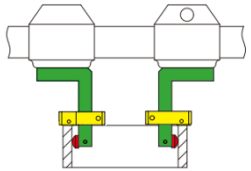
Measuring Jaws





Depth Stop

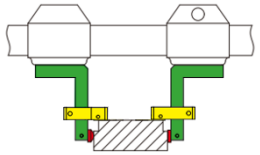




Spherical Point

measure inside diameter (2 spherical points)





Flat Point

measure outside diameter (1 spherical point, 1 flat point)



V-shaped Placement Brackets



Points



Multifunctional Points



Ball Points



External Thread Points



Internal Thread Points

Key Products

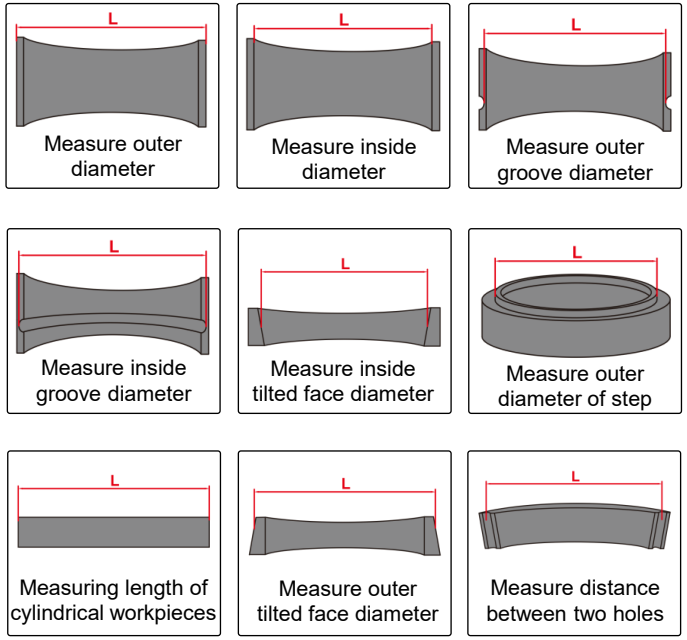
Carbon Fiber Comparison Gauges 2931

Measure outer diameter, inside diameter, holes distance and cylindrical workpiece length

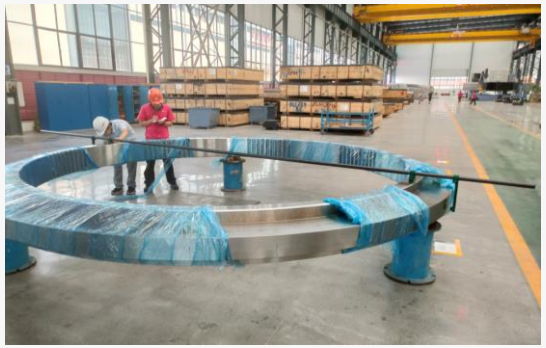
CARBON FIBER RODS, LIGHT WEIGHT, NOT EASY TO DEFORM, NO TEMPERATURE EXPAND, SUITABLE FOR THIN-WALL WORKPIECES AND LARGE-SIZE WORKPIECES

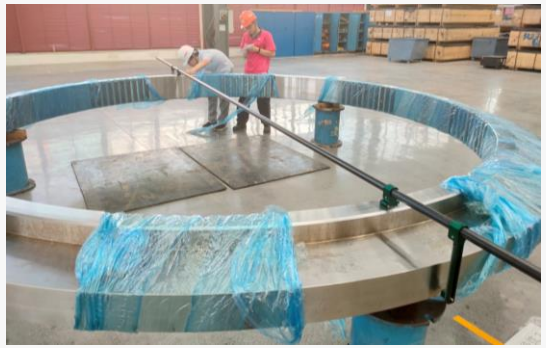


- Maximum measuring range (L): 9000mm
- Measuring depth (H): 0-300mm
- Repeatability: 5μm-120μm

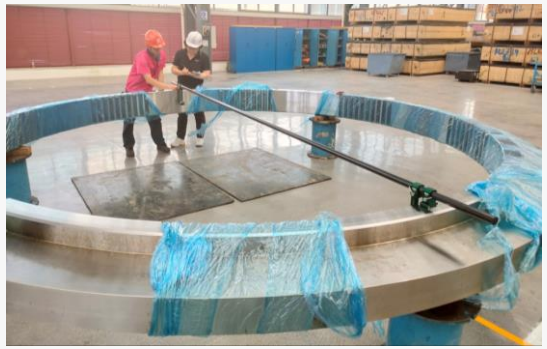


Carbon Fiber Comparison Gauges 2931--Application

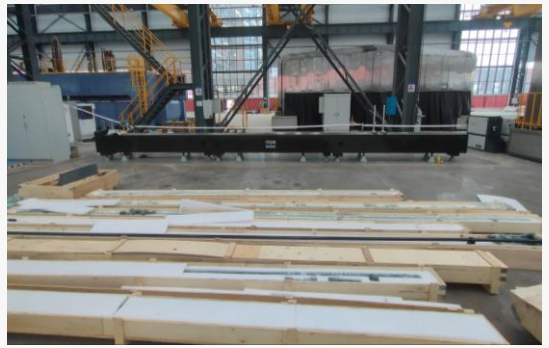




Measure outer diameter



Measure inside diameter



Set zero

Measurement of the inner and outer diameter of bearings, measuring dimensions 3m, 4m, 6m.

Key Products

Horizontal Measuring Bench 6849

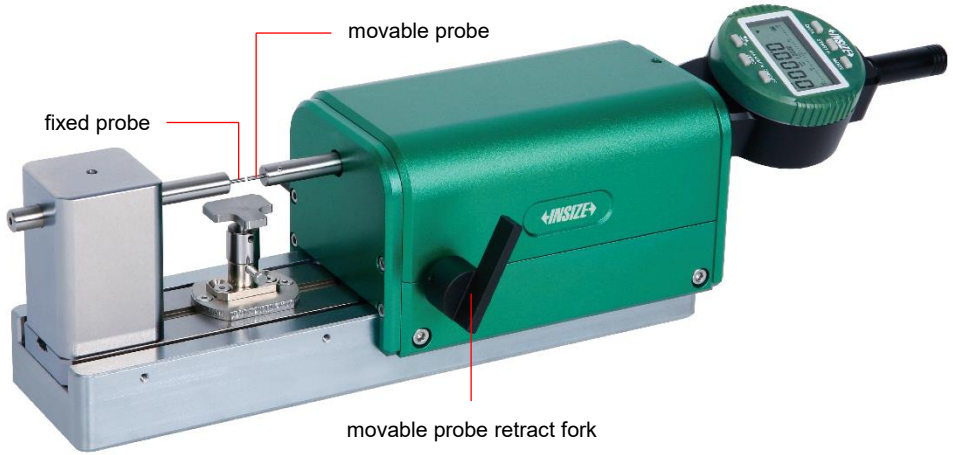
- Quickly measure outside diameters
- The platform can move horizontally and the height is adjustable
- For left and right hand operation
- Carbide probes
- Digital indicator uses linear ball bearings and can be used ten million times

MEASURING FORCE CAN BE CUSTOMIZED, MINIMUM MEASURING FORCE IS 2N

DATA OUTPUT

DIGITAL INDICATOR USES ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

PROBE AND PLATFORM CAN BE CUSTOMIZED



- Range: 0-50mm
- Movable probe travel: 20mm
- Resolution: 0.0002mm
- Accuracy: 5μm

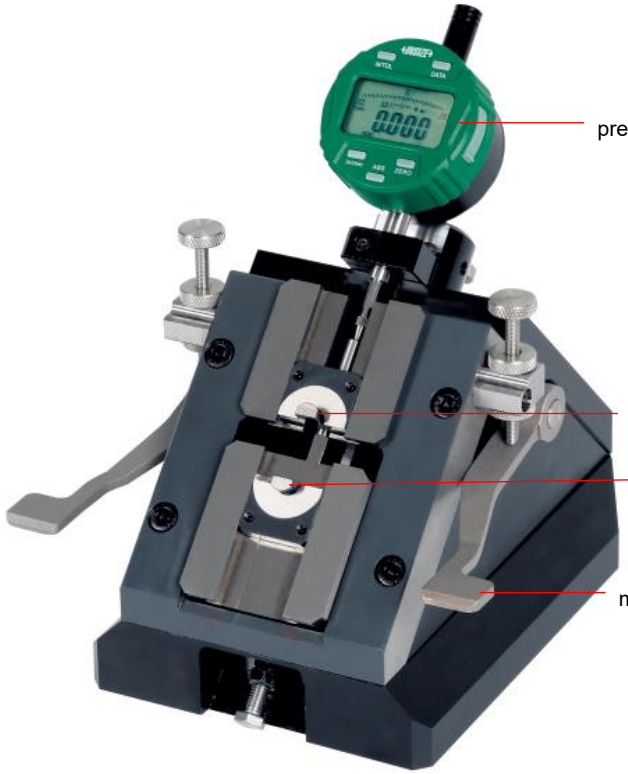
Key Products

Internal Comparison Measuring Bench 6831

PROBE
CAN BE CUSTOMIZED

Application

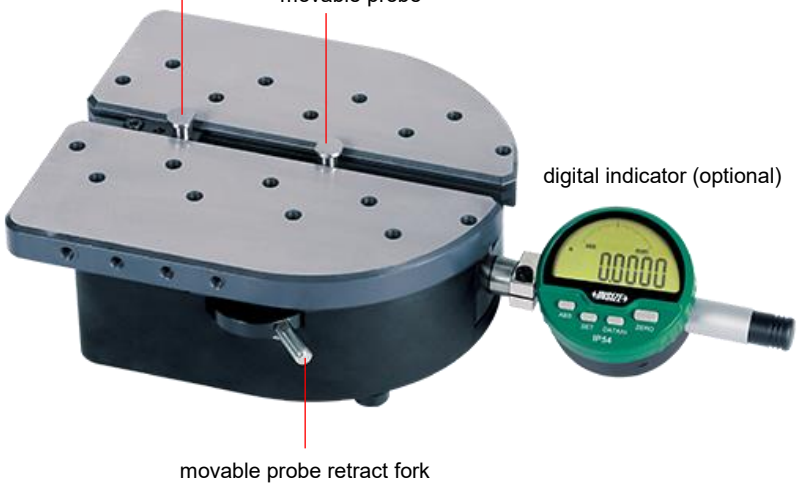




- Range (ØD): 12-80mm
- Movable probe Stroke: 5mm
- Accuracy: 5μm
- Repeatability: 2μm

Key Products

Universal comparison Measuring Bench 6848





Internal groove probes



Internal groove probes holders



Disk probes



Probe holders



Thread rollers



Probes



Multifunctional probes



Ball probes



External thread probes



Internal thread probes



Stop block



Spacer blocks

- Range of external diameter: 0-100mm
- Range of internal diameter: 25-120mm
- Repeatability(without digital indicator) : 2μm
- Accuracy(without digital indicator): 5μm

Key Products

Comparison Gauges 2252



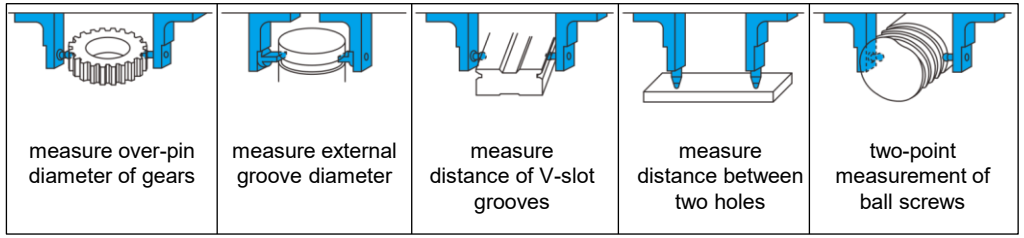
Measure external diameter



Measure internal diameter

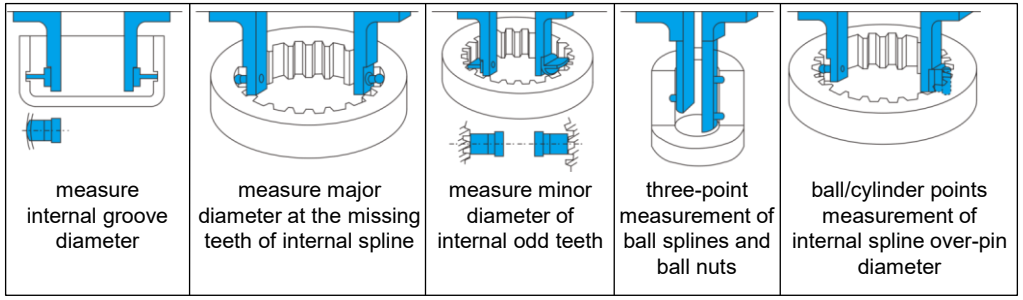
CUSTOMIZABLE MEASURING JAWS AND POINTS

External diameter measurement application



measure over-pin diameter of gears	measure external groove diameter	measure distance of V-slot grooves	measure distance between two holes	two-point measurement of ball screws

Internal diameter measurement application



measure internal groove diameter	measure major diameter at the missing teeth of internal spline	measure minor diameter of internal odd teeth	three-point measurement of ball splines and ball nuts	ball/cylinder points measurement of internal spline over-pin diameter

- Range of external diameter: 0-90mm
- Range of internal diameter: 40-150mm
- Repeatability: 2μm
- Accuracy: ±5μm
- Movable point stroke: 8mm
- Effective range of movable point: ±1mm
- Measure external diameter, internal diameter and over-pin diameter of gears

Key Products

Digital Measuring Gauges (Small Range)

DATA OUTPUT

Digital Internal Measuring Gauges 2932



Digital External Measuring Gauges 2934



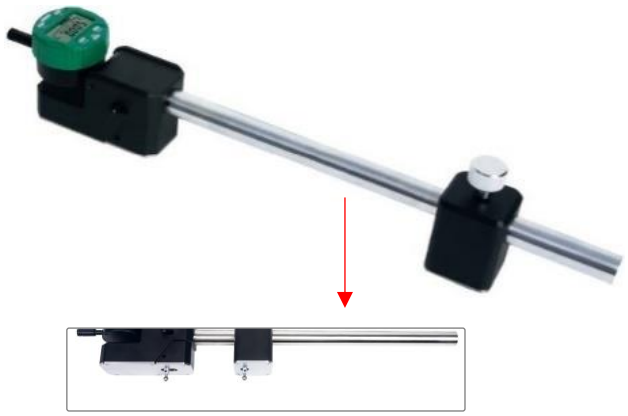
- Measuring range: External: 13-38mm
  Internal: 24-50mm
- Movable point stroke: 5mm
- Accuracy: 5μm
- Resolution: 0.001mm
- Point height is adjustable, h=2-25mm
- Repeatability: 1μm

Key Products

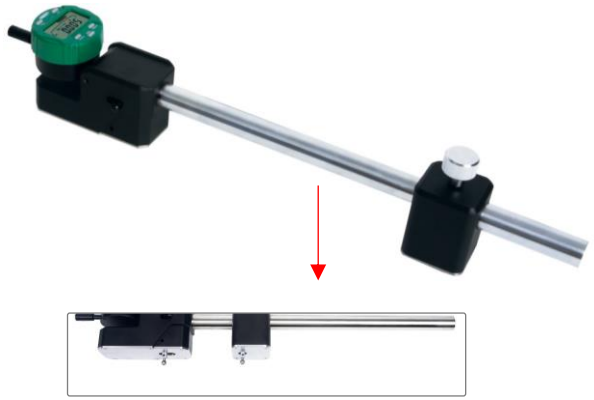
Digital Measuring Gauges (Large Range)

DATA OUTPUT

Large Range Digital Internal Measuring Gauges 2933



Large Range Digital External Measuring Gauges 2935

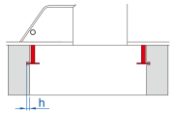


- Measuring range: External: 35-320mm
  Internal: 48-330mm
- Movable point stroke: 5mm
- Accuracy: 5μm
- Resolution: 0.001mm
- Point height is adjustable, h=2-25mm
- Repeatability:1μm

Digital Measuring Gauges (Optional Probe)



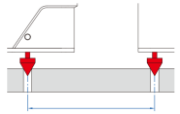
Disk Points



measuring internal groove diameter

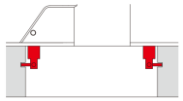


Conical Points



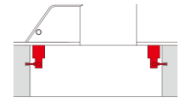
measuring center distance

Spherical Points



spherical points for groove (inside hole) measurement

Spherical Blade Points



spherical blade points for narrow groove (inside hole) measurement

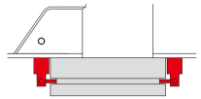


Ball Points



ball points for internal diameter measurement

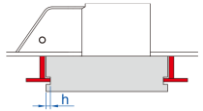
Spherical/Flat Points



flat points for external groove diameter measurement



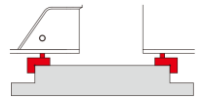
Disk Points



measuring external groove diameter

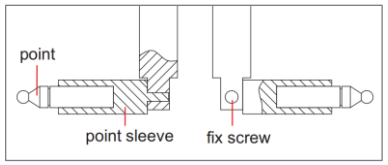


Flat Shoulder Points



measure outside diameter of low boss

installation





Point Sleeve



Screw Thread Points

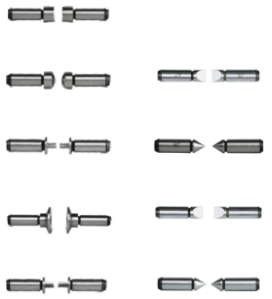


Screw Thread Points



Ball Points

Multifunctional Points



Key Products

Ball Screw/Ball Nut Pitch Circle Diameter Comparators

PROBE AND CALIBRATION PLUG GAUGE
NEED TO BE CUSTOMIZED ACCORDING TO THE WORKPIECE

DATA OUTPUT



Ball Screw Pitch Circle Diameter Comparators 2677

- Range: 6-50mm
- Contact point opening range: 6-15mm
- Effective stroke of anvil: 0.1mm
- Accuracy: 0.005mm
- Repeatability: 0.002mm
- Adjustable resolution: 0.0005mm/ 0.001mm/ 0.01mm

PROBE AND CALIBRATION RING GAUGE
NEED TO BE CUSTOMIZED ACCORDING TO THE WORKPIECE

DATA OUTPUT



Ball Nut Pitch Circle Diameter Comparators 2678

- Range: 6-50mm
- Contact point opening range: 6-15mm
- Effective stroke of anvil: 0.1mm
- Accuracy: 0.005mm
- Repeatability: 0.002mm
- Adjustable resolution: 0.0005mm/ 0.001mm/ 0.01mm

Micrometers (P1)



Digital Micrometers|Snap Gauges



Wireless Waterproof Digital Outside Micrometers



Digital Micrometers



Outside Micrometers



Large Outside Micrometers



Indicating Micrometers



Micrometers With Dial Indicator



Groove Micrometers



3-Wires



Screw Thread Micrometers



Gear Tooth Micrometers



Disk Micrometers

Micrometers (P2)



Special Purpose Micrometers



Optical Parallels



Parallelism Inspect Devices For Outside Micrometers



Measuring Tools Dynamometers



Micrometer Measuring Force Detectors



Micrometer Inspection Gauge Block Sets



Micrometer Stands



Micrometer Setting Standards



Micrometer Lapping Machines



Micrometer Heads

Digital Micrometers/Snap Gauges

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

MEASUREMENT ACCURACY IS NOT AFFECTED BY THE USE OF SLEEVE

NON-ROTATING SPINDLE



High Precision Digital Micrometer/Snap Gauges 3359

- Resolution: 0.0001mm
- Range: 0-25mm
- Accuracy: ±0.5μm
- Repeatability: 0.3μm



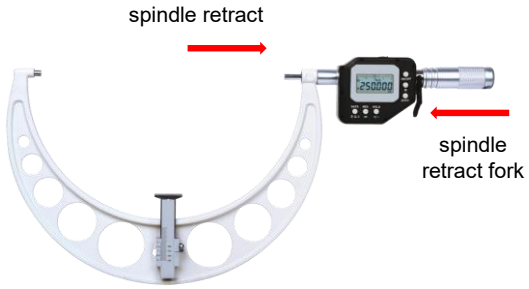
Digital Micrometers/Snap Gauges 3358

- Resolution: 0.001mm
- Range: 0-100mm
- Accuracy: 2μm/3μm
- Repeatability: 1μm



Digital Micrometers/Snap Gauges 3350

- Adjustable resolution: 0.0002mm/0.001mm/0.01mm
- Range: 0-100mm
- Accuracy: 1.4μm-2μm
- Repeatability: 0.6μm/1μm



Digital Micrometers/Snap Gauges 3351

- Adjustable resolution: 0.0002mm/0.001mm/0.01mm
- Range: 100-300mm
- Accuracy: 3μm-6μm
- Repeatability: 1μm

Outside Micrometers



Waterproof Digital Outside Micrometers 3101



Digital Vertical Micrometers 3565



Outside Micrometers 3203



Outside Micrometer With Counter 3400



Outside Micrometers For Left or Right Handers 3236



Digital outside Micrometers with Interchangeable Anvils 3506



Outside Micrometer With Extension Anvil collar 3205



Indicating Micrometers 3332



Micrometers With Dial Indicator 3331

Key Products

Digital Indicating Micrometers

IP54 WATERPROOF | BUILT-IN BLUETOOTH | ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF



Bluetooth Digital Indicating Micrometers 3507

Micrometer head
- Range: 0-100mm
- Accuracy: 3μm

Digital indicator
- Range: ±0.04mm
- Accuracy: ±1μm

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF | IP54 WATERPROOF



Digital Indicating Micrometers(Without Data output) 3508

Micrometer head
- Range: 0-100mm
- Accuracy: 3μm

Digital indicator
- Range: ±0.04mm
- Accuracy: ±1μm

Key Products

3-WIRES

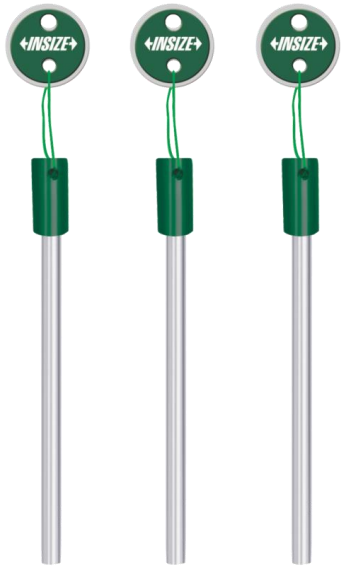
3-wires 7382



- Pin gauge diameter: Ø0.170mm-Ø3.200mm
- Diameter accuracy: ±0.5μm
- Cylindricity: 1μm
- Hardness: HRC60

3-wires（Made Of Alloy Steel） 7394

CUSTOMIZABLE DIAMETER Ød



- Diameter (Ød)): 0.170mm-3.200mm
- Hardness:
  HRC60: Ød≤0.3mm, made of alloy steel
  HRA90: Ød>0.3mm, made of carbide
- Diameter accuracy: ±0.5μm
- Cylindricity: 0.5μm

Screw Thread Micrometers



External Screw Thread Micrometers 3680

- Graduation: 0.01mm
- Range: 0-300mm



Digital External Screw Thread Micrometers 3680

- Graduation: 0.01mm
- Range: 200-2000mm



Screw Thread Micrometers 3281

- Graduation: 0.01mm
- Range: 0-300mm



Digital Screw Thread Micrometers 3581

- Resolution: 0.001mm
- Range: 0 -300mm

Gear Tooth Micrometers



External Gear Tooth Micrometers 3636

- Graduation: 0.01mm
- Range: 0-600mm



Gear Tooth Micrometers 3291

- Graduation: 0.01mm
- Range: 0-275mm



Digital Gear Tooth Micrometers 3591

- Resolution: 0.001mm
- Range: 0-275mm

Disk Micrometers



Disk Micrometers 3676



Large Range Disk Micrometers 3677



Disk Micrometers 3282



Digital Non-Rotating Spindle Disk Micrometers 3594



Digital Disk Micrometers/snap Gauges 3353

Special Purpose Micrometers



Digital Point Micrometers 3530



Digital crimp Height Micrometers 3566



Digital Spline Micrometers 3533



Digital Disk Brake Micrometers 3588



Digital sheet Metal Micrometers 3539



Digital Interchangeable Anvil Micrometers 3562



Digital Large Anvil Micrometers 3534



Digital V-Anvil Micrometers 3590



Digital Universal Micrometers 3580



Digital Jaw Type Micrometers 3583



Sheet Metal Micrometers 3263



Hub Micrometers 3292



Wire Micrometer 3285



Can seam Micrometers 3293

Bore Diameter And Circumference Measurement Tools (P1)



Inside Micrometers



Internal Gear Tooth Micrometers



Inside Micrometers



Digital Tubular Inside Micrometers With Interchangeable Points



Pistol Grip Three Points Bore Gauges



Pistol Grip Internal Thread Micrometers



Snap-Open Digital Three Points Bore Gauges



Three Points Internal Micrometers



Bore Plug Gauges



Stand For Split Type Dial Bore Gauges



Gear Bore Gauges



Split Type Dial Bore Gauges

Bore Diameter And Circumference Measurement Tools (P2)



Bore Gauges



Carbon Fiber Bore Gauges



Large Range Bore Gauges



Bore Gauge Setters



Internal Groove Bore Gauges



Rotary Bore Gauges



Pistol Grip Groove Bore Gauges



Internal Chamfer Gauges

Bore Diameter And Circumference Measurement Tools (P3)



Telescoping Gauge Sets



Tape Bore Meters



Diameter Meters



Diameter Meters



Circumference Meters

Internal Gear Tooth Micrometers



Internal Gear Tooth Micrometers 3678

- Range: 25-75mm
- Graduation: 0.01mm



Internal Gear Tooth Micrometers 3638

- Range: 100-1150mm
- Micrometer head Range: 100-175mm
- Micrometer head Graduation: 0.01mm



Ball Tips For Gear Tooth Micrometers (optional)

- Ball dia. (SØD): SØ1-16mm
- Accuracy: ±1μm/±1.5μm

Key Products

Digital Tubular Inside Micrometers With Interchangeable Points 3525

DATA OUTPUT

IP65 WATERPROOF

POINTS CAN BE CUSTOMIZED



- Range: 200-2050mm
- Travel of micrometer head: 25mm
- Resolution: 0.001mm
- Accuracy: (3+n+L/50)μm
  n=number of rods
  L=maximum measuring length (mm)

Key Products

Pistol Grip Three Points Bore Gauges 2124

digital indicator is optional





Extension rod (included)



Setting ring

6-100mm: included
100-300mm: optional

- Range: 6-300mm
- Accuracy (without digital indicator): 4μm-9μm

Key Products

Pistol Grip Internal Thread Micrometers 3126

digital indicator is optional



Extension rod (included)



- Range: M7-8x1~M68-75x6
- Accuracy: 8μm

Key Products

Snap-Open Digital Three Points Bore Gauges 3129



IP54 WATERPROOF

BUILT-IN BLUETOOTH



extension rod (included)



setting ring

6-100mm: included
100-300mm: optional

- Range: 6-300mm
- Accuracy: 4μm-9μm

Key Products

Two Points/Three Points Internal Micrometers

Digital Two Points/Three Points Internal Micrometers 3127



- Resolution: 0.001mm
- Range: 2-300mm
- Accuracy: 4μm-9μm

Two Points/Three Points Internal Micrometers 3227





- 2-12mm: graduation 0.001mm
  12-300mm: graduation 0.005mm
- Range: 2-300mm
- Accuracy: 4μm-9μm

Key Products

Bore Plug Gauges 4653





- Range: 2-130mm
- Repeatability: 0.0005mm/0.001mm

- Range: 130.1-300mm
- Repeatability: 0.002mm



Handle (retraction button)



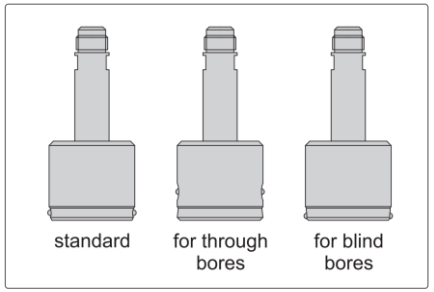
Depth stop (set measuring depth)



90° Adapter



Handle for inductive probe



Bore Plug Gauges 4653--Application





Quickly measure the internal diameter of the differential and upload the data

Key Products

Gear Bore Gauges 2428



ball points (optional)

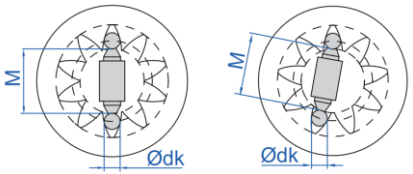
- Range: 8-510mm
- Accuracy (without dial comparator): 2μm
- Repeatability (without dial comparator): 0.5μm

Ball Points (Optional)



- Ball point diameter Ødk: 1-10mm
- in pair

Method of measurement



Gear Bore Gauges 2428 --Application



Measure the span measurement of the internal spline gear

Split Type Dial Bore Gauges

Split Type Dial Bore Gauges 2426



Split Type Dial Bore Gauges For Blind Holes 2427



Stand For Split Type Dial Bore Gauges 2491



Floating holder—Suitable for automatic measurement



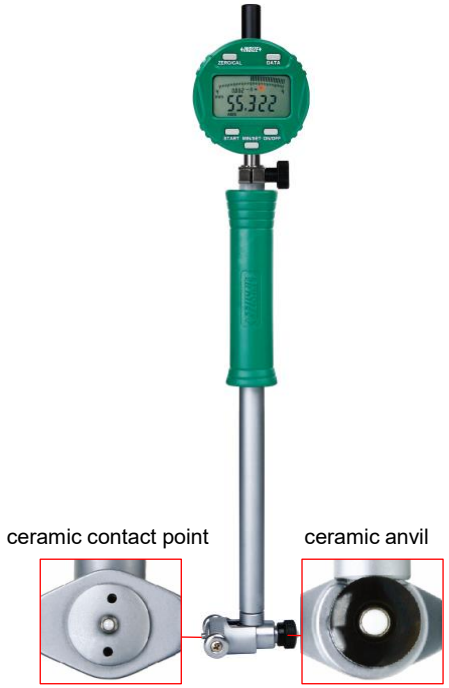


- Measuring range: 0.95-20.6mm
- Accuracy (without indicator): 3μm/4μm/4.5μm/6μm
- Repeatability (without indicator): 1μm
- Split type contact points

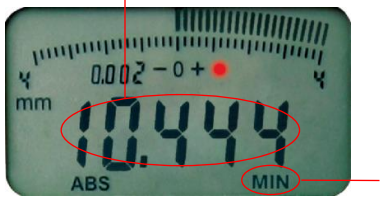
Bore Gauges （P1）

Bore Gauges (With Digital Indicator)



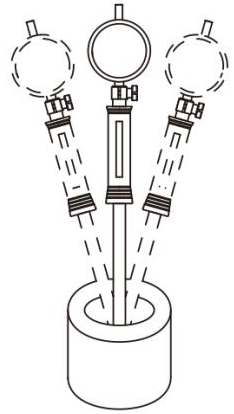


read the diameter directly, after inputting the size of setting ring



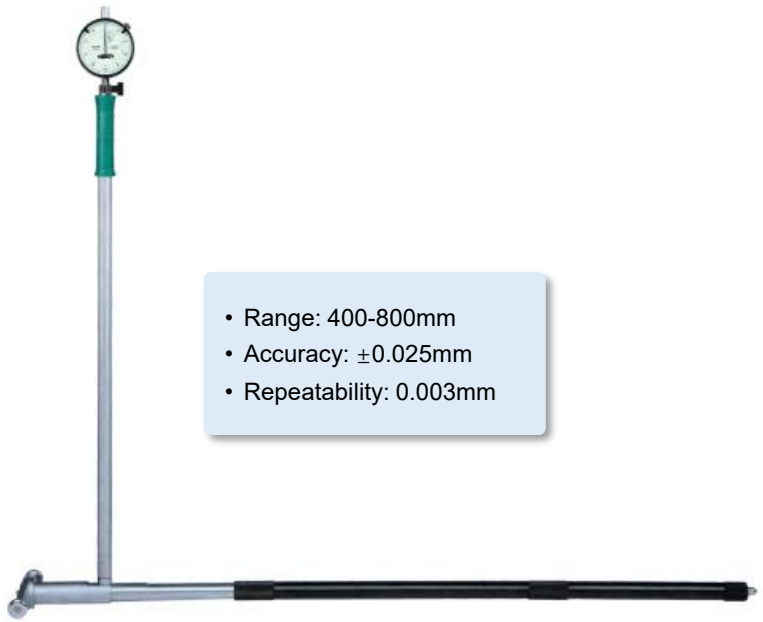
MIN

the minimum value tracking function can find the diameter automatically



Bore Gauges （P2）

Bore Gauges (With Dial Indicator) 2828

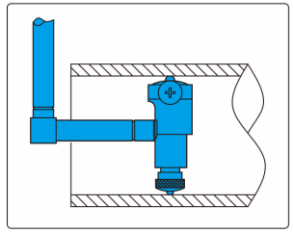


- Range: 400-800mm
- Accuracy: ±0.025mm
- Repeatability: 0.003mm

Bore Gauges (with Dial Indicator) 2827



Application



- Range: 35-450mm
- Accuracy: ±0.018mm
- Repeatability: 0.003mm

Large Range Bore Gauges 2330

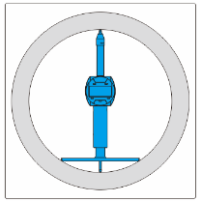




extension rods

- Range: 180-1000mm
- Accuracy (without dial indicator): 7μm
- Repeatability (without dial indicator): 2μm

Application

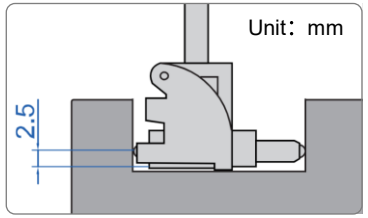


Bore Gauges （P3）

Bore Gauges For Blind Holes 2420/2220



Application

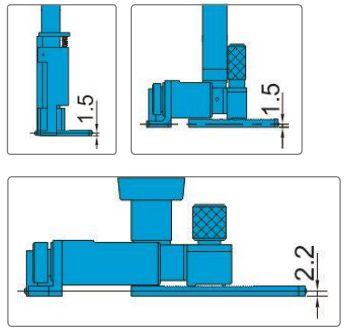


- Range: 35-60mm
- Accuracy: ±0.018mm
- Repeatability: 0.003mm

Bore Gauges For Blind Holes 2424



Application



- Range: 20-600mm
- Accuracy (without dial indicator): 4μm
- Repeatability (without dial indicator): 1μm

Bore Gauges （P4)

Bore Gauges For Barrier Inside Bores 2432



Application

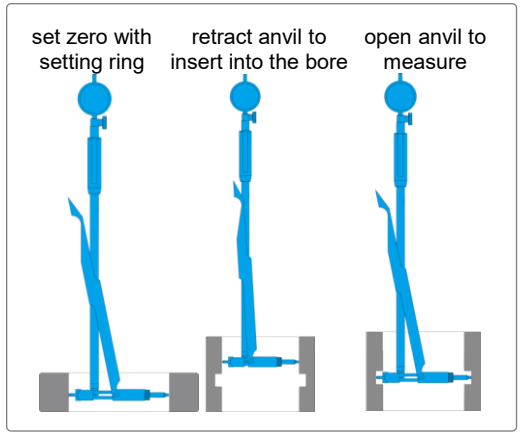


- Range: 25-500mm
- Accuracy (without dial indicator): 0.01-0.02mm

Internal Groove Bore Gauges 2433



Application



- Measure diameter of internal grooves (width of groove> 3mm)
- Range: 60-300mm
- Accuracy (without dial indicator): 2μm
- Repeatability (without dial indicator): 1μm

Key Products

Carbon Fiber Bore Gauges With Interchangeable Points 3526

POINTS CAN BE CUSTOMIZED

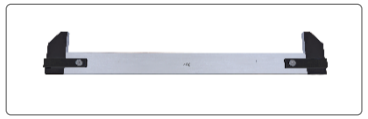
SPRING LOADED MEASURING POINT

DATA OUTPUT

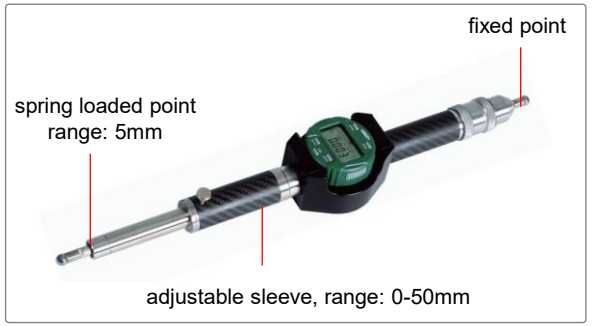
CARBON FIBER EXTENSION RODS, LIGHT WEIGHT, NOT EASY TO DEFORM, LOW THERMAL EXPANSION



430mm standard setting gauge (included) for micrometer head zero setting



spring loaded point, and max./min. value tracking make it easy to find the right measuring position



- Range: 430-6430mm
- Micrometer head Range: 430-480mm
- Micrometer head Resolution: 0.001mm/0.00005"
- Micrometer head Accuracy: ±6μm
- Micrometer head Repeatability: ±3μm

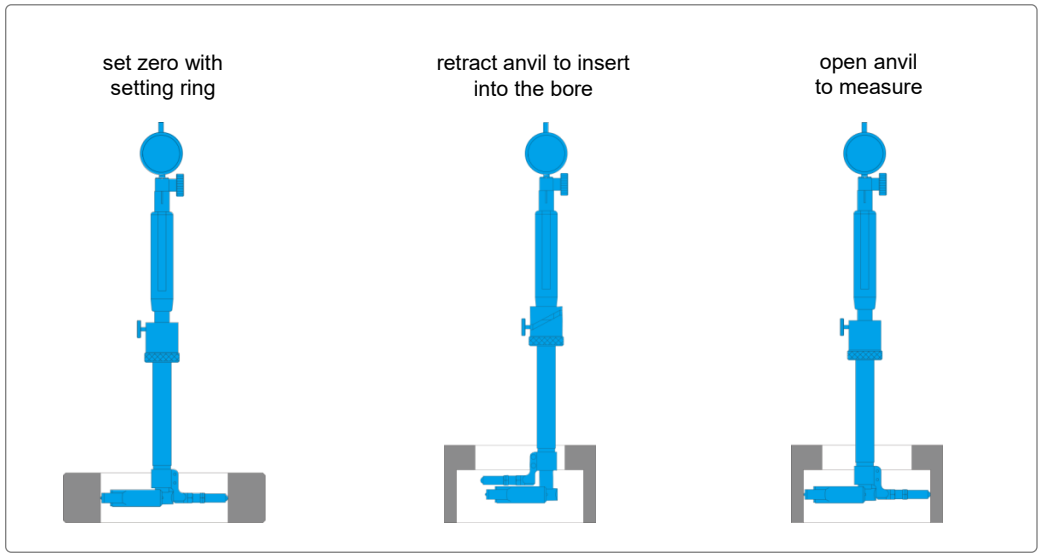
Key Products

Rotary Bore Gauges 2921



180° rotatable fixed anvil

Application



- With rotary anvil, applicable to measure bores with large inner diameter and small opening
- Range: 30-530mm
- Accuracy (without dial indicator): 2μm/3μm
- Repeatability (without dial indicator): 1μm/1.5μm

Key Products

Pistol Grip Groove Bore Gauges 2436

FAST MEASURING INNER DIAMETER OF DEEP GROOVES



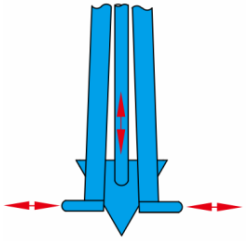


Depth stop (optional)

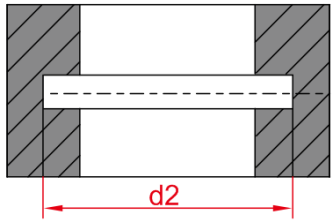


Extension rods (optional)

principle of measurement



applicable workpieces



- Range: 6-200mm
- Repeatability: 0.01mm
- Accuracy: 2% of deviation between workpiece size and setting ring, for example, when measuring Ø21mm inner groove, use a Ø20mm setting ring for calibration, accuracy is (21-20)x2%=0.02mm

Key Products

Bore Gauge setters 7353



Application



Horizontal use



Gauge blocks for 7353-160



- Range: 0-160mm
- Repeatability: 1.2μm

Chamfer Gauges



2942

- Range: 0.5-40mm
- Resolution: 0.01mm
- Accuracy: ±0.02mm/±0.04mm



2962

- Range: 1-120mm
- Resolution: 0.01mm
- Accuracy: ±0.02mm



2937 type A

- Range: 1-40mm
- Accuracy: ±0.02mm/±0.03mm
- Resolution: 0.01mm



2937 type B

- Range: 20-40mm
- Accuracy: ±0.02mm/±0.03mm
- Resolution: 0.01mm

Tape Bore Meters/Circumference Meters

Tape Bore Meters 2430



- Range ØD: 14-330mm
- Graduation: 0.1mm
- Accuracy: ±0.2mm

Circumference Meters 7116



- Range: Ø20-620mm
- Graduation: 0.05mm
- Accuracy: ±0.10mm~±0.20mm

Diameter Meters 7135



- Diameter range: Ø9-9300mm
- Graduation: 0.01mm- 0.05mm

Arc Radius Measuring Tools



Outside Diameter Variation Measuring Instruments



Outside Diameter Measuring Instruments



Digital Radius Gauges



Digital Radius Gauges



Large Range Digital Radius Gauges



Digital Arc Radius Calipers



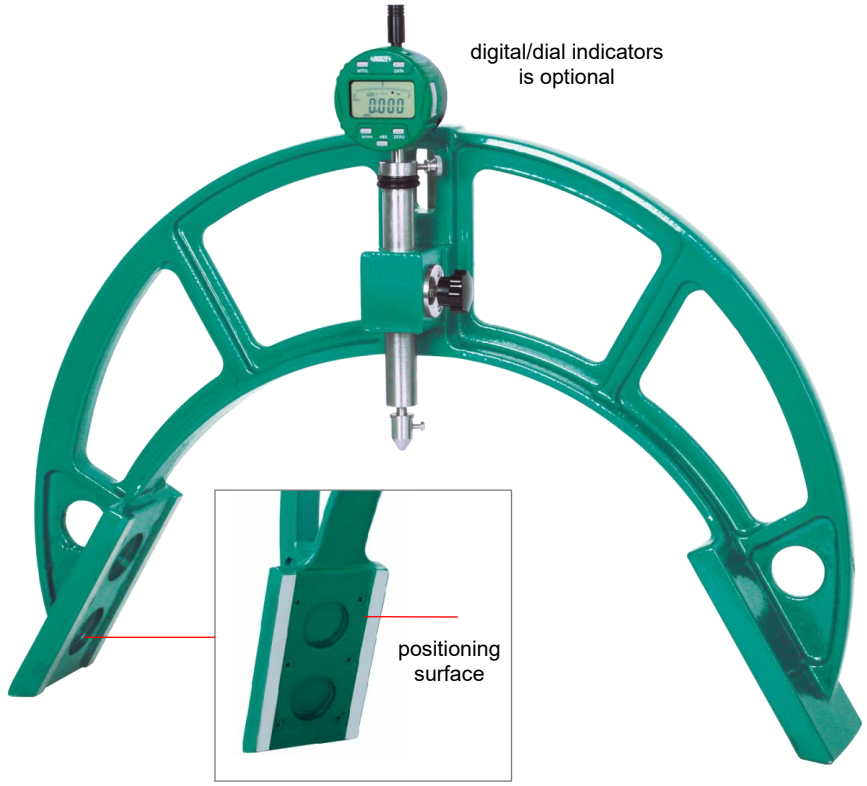
Digital Radius Calipers



Radius Gauges

Key Products

Outside Diameter Measuring Instruments 2716



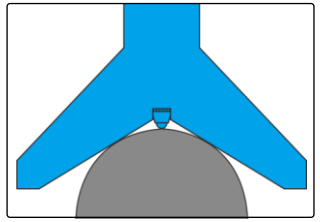
- Range (diameter): 18-2000mm
- Repeatability: 0.01mm
- The frame is made of aluminum magnesium alloy with light weight and high strength

Key Products

Digital Radius Gauges 2188



Application



Setting standards



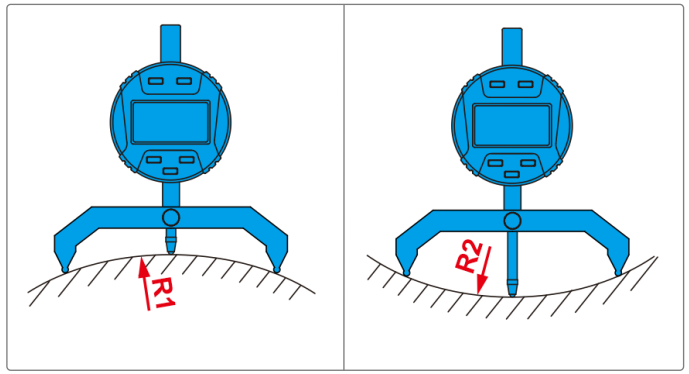
Application

- Range (radius): 4-323mm
- Resolution: 0.01mm
- Accuracy: ±0.02mm~±0.04mm
- Measure radius of external arc, arc angle of measured surface should be larger than 60º
- Display radius value, no need to calculate
- Stainless steel base

Key Products

Digital Radius Gauge 2511





- Range of external radius (R1): 5-910mm
- Range of internal radius (R2): 7-910mm
- Accuracy (mm): ±0.005R
- Resolution: 0.01mm
- Measure radius of internal or external arcs
- Supplied with 5 jaws for different sizes of arc

Key Products

Digital Radius calipers 1501



1501-25



1501-10

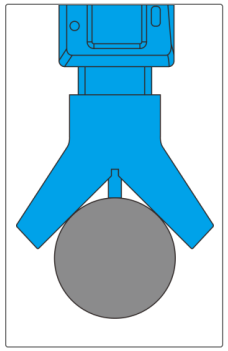
DIRECT READING, CALCULATION IS NOT REQUIRED

DATA OUTPUT

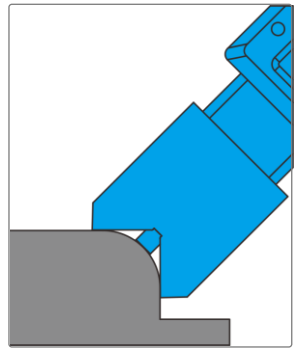
Pin gauge (included)



Application



1501-10 Can measure small workpieces or workpieces with steps



Code	Range (radius)
1501-25	2-25mm
1501-10	2-10mm

- Measure radius of external arc, arc angle of measured surface should be larger than 90°
- Resolution: 0.01mm
- Accuracy: ±0.05mm

Keyway And Chamfer Measuring Tools



Keyway Symmetry Gauges



Keyway Symmetry Digital Calipers



Digital Keyway Depth Gauges



Digital Keyway Depth Gauges

Groove Micrometers



Digital Chamfer Gauges



Chamfer Gauges



Digital Chamfer Gauges



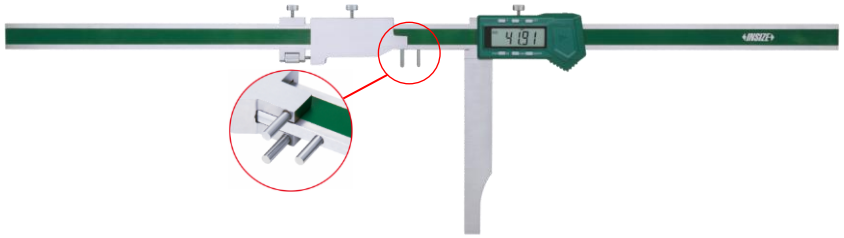
Chamfer Height Gauges

Key Products

Keyway Symmetry Digital Calipers 1531

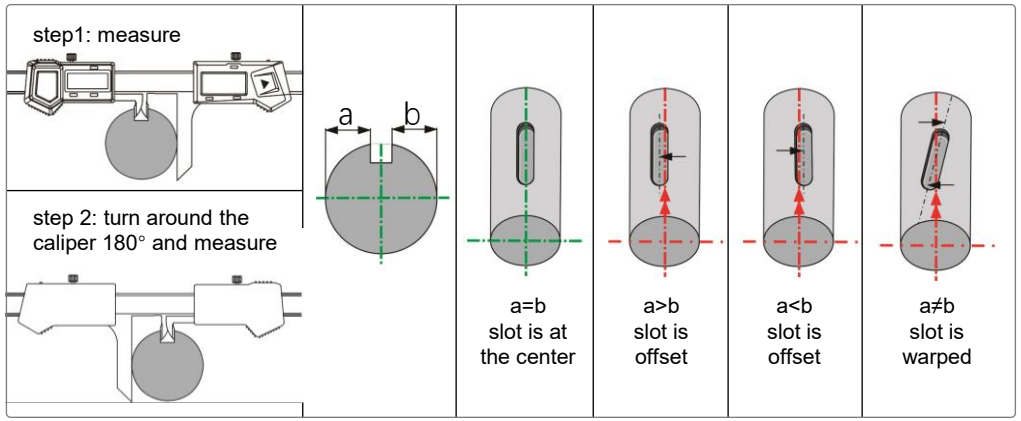


- Width of keyway: 6-45mm
- Resolution: 0.01mm
- Can measure keyway width
- Diameter of shaft: Ø10-120mm
- Accuracy: ±0.05mm
- Used to measure the symmetry of shaft keyways



- Width of keyway: 3-250mm
- Resolution: 0.01mm
- Cannot measure keyway width
- Diameter of shaft: Ø6-350mm
- Accuracy: ±0.05mm
- Used to measure the symmetry of shaft keyways

DATA OUTPUT

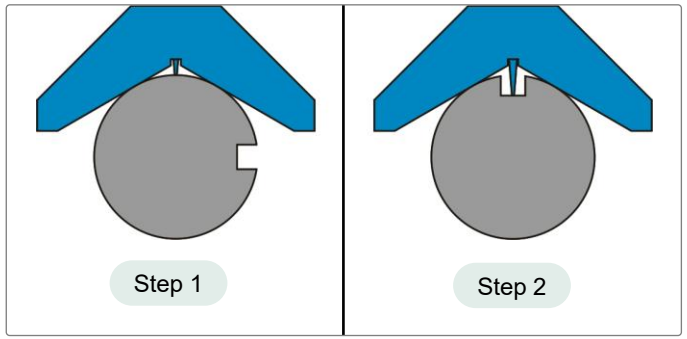


Key Products

Digital Keyway Depth Gauge 2182



DATA OUTPUT



- Range: 0-25.4mm
- Resolution: 0.01mm
- Accuracy: ±0.02mm
- Measure keyway depth of cylindrical workpieces with diameter Ø10-100mm

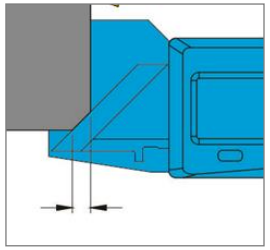
Key Products

Digital Chamfer Gauges 1180

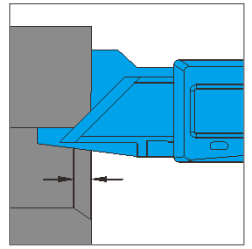
DATA OUTPUT



External chamfer



Internal chamfer



- Measure 15º/20º/30º/45º/60º chamfer dimension
- Resolution: 0.01mm
- Range: 0-10mm
- Accuracy: ±0.06mm

Key Products

Digital chamfer Gauges 1537



1537-20



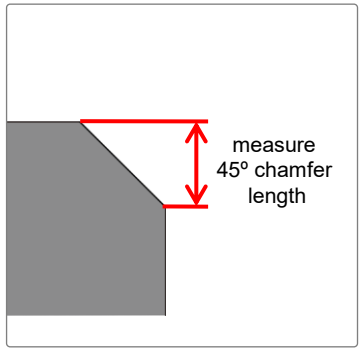
1537-8

DATA OUTPUT

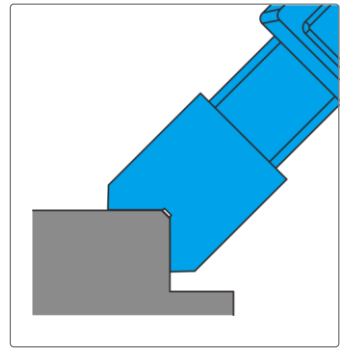
Pin gauge (included)



Application



1537-8 Can measure small workpieces or workpieces with steps



Code	Range
1537-20	0-20mm
1537-8	0-8mm

- Measure 45° chamfer length
- Resolution: 0.01mm
- Accuracy: ±0.05mm

Indicators And Dial Indicator Stands (P1)



Dial Test Indicators



Styli For Dial Test Indicators



Digital Indicators



Zeroing Foot Switches



High Precision Digital Indicators



Digital Comparators



Dial Indicators



Points



Lifting Levers



Spindle Lift Knob



Shaft Sleeve



Backs

Indicators And Dial Indicator Stands (P2)



Measuring Tools Dynamometers



Dial Indicator Tester|Extensometer Tester



Dial Indicator Testers



Dial Test Indicator Holders



Magnetic Stands



Dial Indicator Stands (Non-magnetic)



Dial Indicator Stands

Dial Test Indicators



Precision Dial Test Indicators 2880



Dial Test Indicator 2895



Long Stylus Dial Test Indicator 2896



Vertical Type Long Stylus Dial Test Indicator 2899



Side Type Dial Test Indicator 2898



Tilted Face Type Dial Test Indicator 2399



Large Range Dial Test Indicator 2386



Large Range Vertical Type Dial Test Indicator 2480

Digital Indicators



Digital Indicators (Standard Type) 2112



Digital Indicators (Advanced Type) 2103



Waterproof Digital Indicators 2115



Adjustable Coefficient Digital Indicators 2501



Compact Digital Indicators 2114



Back Plunger Type Digital Indicators 2118



Large Stroke Digital Indicators 2117



High Precision Digital Indicators 2133



High Precision Digital Indicators 2140

Key Products

Digital Indicators For Bore Gauges

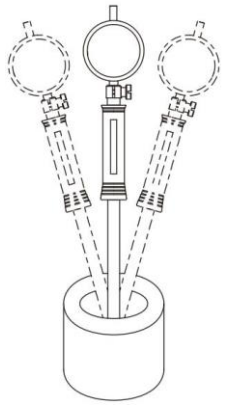
2108 (With Transmission Button and Signal Light)



read the diameter directly, after inputting the size of setting ring.



the minimum value tracking function can find the diameter automatically.



2137

IP54 WATERPROOF

THE ORIGINAL DATA REMAINS AFTER POWER OFF



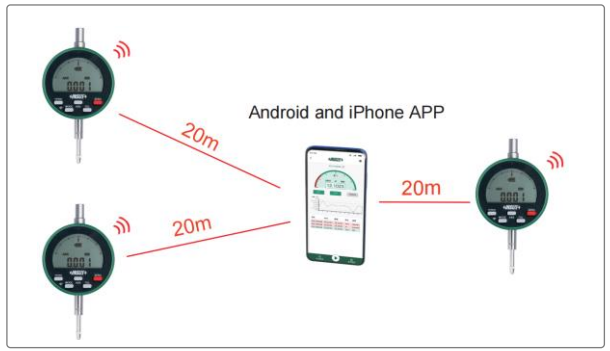
- Range: 12.7mm
- Accuracy: 5μm/20μm
- Hysteresis: 2μm/10μm
- Resolution: 0.001mm/0.002mm(can switch to: 0.01mm)

Key Products

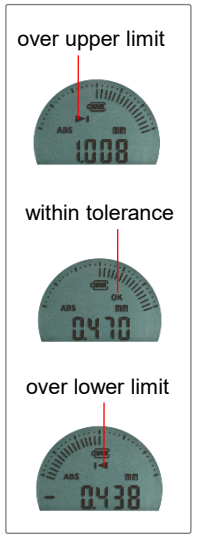
Built-In Bluetooth Digital Indicators 2510

ABSOLUTE SYSTEM | DATA OUTPUT | BUILT-IN BLUETOOTH

Application



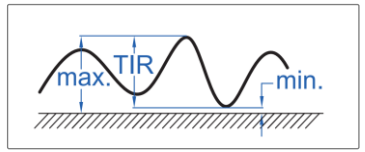




alarm when over tolerance



analog pointer



max./min./TIR measurement

- Range: 12.7mm
- Accuracy: 10μm/3μm
- Hysteresis: 10μm/2μm
- Resolution: 0.01mm/0.001mm
- Maximum measuring force: 1.5N

Key Products

Precision Digital Indicators

High Precision Digital indicators 2140



	2140	2150
Range	0-6mm	0-5mm
Adjustable resolution	0.2μm，1μm，10μm	0.1μm，1μm，10μm
Accuracy	1.6μm	0.5μm
Hysteresis	0.8μm	0.3μm
Other	Can choose Built-in wireless	

DATA OUTPUT

LINEAR BALL BEARINGS FOR TEN MILLION TIMES USE

Ø28MM STEM SUITABLE FOR REINFORCED CLAMPING

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF

Built-in Wireless Smart High Precision Digital Indicators 2150



DATA OUTPUT

THE MEASURING TIME PERIOD CAN BE SET (1-99S IS ADJUSTABLE), THE MAX./MIN./TIR/AVG. CAN BE MEASURED AUTOMATICALLY DURING THIS PERIOD, AND THE DATA CAN BE TRANSMITTED AUTOMATICALLY AFTER EACH MEASUREMENT

PRESS BUTTON OR PROBE MOVEMENT CAN START AUTOMATIC MEASUREMENT, THE MEASUREMENT CAN BE DELAYED (1-99S IS ADJUSTABLE)

Dial Indicators



Dial Comparator 2881



Precision Dial Indicators 2830



High Precision Compact Dial Indicators 2890



Compact Dial Indicators 2887



Dial Indicators 2892



Large Dial Face Dial Indicator 2888



Back Plunger Dial Indicator 2893



Waterproof Dial Indicator 2894



One Revolution Dial Indicators 2882

Contact Points



Universal Stands



Hydraulic Universal Magnetic Stands 6229



Magnetic Stands 6200



Magnetic Stand For Uneven Surfaces 6215



Mini Magnetic Stand 6211



Flex Arm Magnetic Stand 6207



Vacuum Stand 6217



Universal Stand 6214



Universal Dial Indicator Stands(Non-magnetic) 6225

Dial Indicator Stands



Dial Indicator Stands 6876



Granite Dial Indicator Stand 6866



Granite Dial Indicator Stands 6867



Dial Indicator Stands 6864



Heavy Duty Dial Indicator Stand 6869

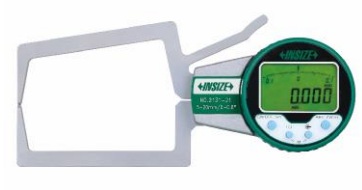


Transfer Stands 6865

Indicating Measuring Tools (P1)



Internal Caliper Gauges



External Caliper Gauges



Thickness Gauges



Geomembrane Thickness Gauges



Rubber Thickness Gauges



Leather Thickness Gauges



Tube Thickness Gauges



Thread/Lead Screw Pitch Diameter Snap Gauges



Saw Teeth Setting Gauges



Bluetooth Digital Indicating Snap Gauges



Dial Snap Gauges



Step And Gap Gauges

Indicating Measuring Tools (P2)



Mini Digital Height Gauges



Height Gauges



Crankshaft Testers



Digital Flushness Gauge



Thread Pitch Measuring Instruments



Buttress Thread Run-out Gauges



Buttress Thread Tooth Thickness Gauges



Thread Taper Measuring Instruments



Thread Height Measuring Instruments



Thread Height Measuring Instruments



Thread Crest Diameter Measuring Instruments



External Spline Comparator

Thickness Gauges



High Precision Digital Thickness Gauges 2879



Smart Digital Thickness Gauges 2850



Digital Thickness Gauges 2673



Digital Thickness Gauges 2871



Thickness Gauges 2364



Digital Thickness Gauges 2674



Digital Thickness Gauges 2872



Thickness Gauge 2361



Thickness Gauge 2363



Digital Roller Thickness Gauges 2877



Digital Rubber Thickness Gauges 2263



Digital Leather Thickness Gauges 2262

Key Products

Bluetooth Digital Indicating Snap Gauges 3509

BUILT-IN BLUETOOTH

IP54 WATERPROOF

ABSOLUTE ENCODER, THE ORIGINAL DATA REMAINS AFTER POWER OFF





over lower tolerance in yellow



within tolerance in green

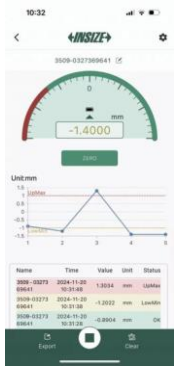


over upper tolerance in red

Data collection application (included) real-time display (continuous streaming) or single acquisition mode selectable



real-time display of multiple snap gauges (connected with maximum 7 snap gauges)



single snap gauge display interface

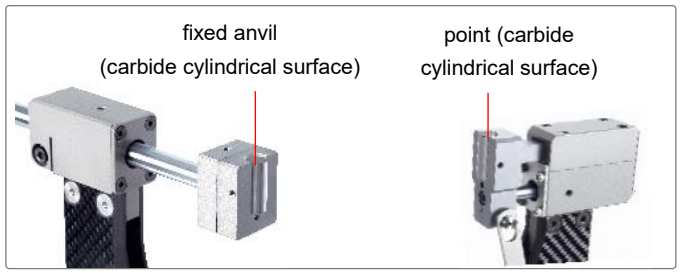
- Range: 0-50mm
- Resolution: 0.1μm
- Accuracy: 1μm
- Repeatability: 0.3μm

Key Products

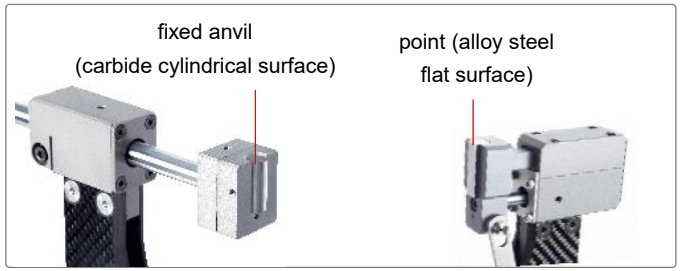
Carbon Fiber Gauges 3348

CARBON FIBER FRAMES, LIGHT WEIGHT,
NOT EASY TO DEFORM, NO TEMPERATURE EXPAND

Type A



Type B





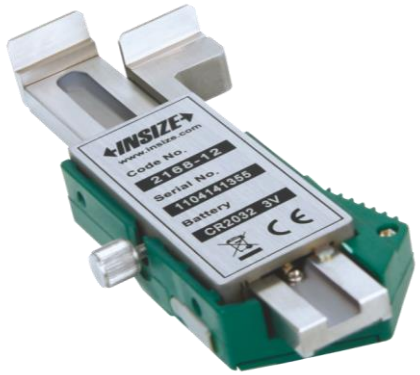
- Range: 200-400mm
- Accuracy: ±5μm
- Total range of point: 10mm
- Measuring force: 8-12N
- Repeatability: 2μm

Key Products

Step And Gap Gauges 2168



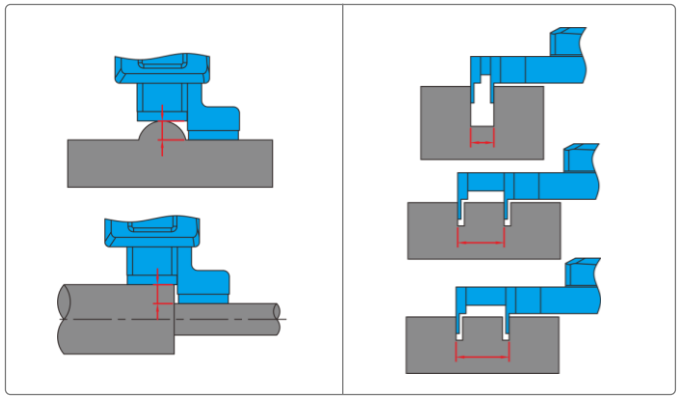
Front



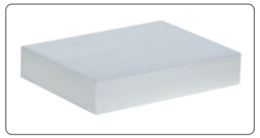
Back

Step height

Gap width



Zero setting block (included)

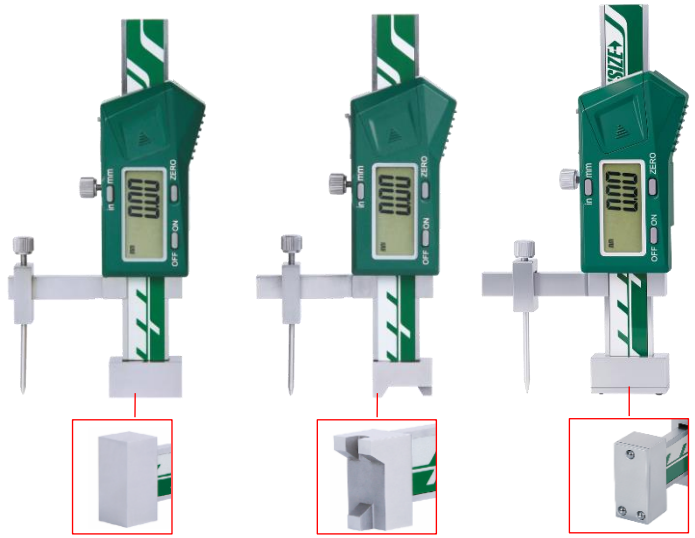


- Range: 0-12.7mm
- Accuracy: ±0.03mm
- Resolution: 0.01mm
- Measure step height and gap width

Key Products

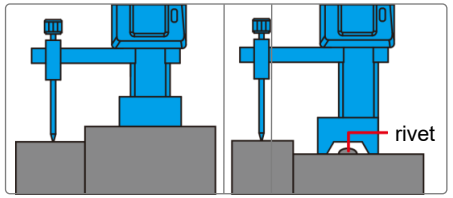
Digital Height Gauges

1146



- Resolution: 0.01mm
- Range: 0~±100mm
- Accuracy: ±0.02mm/±0.03mm
- Measure height difference of two surfaces

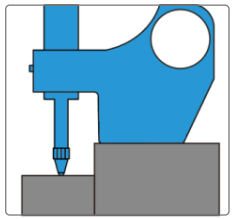
Application



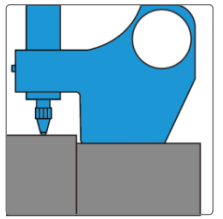
2146-4A



Measure sinked step



Measure raised step



- Range (adjustable): 0-4mm (sinked), 0-12.7mm (raised)
- Digital indicator resolution: 0.01mm/0.001mm
- Accuracy: ±0.02mm/±0.005mm
- Measure height difference of two surfaces

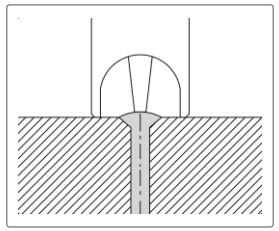
Key Products

Digital Flushness Gauge 2936

DATA OUTPUT



Application



Zero-setting block (included)



- Measuring range: ±5mm
- Accuracy: 0.005mm
- Resolution: 0.001mm
- Repeatability: 0.002mm
- Measuring force: 8-12N

Key Products

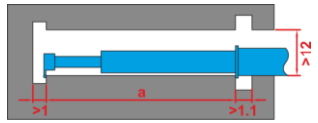
Pistol Grip Groove Width Bore Gauge 2438

- Travel of contact point: 10mm
- Accuracy: 5μm

2438-BASE1





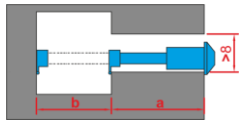


Measuring groove pitch

2438-BASE2





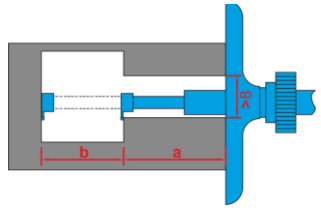


Measuring groove width and depth

2438-BASE3







Measuring groove width and depth

Standards And Gauge Blocks (P1)



Gauge Blocks



Caliper Inspection Gauge Block Sets



Micrometer Inspection Gauge Block Sets



Cylinder Gauge Blocks



Gauge Block Accessories



Gauge Block Holders



Caliper/Height Gauge Checkers



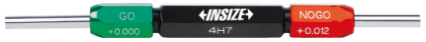
Angle Gauge Blocks



Pin Gauges



Pin Gauges With Handle



Pin Gauge Handles



Setting Rings

Standards And Gauge Blocks (P2)



Cylinder Gauges



Adjustable Snap Gauges



Plain Plug Gauges



Spline Ring/Plug Gauges



Measuring Balls



Threaded Hole Location Gauges



Thread Depth Gauges



Thread Ring/Plug Gauges

Standards And Gauge Blocks (P3)



Electric Thread Plug Gauges



Semi-Automatic Thread Inspectors



Automatic Thread Inspection Machine



Handheld Thread Inspection Machines



External Thread Measuring Devices

Setting Rings

CUSTOM-MADE



Setting Rings 6312



Carbide Setting Rings 6317



Ceramic Setting Rings 6319

Plain Plug Gauges

CUSTOM-MADE



Plain Plug Gauges 4124



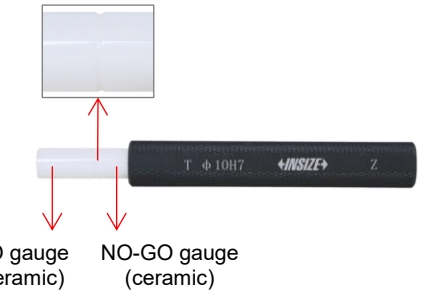
Carbide Plain Plug Gauges 4128



Ceramic Plain Plug Gauges 6332



Carbide Plain Plug Gauges (Single End) 6331

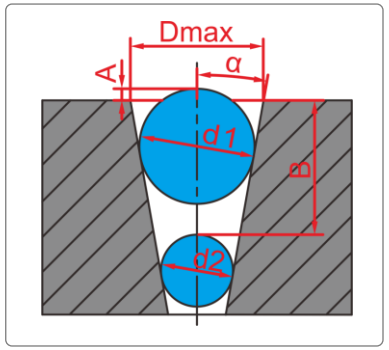


Ceramic Plain Plug Gauges (Single End) 6333

Key Products

Ceramic Measuring Balls 4190





calculate angle (α) and diameter(Dmax) according to the ball diameter(d1, d2), height (A) and depth (B)

- Diameter: 1-40mm
- Accuracy: ±2μm /±2.5μm
- Roundness: 0.5μm-1.5μm
- Zirconia material, high strength and hardness, extremely wear resistance and corrosion resistance, good insulation, antistatic and magnetic resistance
- Mirror surface without holes

Key Products

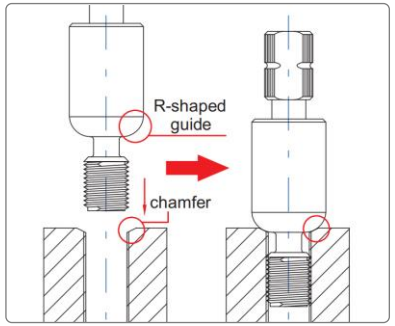
Threaded Hole Location Gauges 4676



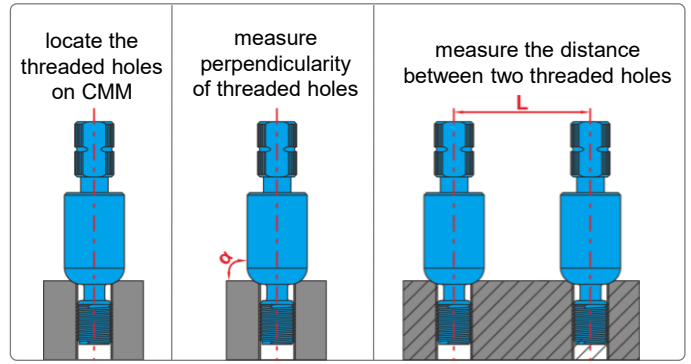
the concentricity between this surface and threaded part is less than 0.01mm

Size: M3–M12

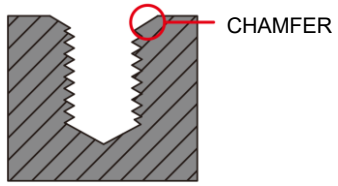
there is a R-shaped guide, which leads the gauge to the center of the threaded holes by fitting the R-shaped guide on the chamfer of the threaded holes



Application



ATTENTION: ONLY FOR THE WORKPIECES THAT THE CHAMFER IS CONCENTRIC WITH THE SCREW PART

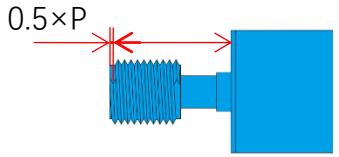


Key Products

Thread Depth Gauges



4649

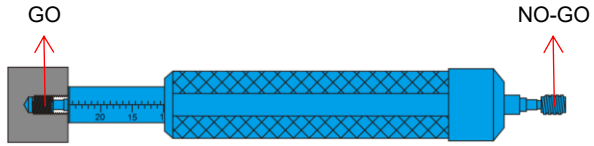


the depth measurement starts at 1/2 thread pitch (P)

- Size: M2-M30
- Resolution: 0.01mm
- The GO gauge can be replaced after wear



4666



check GO and NO-GO while measuring depth of thread holes

- Size: M2-M30
- Graduation: 0.5mm/0.1mm
- The GO gauge can be replaced after wear

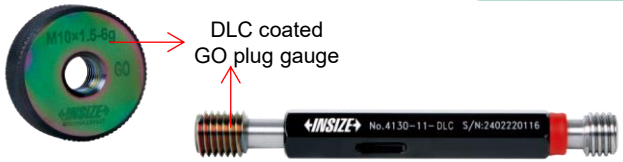
Thread Plug And Ring Gauges



Thread Plug And Ring Gauges

- Metric/Unified/Taper Pipe/Whitworth Parallel Pipe Thread series
- Customized available according to customer drawings

DLC Coated Thread Ring Gauges And Plug Gauges

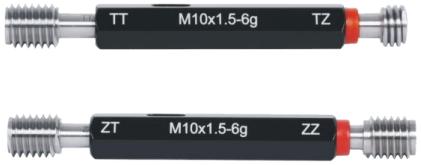


The DLC coating has the following advantages:
- High hardness, extremely wear resistance
- Low friction coefficient
- Corrosion resistance



Metric Thread Plug Gauges

- Supplied with Go and No-Go gauges together



Check Plugs For Metric Thread Ring Gauges

- Check thread ring gauges

Key Products

Electric Thread Plug Gauges 4256

- Suitable for left-hand and right-hand threads
- Fast screw-in and screw-out



handle with adjustable angle



4256-HANDLE

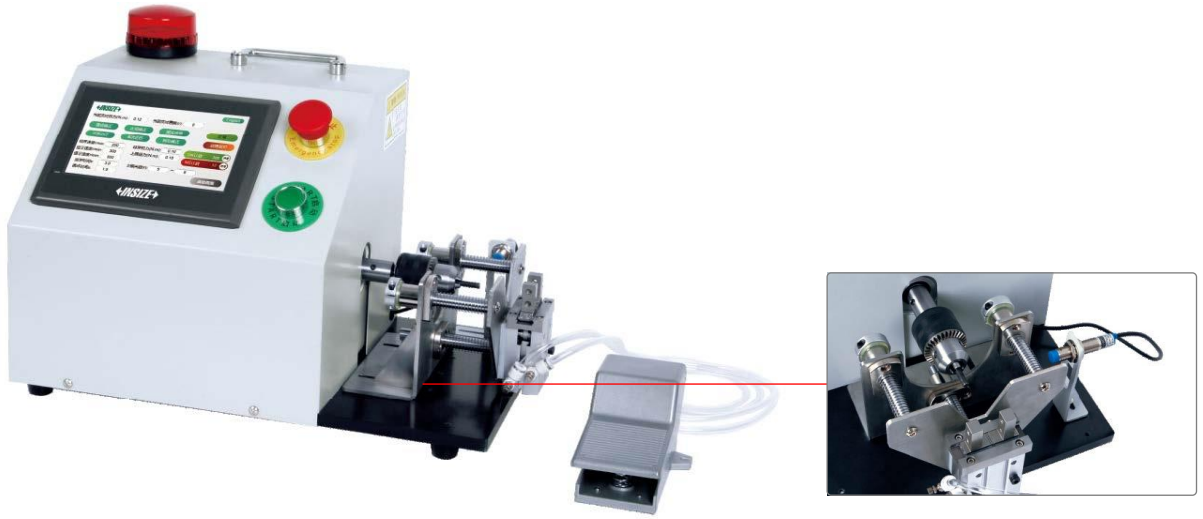
CUSTOMIZED THREAD PLUG GAUGES ARE AVAILABLE

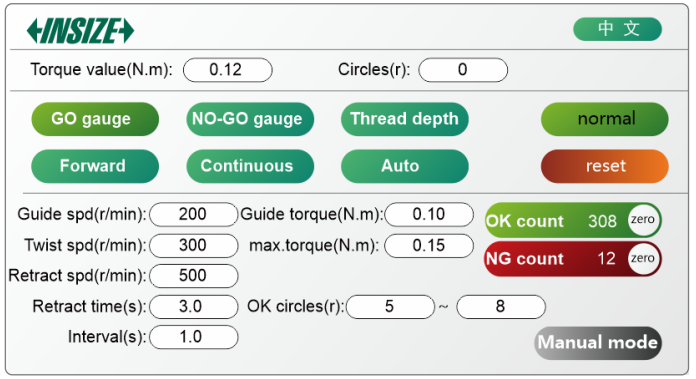
Electric Driver (thread plug gauge are not included)
- Torque range: 0.3~2.9N.m
- Number of torque settings: 21

Key Products

Automatic Thread Inspection Machine TCM

CUSTOM-MADE





- Measuring range: thread: M1-M30
- Reprocessing range: thread: M1-M20

- For inspection of GO, NO-GO and depth of threads
- Can be for repair of thread defects
- Real-time display of torque, circles, OK and NG counts
- If NG thread is detected, audible and visual alarm are activated and the motor is automatically reversed to exit the thread gauge
- For different length of thread by adjusting the induction switc
- Thread gauges with DLC coating, excellent wear resistance

Key Products

Handheld Thread Inspection Machines
HES-TP01/HES-TP02



thread plug gauge (optional)



Controller (included)



Code	Measuring range (internal thread)	Torque range	Max. speed
HES-TP01	M4-M13	0.02-0.23N.m	5000rpm
HES-TP02	M14-M30	0.15-0.90N.m	1200rpm

- For inspection of left-hand and right-hand internal thread
- High precision torque+angle control
- Real-time display torque, OK counts, NG counts and pass rate
- If NG thread is detected, the alarm is activated and the corresponding NG parameter is displayed in red on the controller
- Provide programmable IO and RS485 communication port for process control and data transmission
- Thread plug gauges can be replaced with different sizes
- Thread gauges with DLC coating, excellent wear resistance

Angle, Straightness, Flatness Measuring Tools (P1)



Angle Meters



Protractors



Granite Squares



Granite Square



Cylinder Squares



Perpendicularity Testers



Squares



Straight Edges

Angle, Straightness, Flatness Measuring Tools (P2)



Straight Edges



Optical Flats



Sodium Light Cabinets



Pipe Straightness Gauge



Straightness Gauge



Flatness Measurement Stands

Key Products

Digital Protractor 2771

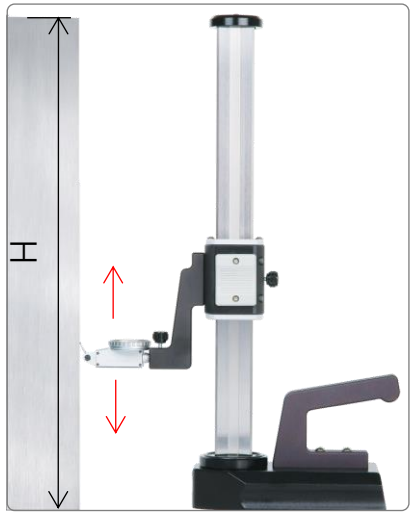


- Resolution: 1′/0.01°
- Range: 0-360°
- Accuracy: ±5′

Key Products

Perpendicularity Testers 4770





Code	Range（H）	Perpendicularity (α)	Side perpendicularity (β)
4770-300	0-300mm	3μm	10μm
4770-600	0-600mm	5μm	20μm

Key Products

Pipe Straightness Gauge 2226

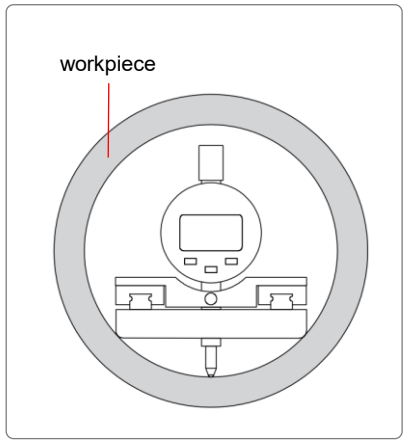
- Measure inner wall straightness of pipes

DATA OUTPUT

GUIDE LENGTH (L) CAN BE CUSTOMIZED



Application



- Measuring range: 400mm
- Inner diameter of measured bore: 100-250mm
- Resolution: 0.01mm
- Straightness accuracy: 0.05mm
- Guide rail length: 430mm

Key Products

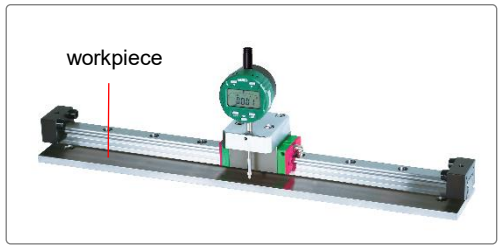
Straightness Gauge 2225

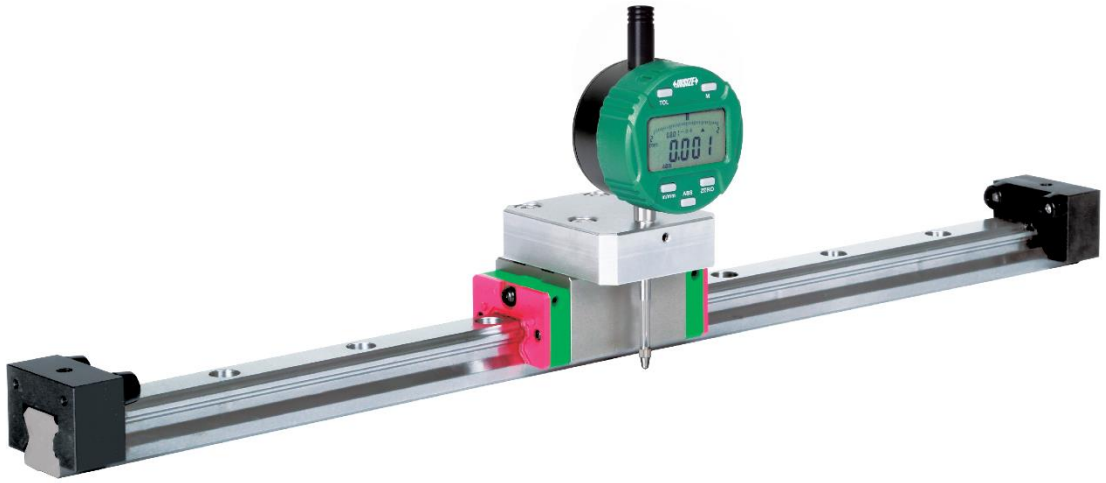
- Measure straightness of workpieces

DATA OUTPUT

GUIDE LENGTH (L) CAN BE CUSTOMIZED

Application





- Measuring range: 370mm
- Resolution: 0.001mm
- Straightness accuracy: 15μm
- Guide rail length: 500mm

Key Products

Flatness Measurement Stands 6852

GRANITE PLATE CAN BE CUSTOMIZED ACCORDING TO WORKPIECES



Application



- Digital indicator resolution: 0.001mm
- Flatness measurement accuracy: 2μm
- Flatness of granite plate: 2μm

Concentricity And Runout Testers



Concentricity Gauges



Bench Centers



V-blocks



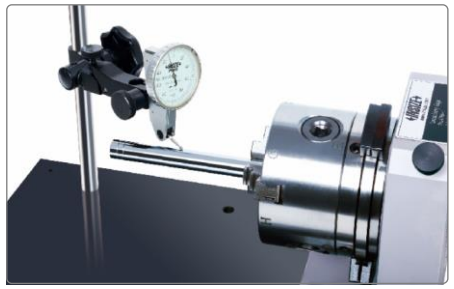
Expansion Mandrels

Key Products

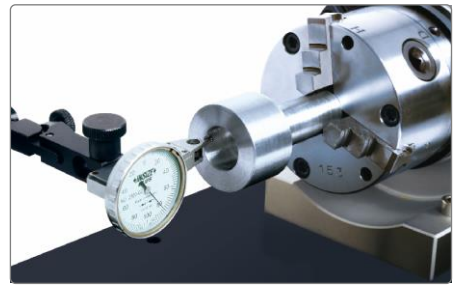
Concentricity Gauges 4786



For cylinder



For tube



- Applicable inside diameter: Ø24-64mm
- Applicable outside diameter: Ø2-70mm
- Accuracy: 3μm
- Ø50mm setting ring and Ø55mm calibration cylinder are included
- To ensure the accuracy 3μm, the distance between measuring point and roller should be <50mm

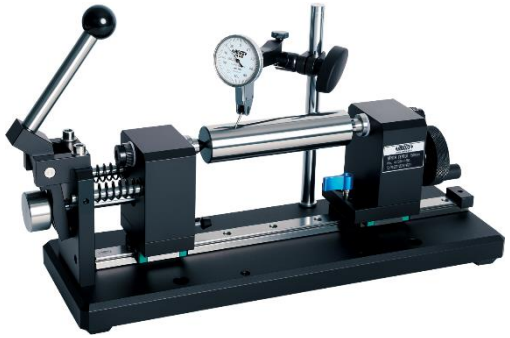
Key Products

Bench Centers



4736

- Diameter range: Ø3-35mm
- Workpiece length: 15-405mm
- Accuracy: 2μm



4739

- Accuracy: 2μm



4741

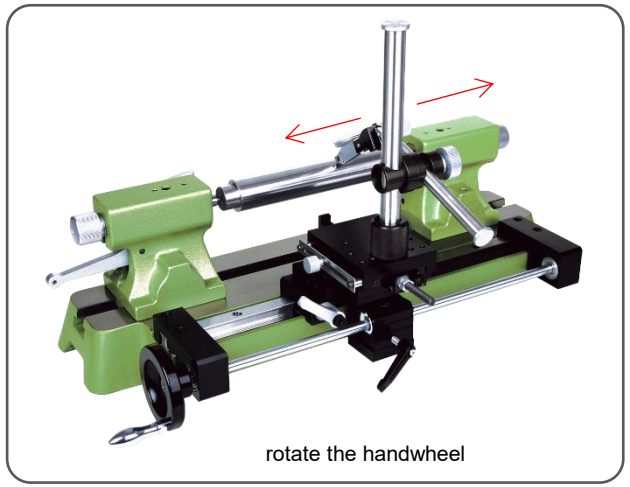
- Stem hole: Ø8mm-Ø28mm
- Diameter range: Ø3-40mm

Key Products

Bench Center With Straightness Measurement 4723



Straightness measurement



- Runout accuracy: 2μm
- Accuracy of straightness measurement: 0.02mm
- Distance between two centers (D): 300mm

Key Products

Motorized Concentricity Gauges



Digital Motorized Concentricity Gauge 4763-300

- Measuring workpiece diameter range: Ø3-35mm
- Measuring workpiece length range: 15-300mm
- Accuracy: ≤3μm
- Repeatability: ≤2μm



Motorized Concentricity Gauges 4757

- Diameter range: Ø3-25mm
- Workpiece length: 15-152mm
- Accuracy: 2μm



Motorized Bench Center 4735

- Parallelism: 0.010mm *
- Runout accuracy: 2μm
- Center height: 90mm

*Parallelism of two centers to the guide surface

Simple Measuring Tools (P1)



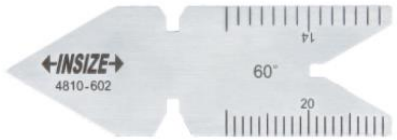
Feeler Gauges



Pitch Gauges



Gear Tooth Pitch Gauges



Center Gauges



Thread Gauges



Angle Gauges



Radius Gauges



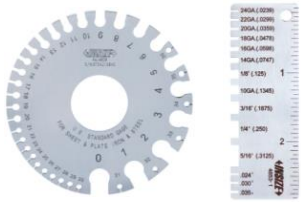
Drill Gauges



Angle Gauges



Wire Gauges



Thickness Gauges



Taper Slot Gauges

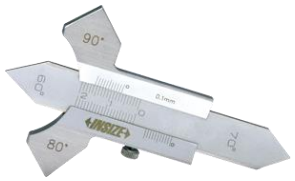
Simple Measuring Tools (P2)



Taper Gauges



Taper Bore Gauges



Welding Gauges



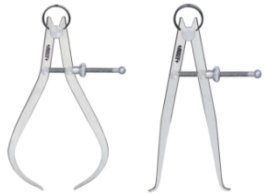
Fillet Welding Gauges



Welding Gauges



Pipe Welding Gauges



Inside/Outside Calipers



Dividers



Length Tapes



Measuring Tapes



Long Measuring Tapes



Automatic Measuring Tapes Calibration Systems

Simple Measuring Tools (P3)



Measuring Wheels



Steel Rules



Automatic Steel Rulers Calibration Systems



Digital Scales With Microscope



Combination Squares



Plastic Angle Squares

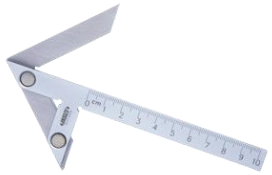


T-bevels



Marking Gauges

Simple Measuring Tools (P4)



Center Marking Gauges



Locators



Scribing Calipers



Height Scribers



Scribers



Precision Screwdriver Sets



LED Flashlights



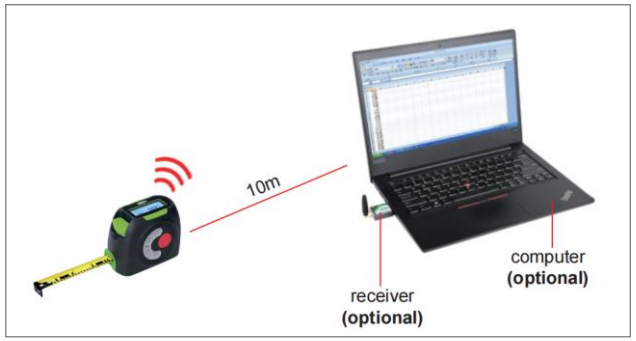
Measuring Tool Sets

Key Products

Digital Measuring Tapes 9570



Wireless Connect To Computer



- Range: 5m
- Digital measurement accuracy: ±1mm
- Blade graduation: 1mm, 1/16"
- Blade graduation accuracy: ±(0.5+D/5000)mm, D: measured distance rounded to whole metres, when D<1m, D takes to 1m

Set-Up Tools (P1)



Granite Surface Plates



Stands For Granite Surface Plates



Jack Sets For Granite Surface Plates



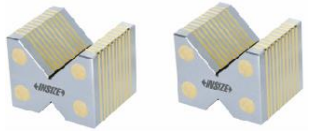
Magnetic Rectangular Blocks



V-blocks



Magnetic V-blocks



Magnetic Induction V-blocks



Squares With V Groove



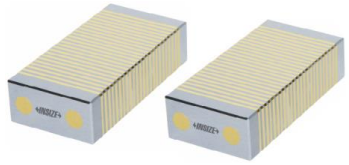
Permanent Magnetic Chucks



Parallels



Parallel/Square Sets



Magnetic Induction Parallel Sets

Set-Up Tools (P2)



Angle Plate Sets



Adjustable Angle Blocks



Right Angle Plates



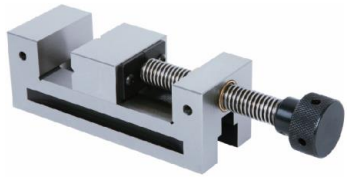
Sine Bars



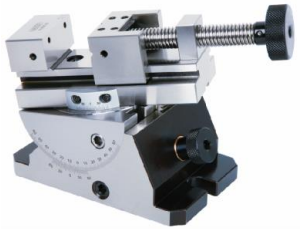
Sine Tables



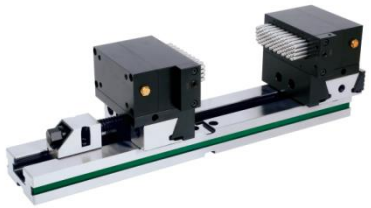
Precision Sine Vises



Precision Vises



Precision Universal Vises



Anvil Vises



Stages

6 Levels

Built-in Bluetooth Electronic Levels



Cylinder Straightness Measuring Instruments



Built-in Bluetooth Digital Level And Slope Meter



Frame Levels



Block Levels



Imaging Level



Level Bubbles



Levels



Cross-line Laser Levels



Self-Leveling Rotary Lasers



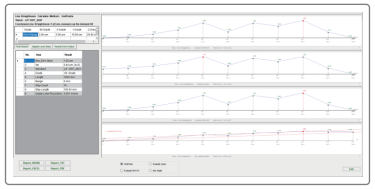
Key Products

Built-in Bluetooth Wireless Electronic Levels 4952

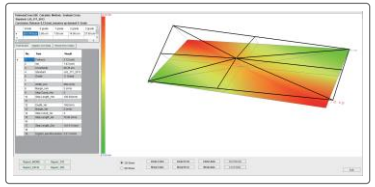
LCD dispaly



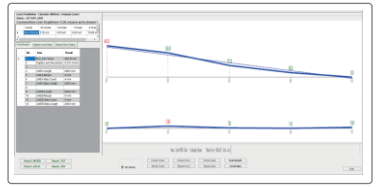
straightness measurement



flatness measurement



parallelism measurement



- Measures flatness, parallelism and straightness
- Built-in bluetooth, transmission distance is 30 meters (under the condition of no obstruction and no electromagnetic interference)
- The LCD can be rotated for easy observation in different directions

Code	4952-150		4952-150L	
Resolution (adjustable)	0.01mm/m	0.001mm/m	0.01mm/m	0.005mm/m
Range	±5mm/m	±0.5mm/m	±5mm/m	±2.5mm/m
Repeatability	0.01mm/m	0.001mm/m	0.01mm/m	0.005mm/m
Response time	<3s	<10s	<3s	<5s
Accuracy	±(0.01+2%A)*	±(0.001+2%A)*	±(0.01+2%A)*	±(0.005+2%A)*

* A is the absolute measured value, for example A=0.1mm/m, the resolution is 0.001mm/m, the accuracy is ±0.003mm/m

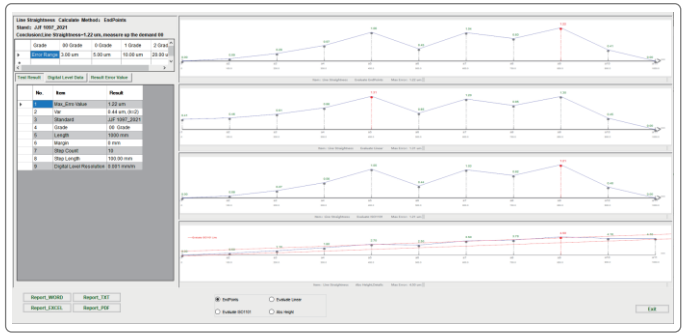
Key Products

Cylinder Straightness Measuring Instruments 4957



- Measure the straightness of cylinders, calibrate the horizontal installation of cylindrical equipments
- Android APP and straightness measuring software are included

straightness measuring software (included)



Resolution (adjustable)	0.01mm/m(2")	0.005mm/m(1")
Range	±5mm/m	±2.5mm/m
Repeatability	0.01mm/m	0.005mm/m
Response time	<3s	<5s
Accuracy	±(0.01+2%A)*	±(0.005+2%A) *

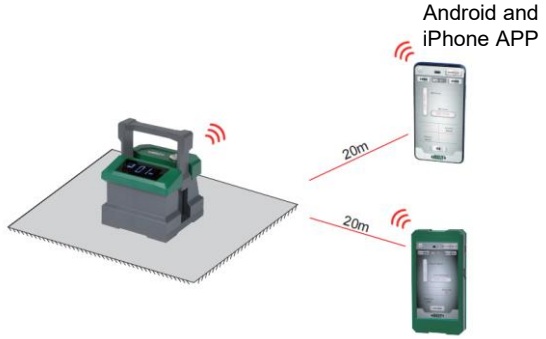
*A is the absolute measured value, for example A=1mm/m, the resolution is 0.005mm/m, the accuracy is 0.025mm/m

Key Products

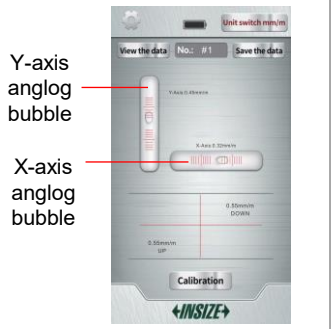
Built-in Bluetooth Dual-axis Digital Levels 4954

- Measure the level of machine tools and other equipments
- Built-in bluetooth, transmission distance is 20 meters (under the condition of no obstruction and no electromagnetic interference)
- Can display one level, can also display two or more (up to 4 levels at a time)

data output

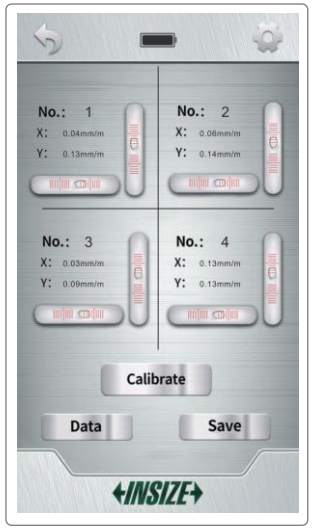


display one level (display in X/Y axes simultaneously)





up to 4 levels at the same time



- Range: ±0.5mm/m
- Resolution: 0.01mm/m
- Accuracy: ±0.02mm

Key Products

Dual Axis Digital Level And Gyro Angle Meter 2199-1/1WL

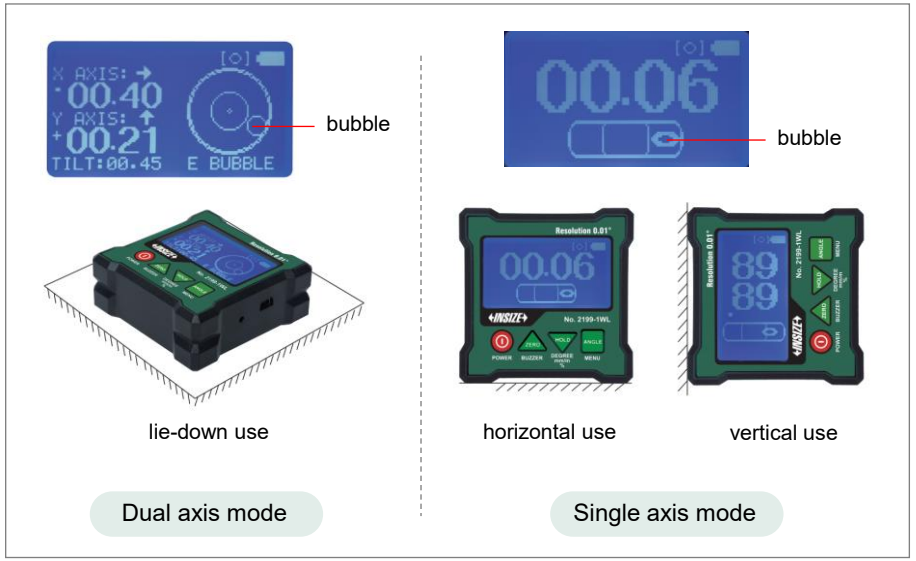
DATA OUTPUT | DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP | AUDIBLE ALARM WHEN OUT OF LIMIT | BACKLIGHT



Measurement of angle between two planes in any direction (gyro technique)



place the angle meter at the first position, press “angle” button, rotate to another position (rotation speed < 90º/s), LCD shows the angle α



- Single axis/double axis level and slope meter, gyro technique can measure the angle between two planes in any direction
- Hard plastic case, with V-shaped grooves, four magnetic sides

Dual axis digital level:
- Range: single axis level: 4x90º
  dual axis level: ±40º
- Resolution: 0.01º
- Accuracy: at 0º and 20º: ±0.05º
  at 20ºand 70º: ±0.15º
  at 70ºand 90º: ±0.05º

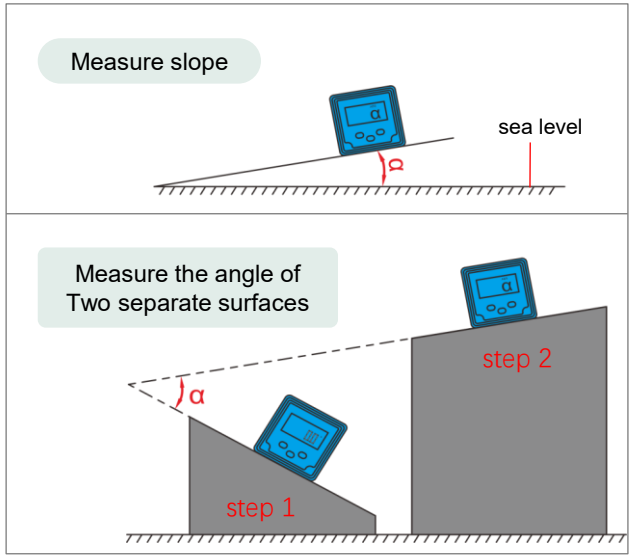
Gyro angle meter:
- Range: 360º
- Resolution: 0.1º
- Accuracy: ±0.5º

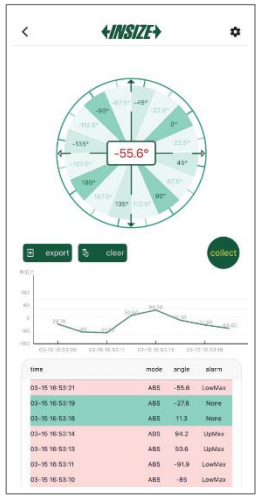
Key Products

Built-in Bluetooth Digital Level And Slope Meter 2198

MAGNETIC BOTTOM | BACKLIGHT | DISPLAY FLIPS OVER WHEN THE BOTTOM FACES UP | ABSOLUTE LEVEL







Android and iPhone APP (included), can choose real-time display (continuous transmission) or single transmission

- The sea level is permanently set inside the chip, zero setting is not needed when battery is replaced
- Built-in bluetooth, transmission distance is 15 meters (under the condition of no obstruction and no electromagnetic interference). Android and iPhone APP are included

- Range: 4×90º
- Resolution: 0.1º (=1.745mm/m)
- Accuracy: at 0º and 90º: ±0.1º;
  at others: ±0.2º

Key Products

Built-in Bluetooth Block Level 4953

COLOR DISPLAY
LARGE CHARACTERS WITH BACKLIGHT

BUILT-IN
BLUETOOTH



- Range: ±0.5mm/m
- Resolution: 0.01mm/m
- Accuracy: ±0.02mm/m
- Repeatability: 0.01mm/m

- Analog bubbles can show tilt trends in X-axis and Y-axis

On-Machine Measurement

Video Measuring Instrument For Machine Tools



In-Process Measuring Instrument



Centering Indicators



Edge Finders



Edge Finders For EDM



3D Testers



Trigger-type 3D Probes



Transmission Probes For CNC Machine tools



Vision Zero Setter



Zero Setters With Cable



Zero Setters



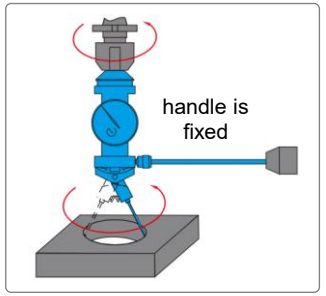
Vertical Milling Machine Perpendicularity Measuring Gauges



Key Products

Centering Indicator 2385

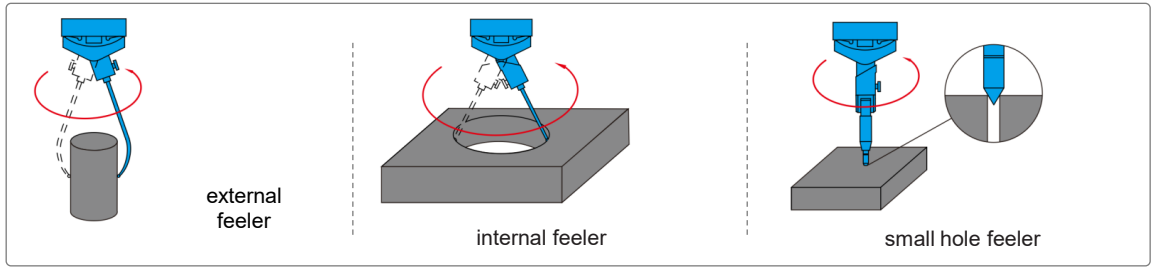




Feeler	Measuring diameter	Accuracy
P1	Ø0-60mm	0.015mm
P2	Ø0-160mm	0.02mm
P3	Ø0-250mm	0.03mm
P4	Ø3.2-80mm	0.015mm
P5	Ø3.2-180mm	0.02mm
P6	Ø3.2-280mm	0.03mm
P7	Ø0-2.8mm	0.015mm

- Provides quick and accurate centering in boring and milling set-up
- Maximum speed is recommended not to exceed 800rpm

Application



Key Products

3D Testers

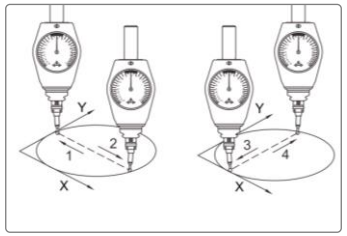
2846



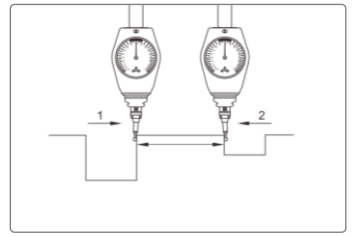
2840



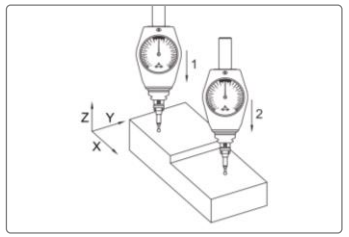
Find center of holes



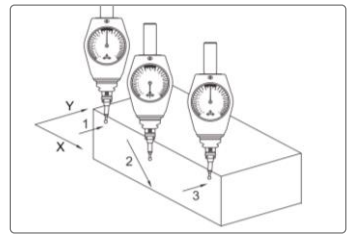
Length measurement



Depth measurement



Position workpieces



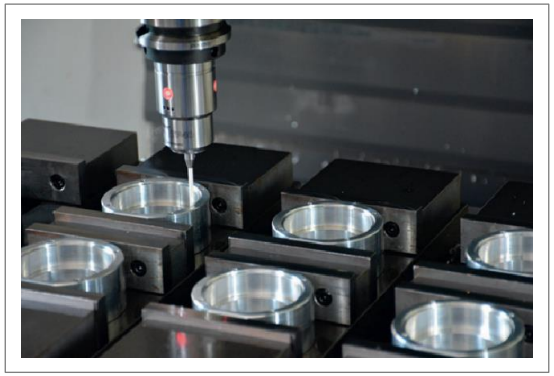
- Mainly used for milling machines and CNC machine tools
  1. determine coordinate point on workpieces
  2. find center of holes
  3. adjust and position workpieces
- Can be used to measure length and depth

Key Products

Trigger-type 3D Probe (Audible And Visual Alarm)
9410



Application



- Arbitrary one-way repeated trigger accuracy: ≤1μm
- Directional trigger protection stroke: X-Y: ±12°, Z: +5mm
- Trigger force in X-Y direction (with standard styli): 0.3-0.6N
- Trigger force in Z direction: 4N

Key Products

Infrared Transmission Probes For CNC Machine Tools 9413

Probe



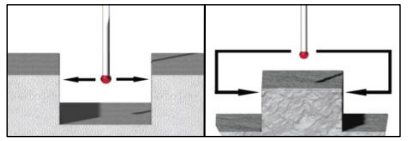
Receiver



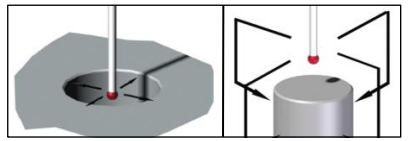
- Trigger accuracy of styli in any direction: 1μm
- Infrared transmission/reception range: 5m

Automatic measurement software (included)

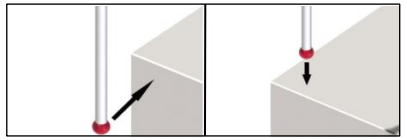
1. Stylus automatic calibration
2. Protection of stylus during probe movement (avoid collision)
3. Groove and boss measurement



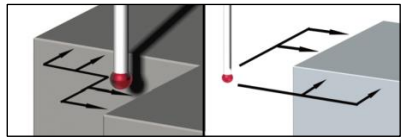
4. Bore and axis measurement



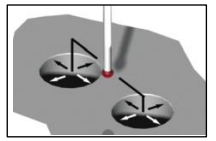
5. X or Y single-surface measurement



6. Internal and external corner measurement



7. 4th axis measurement
8. Angle on X and Y plane measurement
9. Three points measurement of arc
10. Measure the distance between two holes

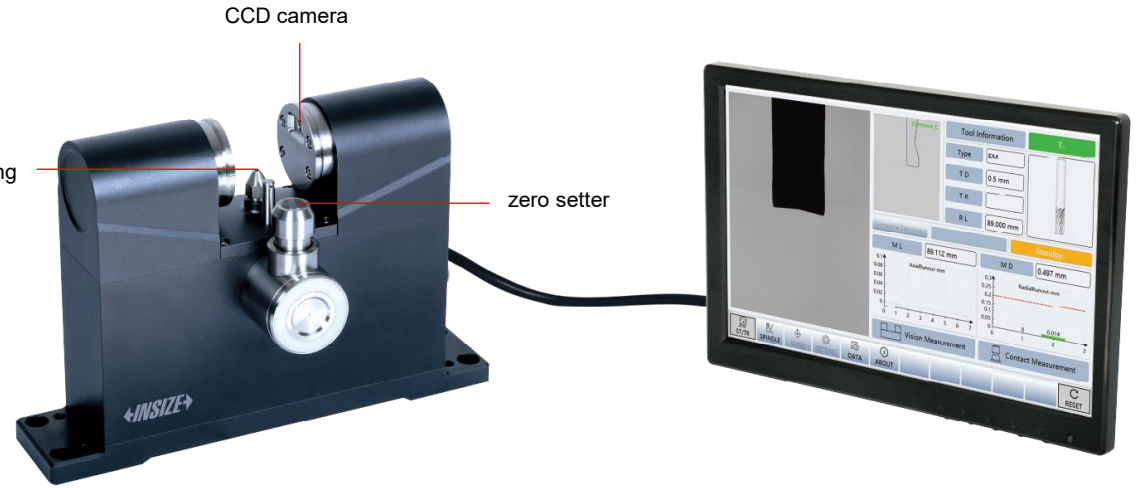


Key Products

Vision Zero Setter 9417

HIGH ROTATION MEASURMENT

IP65 WATERPROOF





high-speed precision machining centers with speeds up to 25000 rpm

Application



- For 3-axis/5-axis high-speed precision machining centers
- Zero setter for large diameter cutting tool lengths
- High-precision CCD camera to measure tool length, tool diameter, axial runout, radial runout, etc.
- Monitoring spindle thermal steady state
- Applicable CNC systems: FANUC, HAAS, OKUMA, SIMENS, LYNUC, MITSUBISHI, etc.

Vision measurment

- Range: Ø0.05-30mm
- Static measurement accuracy: ±2μm
- Repeatablity: ≤3μm
- Communication protocols: OPC-UA, TCP/IP, RS232

Zero setter

- Working air pressure: 0.4-0.8MPa
- Repeated trigger accuracy: ≤2μm

Key Products

Zero Setter With Cable (Five-side) 9412

- Suitable for various machining centers, CNC boring and milling machines, etc.
- Automatically set the tool length parameters before CNC machining process
- Automatic detection of tool wear or damage during CNC machining
- Automatic detection of tool wear or damage after CNC machining is completed
- The working surface adopts ceramic material and chamfering process, which can greatly improve the service life
- The plug, cable part and output signal of the host are protected, so that the zero setter can work in the splash environment for a long time



Application



- Trigger protection stroke: X-Y: ±5mm, Z: 8mm
- Axial reset force: 3.4N-3.6N
- Repeated trigger accuracy: ≤1μm
- Hardness of the zero setter: HM8.5

Linear Probes And Scales

Linear Probes



Inductance Probe Displays



Digital Linear Gauges



Capacitance Type Linear Gauges And Display Units



Laser Displacement Sensors



Linear Scales And Digital Readouts



Magnetic Linear Scales



Scales



Key Products

Inductance Type Probes 9420

IP65 WATERPROOF



9420-AP02



9420-BP02

Code	9420-AP02	9420-BP02
Range	±0.9mm	±1mm
Accuracy	±(0.3+3×|L|³) μm	±(0.2+3×|L|³) μm
Repeatability	0.15μm	

L is measuring length in mm

Inductance Probe Displays

9427



- Channel number: 1-4
- Unit: μm, mm
- Range: ±1mm, ±2mm, ±5mm, ±10mm (adjustable)
- Resolution: 0.1μm, 1μm
- Accuracy (work with 9420 series): accuracy: ±0.3μm (measuring range: ±0.2mm), accuracy: ±0.5μm (measuring range: ±0.5mm), accuracy: ±1μm (measuring range: ±0.9mm)

9428



- Channel number: 1-16 (selectable)
- Unit: μm, mm
- Range: ±0.5mm, ±1mm, ±2mm, ±5mm, ±10mm (adjustable)
- Resolution: 0.1μm

Key Products

Inductance Type Probe And Display Unit 9442-SET1

UNIDIRECTION

FIXED LEVER ANGLE



9427-S01B



9442-G03

Spindle runout measurement application



universal magnetic stand (optional)

Display Unit Specification

- Resolution: 0.1μm/1μm
- Channel number: 1
  (can be customized up to 4 channels)

Inductance Type Probe Specification

- Range: ±0.3μm
- Overall accuracy: ±2μm
- Overall repeatability: 0.3μm

Key Products

Digital Linear Gauges

7130-10



7134-10L (Pneumatic Digital Linear Gauges)



Output interface

		
RS232, TTL level RS232, 232 level	RS485	RS232, TTL level RS232, 232 level

- Range: 0-12.5mm
- Accuracy: 1μm/3μm
- Measuring force: ≤1.5N
- Repeatability: 0.5μm/1.5μm
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Dust/waterproof: IP43/IP66

Key Products

Capacitance Linear Gauges 7107

Capacitance Linear Gauges

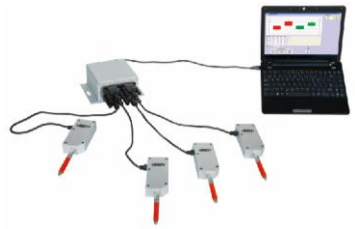


- Measuring range: 12mm
- Resolution: 0.01mm / 0.001mm
- Accuracy: 20μm / 5μm
- Hysteresis: 10μm / 2μm

Multichannel Interface Boxes For Capacitance Linear Gauges



Connected with 7107-11, 7107-12, 7107-11V or 7107-12V linear gauges



Software (included)



Connected with digital indicators (data cable 7309-C01M is needed)



suitable for 2112, 2114, 2115, 2116, 2501, 2103 and 2104 series digital indicators

Key Products

Laser Displacement Sensors LDS-N Series

- High accuracy, non-contact measurement, high speed response, multiple measurement modes, environmental adaptability, programmable control, rich data output interface and easy maintenance
- Can be used in automated production lines, robotic arms, packaging equipment, printing equipment, medical equipment etc.

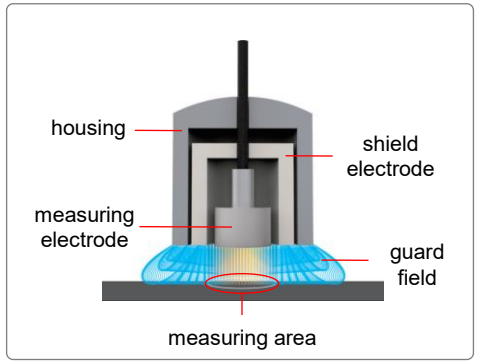


Code	NPN+Analog current	LDS-N30	LDS-N50	LDS-N100	LDS-N200	LDS-N400
	NPN+Analog voltage	LDS-N30-MC	LDS-N50-MC	LDS-N100-MC	LDS-N200-MC	LDS-N400-MC
	NPN+RS485	LDS-N30-RS	LDS-N50-RS	LDS-N100-RS	LDS-N200-RS	LDS-N400-RS
Basis (center) distance		30mm	50mm	100mm	200mm	400mm
Detection range (FS)		25-35mm	35-65mm	65-135mm	120-280mm	200-600mm
Full scale		10mm	30mm	70mm	160mm	400mm
Repeat accuracy		5μm	15μm	35μm	100μm	200-400mm: 150μm 400-600mm: 400μm
Linear accuracy		±0.2% FS				200-400mm: ±0.2% FS 400-600mm: ±0.3% FS

Key Products

Capacitive Displacement Sensor And Measurement System 9437

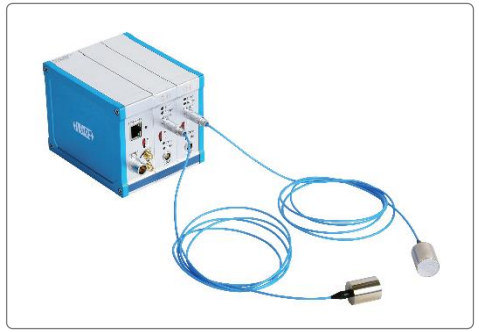
Measuring principle

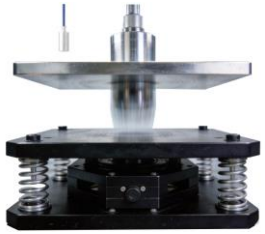




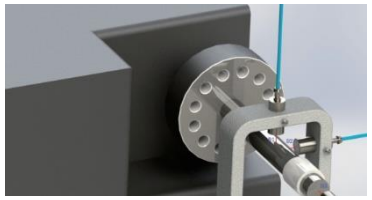


Connected operation





measurement of planar displacement under high-frequency vibration



measurement of runout

Capacitive displacement sensor specification

- Range: 0.05mm-10mm
- Accuracy: 0.0125μm-2.5μm
- Static resolution: 0.0375nm-7.5nm
- Dynamic resolution: 1nm-200nm

Measurement system specification

- Range*: 0.05/0.2/0.5/0.8/1/2/3/5/7/10mm
- No. of Channels: 2 (customizable 1~6)
- Accuracy**: ±0.025%FSO
- Repeatability: 0.005%FSO
- Static resolution: 0.0005%FSO
- Dynamic resolution: 0.005%FSO (5kHz)

* Measuring range of measurement system is determined by the capacitive displacement sensor
** Overall linear error is composed of measurement-system error and capacitive displacement sensor indication error, must be purchased together, need to be set in the factory

Roundness, Profile And Roughness Testers

Roundness/Cylindricity Tester



Roundness Measuring Machines



Precision Air Floating Rotary Tables



Surface Profile Measuring Machines



Roughness Measuring Machines



Roughness Testers



Surface Roughness Specimens



Surface Roughness Reference Specimens



Key Products

Roundness/Cylindricity Testers

Roundness/Cylindricity Tester RCT-300



- Automatic centering and leveling
- Evaluation items: cylindricity module, roundness module, straightness module, single section flatness module, multi-section flatness module, commutator module
- Analytical ability: cylindricity function, reference benchmarks for cylindricity evaluation, reference circle for roundness evaluation, measurement band, notched measurement

Roundness Measuring Machine RCT-RA260



- Air-floating spindle
- Can measure roundness, concentricity, flatness, radial runout
- Spectrum analysis, automatic gap/burr removal, waveform analysis
- 4 roundness evaluation methods: smallest area method, least square method, smallest circumscribed circle method, largest inscribed circle method

Key Products

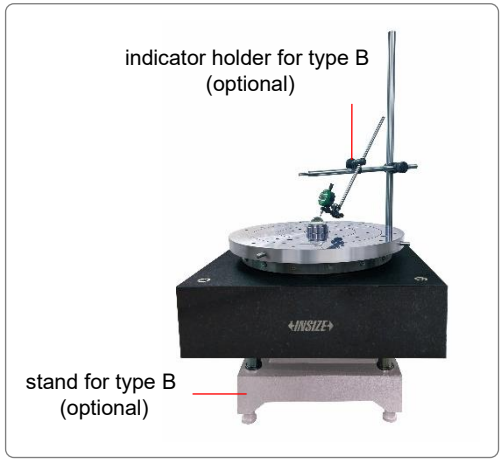
Precision Air Floating Rotary Tables 6875

CUSTOM-MADE
SUPPLY SPECIAL SIZES ACCORDING TO CUSTOMER'S REQUEST





Application



- Manual drive
- Floating by air pressure, the rotary table can rotate smoothly and be free from wear

- Stage Size: Ø320mm/Ø400mm/Ø500mm/Ø600mm
- Rotation accuracy in radial/axial: <0.3μm

Key Products

Roughness And Profile Measuring Machines (P1)

Surface Profile Measuring Machine SPM-1000



Roughness And Profile Measuring Machine (Two Probes Type) SPM-2000



- Measure curved surfaces

Key Products

Roughness And Profile Measuring Machines (P2)

Roughness And Profile Measuring Machine (One Probe Type) SPM-5000



- Roughness, waviness, and profile analysis can be achieved with just one measurement

Roughness Measuring Machine SPM-4000



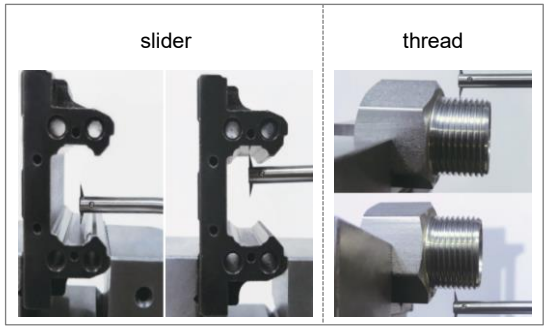
- Hundreds of parameters can be evaluated, such as roughness profile,waviness profile, primary profile, etc.

Key Products

Bidirectional Roughness And Profile Measuring Machine SPM-6000



Application



- Bidirectional probe measurement
- Constant measuring force
- Intelligent tracking control system, real-time scanning measurement

Key Products

Roughness Tester (Separable Type)
ISR-C300/ISR-C301/ISR-C300WL

BLUETOOTH | TOUCH SCREEN | DATA OUTPUT

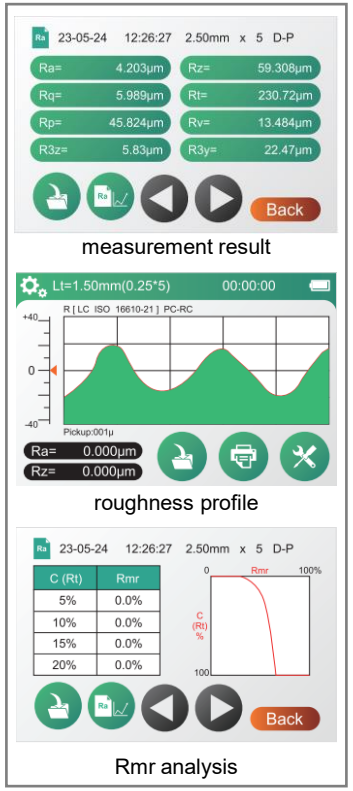
CAN BE OPERATED BY COMPUTERS OR MOBILE PHONES



Probe and main unit Can be combined together



Roughness tester screen display



- Roughness tester can be operated by mobile phones or computers
- Optional wireless or Bluetooth receivers can be used to output keyboard signals, connecting to a computer to send data to Excel
- Support bluetooth printer
- 36 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display roughness values, profile and curve
- Memory of maximum 100 data and waveform
- Built-in lithium battery, working time more than 50 hours
- Touch screen
- Automatic power off

Key Products

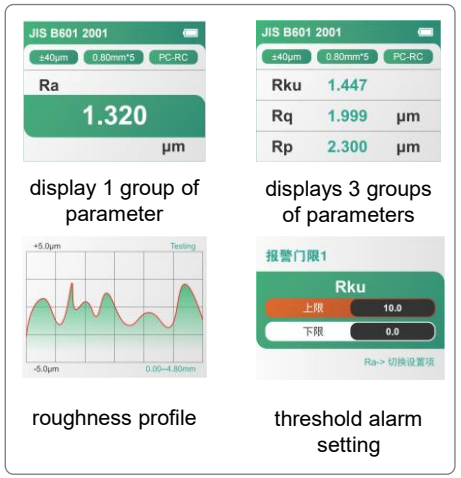
Roughness Tester For Automation ISR-C400

CAN BE OPERATED BY MOBILE PHONES OR COMPUTERS

BLUETOOTH

DATA OUTPUT

Screen display



display 1 group of parameter

displays 3 groups of parameters

roughness profile

threshold alarm setting



Application



- Range: 320μm (-160μm~160μm)
- Accuracy: ±10%
- Resolution (Ra): 0.001μm

Key Products

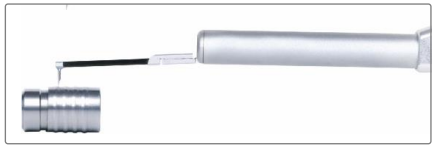
Roughness Testers （P1）

Surface Roughness And Profile Tester ISR-S600





standard roughness probe (included),
for measuring plane and curved surfaces



standard profile probe (included),
for measuring profile and dimension

- Profile measurement specification
  X axis measuring range: 59mm
  X axis resolution: 1μm
  Z axis measuring range: 3mm
  Z axis resolution: 1μm
- Roughness measurement specification
  Range: 1500μm
  Resolution (Ra): 0.0001μm

Roughness Tester (Compact Type) ISR-C200



- Range: X axis: 17.5mm
  Z axis: 250μm
- Accuracy: ±(5%+0.025)μm
- Resolution (Ra): 0.001μm

Key Products

Roughness Testers （P2）



Roughness Tester ISR-C002

- Range: 320μm (-160μm~160μm)
- Accuracy: ±10%
- Resolution (Ra): 0.001μm



Roughness Tester ISR-T120

- Range: X axis: 17.5mm
  Z axis: 640μm (-320μm~320μm)
- Accuracy: ±10%
- Resolution (Ra): 0.001μm



Roughness Tester (Economic Type) ISR-C003

- Range: Ra, Rq: 0.05-15μm
  Rz, Rt: 0.1-50μm
- Accuracy: ±10%
- Resolution (Ra): 0.01μm

3D Measurement

CMM



CMM (Gantry Type)



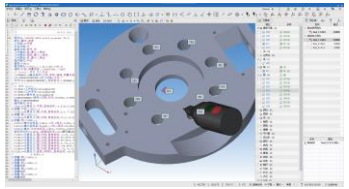
Workshop Coordinate Measuring Machines



Measuring Arms



Software For Measuring Arms



Handheld 3D Scanners



Styli For CMM



Ceramic Ball Gauges



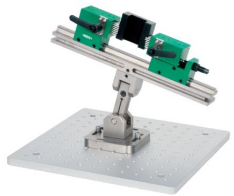
Gauge Block Stands for CMM



CMM Check Masters



Jigs For CMM



Key Products

Coordinate Measuring Machines



Standard accuracy (LM series)
- Range: X: 500-800mm
  Y: 600-1500mm
  Z: 400-600mm
- MPEE (μm):
  ±(2.1+L/250)μm ~±(2.7+L/250)μm

High accuracy (LE series)
- Range X: 500-800mm
  Y: 600-1500mm
  Z: 400-600mm
- MPEE (μm):
  ±(1.6+L/330)μm ~±(2.1+L/330)μm

CMM-LM/CMM-LE Series (Small Range)



Standard accuracy (PM series)
- Range: X: 600-1800mm
  Y: 800-4000mm
  Z: 600-1000mm
- MPEE (μm):
  ±(1.5+L/300)μm ~±(3.9+L/300)μm

High accuracy (PE series)
- Range X: 600-1800mm
  Y: 800-4000mm
  Z: 600-1000mm
- MPEE (μm):
  ±(1.2+L/350)μm ~±(3.5+L/350)μm

CMM-PM/CMM-PE Series (Large Range)

Key Products

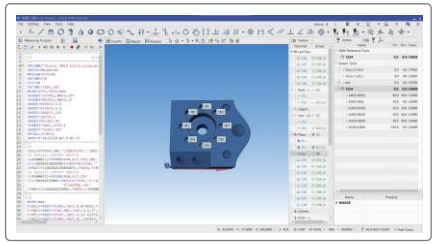
Workshop Coordinate Measuring Machines
CMM-WM Series



- Ultra-high-speed measurement Measurement efficiency is three times of ordinary CMM
- Built-in temperature sensor with real-time temperature compensation
- Ready to use when connected to the power supply, no compressed air
- Dedicated touchscreen software with configurable access permissions ensures both convenience and safety during production site operations.



workshop specific software
(inclued)



measurement software
(inclued)

Code	CMM-WM342A	CMM-WM342B	CMM-WM565A	CMM-WM565B
Range	300×400×200mm		500×600×500mm	
Accuracy MPEE	±(2.7+L/200) μm		±(3.1+L/200) μm	
Movement speed	860mm/s			
Moving acceleration	5000mm/s²			

Key Products

Measuring Arms



Adjustable tripod (optional)



Laser line probe (optional)

CMM-CM30





3mm zircon ball probe (included)



6mm zircon ball probe (included)



calibration cone (included)

- Internal balance
- Equivalent-arm design
- Aerospace grade carbon-fiber material
- U-shaped anti-collision design of the base

- High precision, CM series, 6-axis: range: 1500-4500mm
- High precision, CM series, 7-axis: range: 2000-4500mm
- Standard precision, BE series, 6-axis: range: 1500-4500mm
- Ultra High Precise: HP series, 6-axis: range: 1500-4500mm
- Ultra High Precise: HP series, 7-axis: range: 2000-4500mm
- Temperature rate: 3°C/5min

Key Products

Measuring Arms (Advanced)



Laser line probe (optional)



Adjustable tripod (optional)



CMM-HM30S



3mm intelligent probe (included)



6mm intelligent probe (included)



calibration cone (included)

- Standard Accuracy, HE Series, 6-Axis: Measuring range: 1500-4500mm
- Standard Accuracy, HE Series, 7-Axis: Measuring range: 1500-4500mm
- High Accuracy ,HM Series, 6-Axis: Measuring range: 1500-4500mm
- High Accuracy ,HM Series, 7-Axis: Measuring range: 1500-4500mm
- Ultra High Accuracy, GP Series, 6-Axis: Measuring range: 1500-4500mm
- Ultra High Accuracy, GP Series, 7-Axis: Measuring range: 1500-4500mm

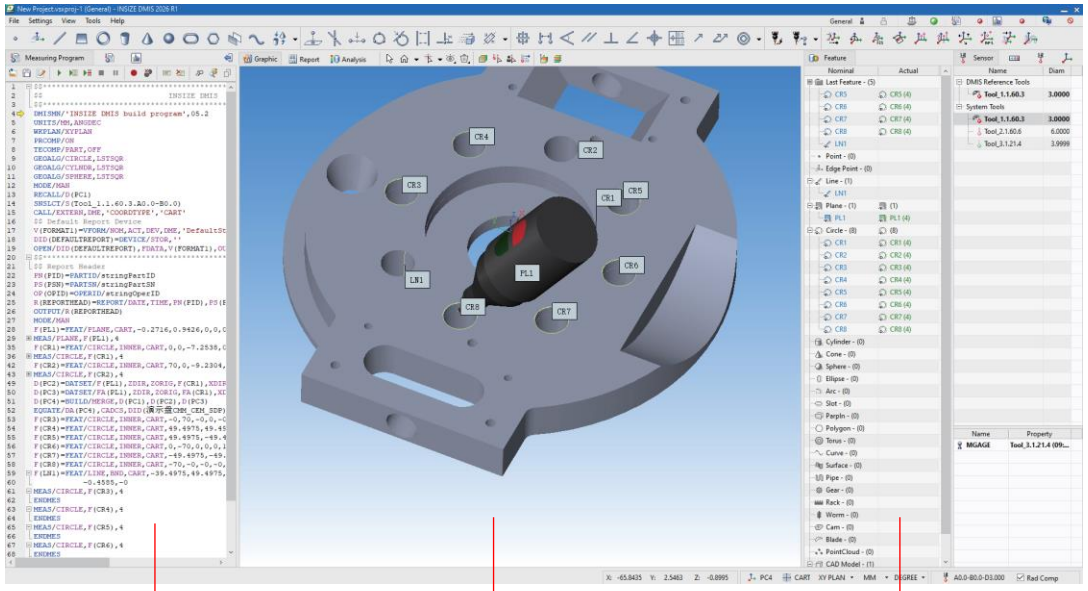
Key Products

Software For Measuring Arms CMM-ARM-DMIS

- Simple and intuitive user interface
- Drag-and-drop operation for simplicity and efficiency
- Standard DMIS kernel with self-learning programming function
- Multilingual design
- The tolerance algorithm supports ISO and ASME Y14.5



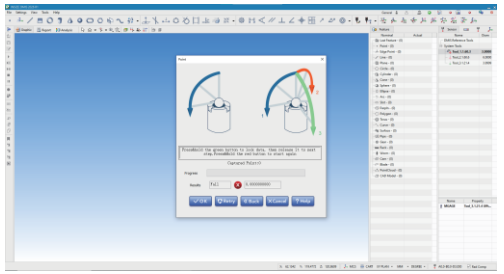
Measuring arm (optional) applications



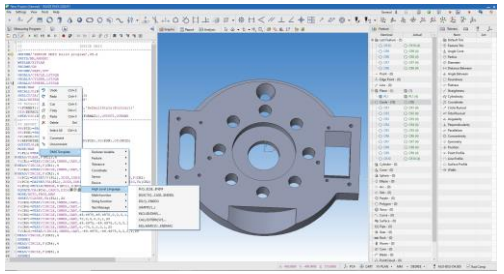
measuring program

integrated display window

element library



probe calibration



advanced programming

Key Products

Handheld 3D Scanner LSM-L340/L560

- Three scanning modes to suit different situations
- AI algorithm module, greatly improve the scanning effect
- Highly efficient scanning with ultra-fast measuring speeds
- Metrology-grade measuring accuracy

Scanning software (included)

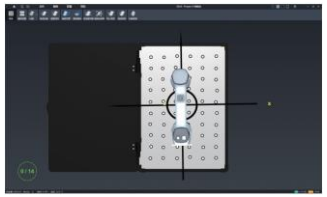
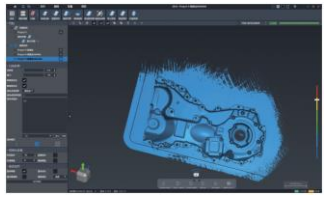
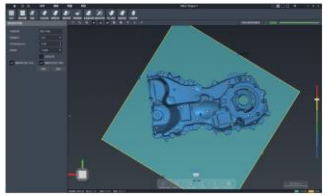


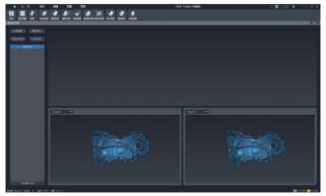
image-guide calibration



point cloud meshing



invalid area removal



scanning splicing



laser transmitter



scan indicator



Multi-function keys

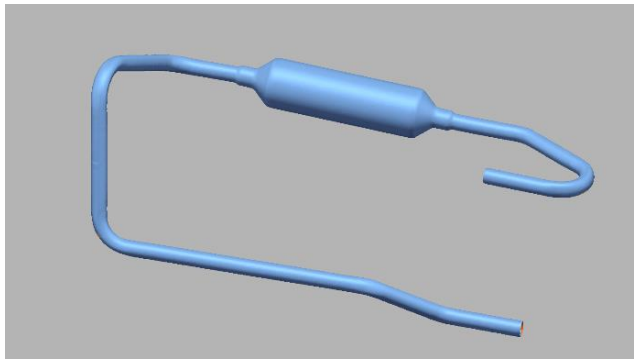
Code	LSM-L340	LSM-L560
High-speed scanning	26 cross blue laser lines	50 cross blue laser lines
Precision scanning	7 parallel blue laser lines	7 parallel blue laser lines
Deep hole scanning	1 blue laser line	1 blue laser line
Maximum scanning speed	5400000 measurements/s	7100000 measurements/s
Maximum resolution	0.01mm	

Handheld 3D Scanner -Case Studies on Pipe Bending

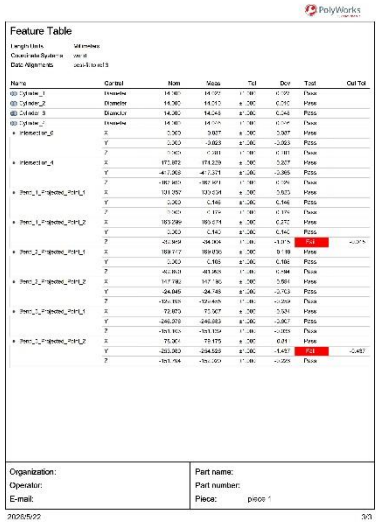
Multi-laser line scanning is simple to operate and fast

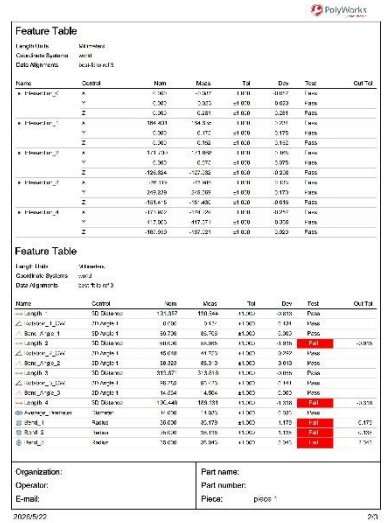


Obtaining a complete outline facilitates measurement and reverse engineering



Data archiving and commissioning of pipe bending equipment





- Supports exporting inspection reports in multiple formats, including PDF, Excel and Word, for convenient archiving and storage
- Precise calibration of tube bending machinery based on actual measurement data such as XYZ and LRA obtained from testing

Gauge Block Stands For CMM



6885

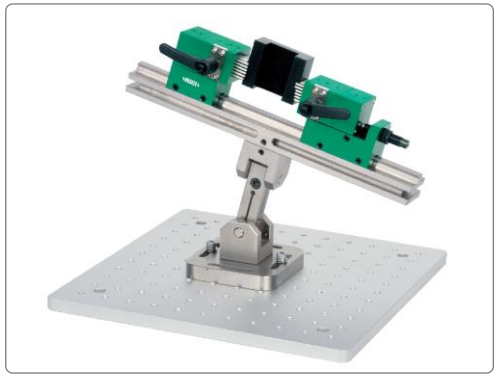
- Length: 500mm, 600mm, 650mm, 700mm, 750mm, 800mm, 850mm, 900mm, 1000mm
- Height: 235mm, 355mm, 475mm



7398

- Applicable block length: 30mm、100mm、125mm、150mm、175mm、 200mm、250mm、300mm、400mm、500mm、 600mm、700mm、800mm、900mm、1000mm
- Column height: 450mm
- Angle adjustment range: 0 ° ~90°

Jigs For CMM



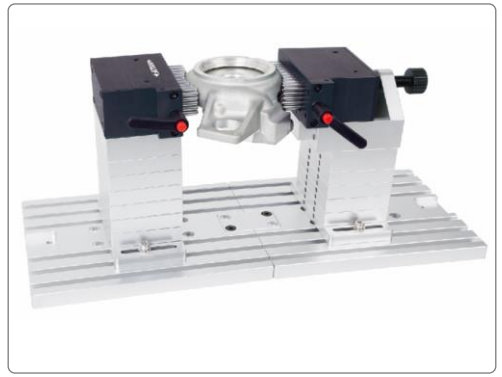
Anvil Ø2.5mm



Anvil Ø2.5mm



Anvil ø6mm



Anvil ø6mm

Profile Projectors, Quick Measurement Systems, Vision Measuring Systems

Profile Projectors



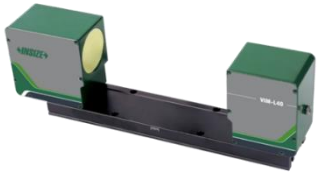
Sheet Metal Vision Measuring Systems



Quick Measurement Systems



Online/Offline Quick Measurement Systems



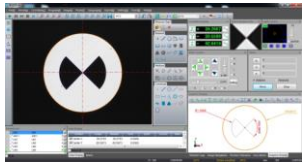
CNC Vision Measuring Systems (Standard Type)



CNC Vision Measuring Systems (Advanced Type)



Vision Measuring Softwares



Jig Set For Vision Measuring Systems



Standard Glass Scales



Profile Projectors



High Precision Profile Projectors
ISP-A5000E Series

Projector screen diameter:
Ø300mm



Horizontal Profile Projectors
ISP-W4025/ISP-A7000E

Projector screen diameter:
Ø400mm



Profile Projectors
ISP-A6000/ISP-A6000E

Projector screen diameter:
Ø600mm



Large Size Profile Projector
ISP-T800

Projector screen diameter:
Ø800mm



Large Size Profile Projector
ISP-T1200

Projector screen diameter:
Ø1200mm

Quick Measurement Systems



Large Size Quick Measurement System
QMS-A450



Quick Measurement Systems (With Stitching)
QMS-A220/QMS-A315



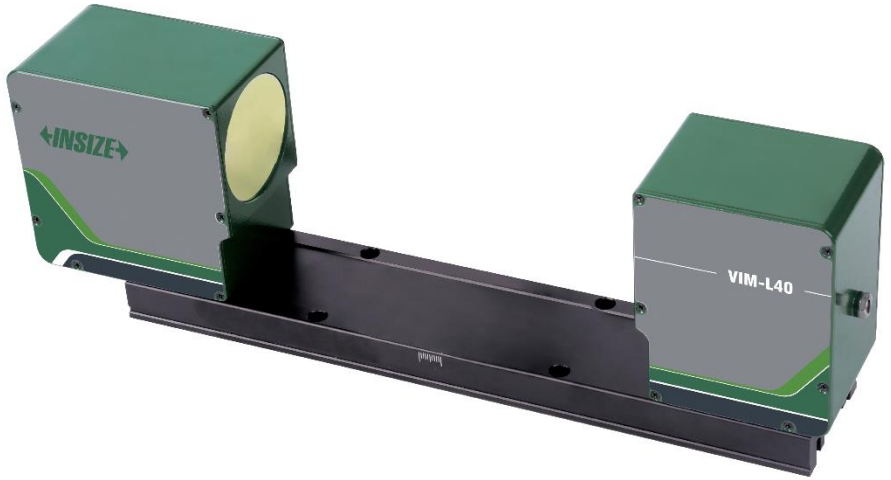
Quick Measurement Systems (Without Stitching)
QMS-A110/QMS-A200

Key Products

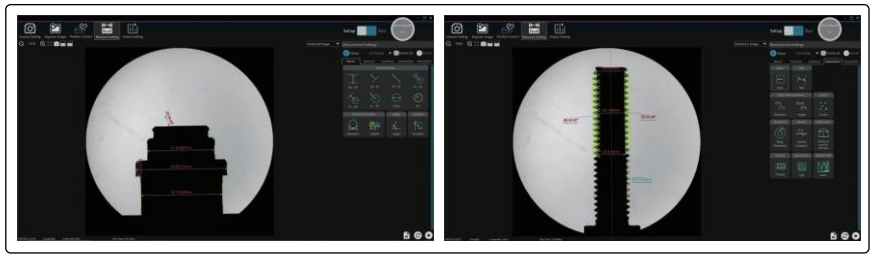
Online/Offline Quick Measurement System
VIM-L Series

TELECENTRIC SYSTEM WITH LARGE DEPTH OF FIELD

ONLINE/OFFLINE DIMENSION MEASUREMENT



Application



Automatically measure widths, pitch, arc, angles at the same time, simple and efficient

- Low-distortion system assures the accuracy throughout the field of view
- The dual telecentric optical system ensures sharp edges without losing accuracy even for misaligned targets
- Easy to use measurement tools for simplifi setup

Measurement range
- View field: high precision measurement area: Ø26mm-Ø60mm
  full measurement area: Ø40mm-Ø120mm
- Depth of field: high precision measurement area: 10mm-20mm
  full measurement area: 20mm-40mm

Measurement accuracy
- high precision measurement area: ±2μm~±4μm
- full measurement area: ±3μm~±5μm

Vision Measuring Systems



2D+3D Composite CNC Vision Measuring Systems ISD-U Series



CNC Vision Measuring Systems (With Stand) ISD-E320/ ISD-E430



CNC Vision Measuring Systems (Standard Type) ISD-V220CNCA



Manual Vision Measuring Systems (Standard Type) ISD-V Series



CNC Vision Measuring Systems ISD-V500N Series

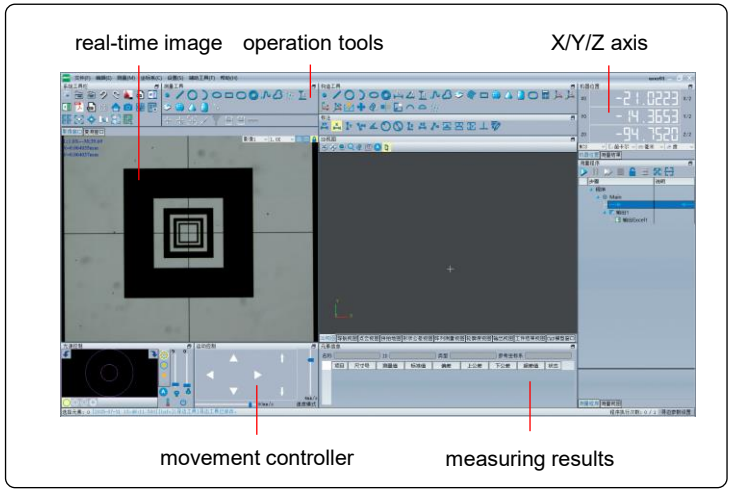
Key Products

CNC Vision Measuring Systems (Advanced Type)
ISD-K Series



- RSF brand linear scales
- Panasonic servo control motor, with precise positioning performance in high-speed movement

Software (included)



HIGH-RESOLUTION AUTO ZOOM LENS

NAVIGATION CAMERA

Code	ISD-K322	ISD-K432	ISD-K542
Measuring range (X×Y×Z)	300×200×200mm	400×300×200mm	500×400×200mm
Resolution of X/Y/Z axis	0.5μm		
Accuracy of X/Y axis	≤(1.8+L/200)μm*		≤(2.3+L/200)μm *
Magnification	27X~356X (on 23.8" monitor)		

*L is the measuring length in mm

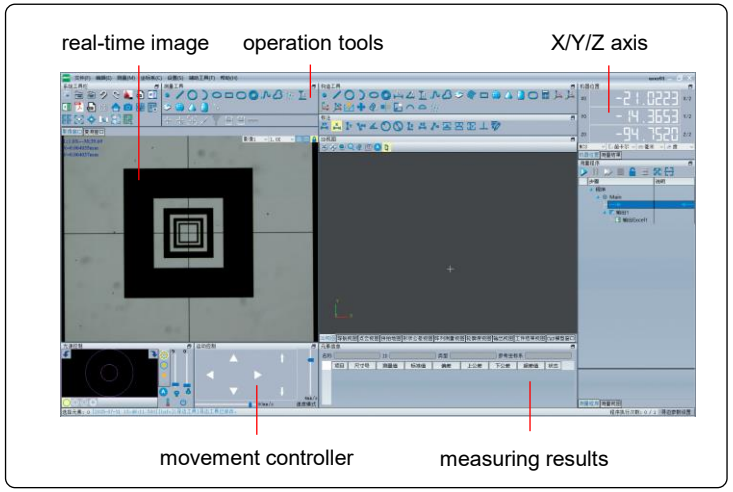
Key Products

CNC VISION MEASURING SYSTEMS (STANDARD TYPE)
ISD-R Series

- Motorized zoom objective
- Granite body, high accuracy and stability



Software (Included)



NAVIGATION CAMERA

Code	ISD-R320	ISD-R430	ISD-R540
Measuring range (X×Y×Z)	300×200×200mm	400×300×200mm	500×400×200mm
Resolution of X/Y/Z axis	0.5μm		
Accuracy of X/Y axis	≤(2.5+L/200)μm*		≤(2.8+L/200)μm *
Magnification	35X~165X (on 23.8" monitor)		

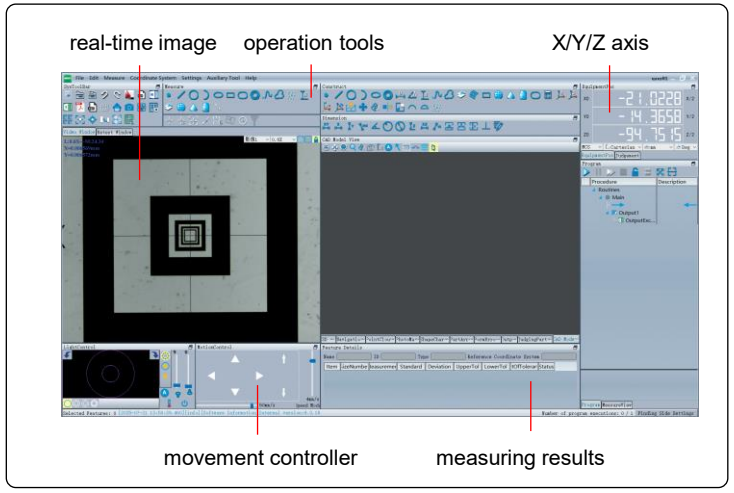
* L is the measuring length in mm

Key Products

CNC Vision Measuring Systems (Advanced Type)
ISD-Q Series



Software (included)



HIGH-RESOLUTION AUTO ZOOM LENS

NAVIGATION CAMERA

Code	ISD-Q542	ISD-Q652	ISD-Q762	ISD-Q1210	ISD-Q1612	ISD-Q2015
Measuring range (X×Y×Z)	400×500×200mm	500×600×200mm	600×700×200mm	1000×1200×200mm	1200×1600×200mm	1500×2000×200mm
Accuracy of X/Y axis	≤(2.5+L/200)μm (L is the measuring length in mm)					
Resolution of X/Y/Z axis	0.5μm					
Magnification	27X~356X (on 23.8" monitor)					

Cutting Tools Inspection

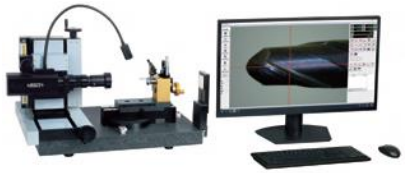
Tool Presetters



Dual-display Cutting Tools Microscope



Cutting Tools Vision Measuring Systems



Tool Presetter



Tool Runout Testers



Laser Measuring Instrument For Tool Diameter/Runout



Shank Runout Testers



Shank Taper Inspection Instruments



Key Products

Automatic Tool Presetters TLP-FA400/FA460

- Check, preset and measure cutting tools
- Measuring radius, angle, concentricity, axial runout, etc.



AUTOMATIC MEASUREMENT

CUSTOMIZED DATA TRANSMISSION

Code		TLP-FA400	TLP-FA460
Maximum tool diameter (X axis)		400mm	400mm
Maximum tool height (Z axis)		400mm	600mm
Repeatability	X axis	±3μm	
	Z axis	±3μm	
X/Z axis resolution		1μm	

Key Products

Tool Presetters



ISP-B420

- Maximum tool diameter (X axis): 420mm
- Range of snap gauge (X axis): 100mm
- X/Z axis resolution: 1μm
- Maximum tool height (Z axis): 420mm/600mm
- Repeatability: X axis: 2μm, Z axis: 2μm

AUTOMATIC RECOGNITION OF CUTTING EDGE SHAPES

CHECK, PRESET AND MEASURE CUTTING TOOLS

DATA OUTPUT



ISP-A350

- Maximum tool diameter (X axis): 320mm
- Repeatability: X axis: 2μm, Z axis: 2μm
- Maximum tool height (Z axis): 350mm
- X/Z axis resolution: 1μm

Key Products

Dual-display Cutting Tools Microscope ISM-CT600

MULTI-ANGLE OBSERVATION

4K



- Cutting tools range: Ø3~20mm, length 20~60mm
- Resolution: 3840×2160
- View field: 1.4×2.5~14×25mm
- Magnification: 23X~230X (on 27" monitor)
- Rotary table: sliding distance: 90mm, rotation range: 0~220°

Key Products

Cutting Tools Vision Measuring System TLP-D150

CUTTING TOOLS MEASUREMENT | SCAN MAXIMUM PROFILE | CAD COMPARISON



- Measuring range (X×Y): 150×60mm
- Applicable range: 0-40mm
- Resolution of X/Y axis: 1μm
- Accuracy of X/Y axis: 5μm
- Magnification: 20X-240X(on 27" monitor)

- Measurement and inspection of milling cutters, drill bits, non-standard molding tools under surface light
- Profile measurement, automatic profile capture for straight and helical fluted tools
- High magnification for clear observation of tool chipping and grinding wheel pattern on the back face
- The crosshairs of the cutting edge can be automatically recognized and captured

Microscopes, Magnifiers (P1)

White Light Interference Measuring Microscope



Areal Confocal 3D Microscope



Large Depth Of Field 3D Measuring Microscopes



Universal Toolmaker Microscope



Motorized Zoom Microscope (Basic Type)



Low-Magnification High-Definition Stereo Microscopes



Metallurgical Microscopes



Metallurgical Microscopes (Advanced Type)



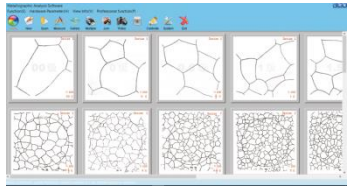
Zoom Stereo Microscopes



Digital Cameras For Microscopes



Metallurgical Analysis Softwares



Digital Depth Measuring Microscope



Microscopes, Magnifiers (P2)

Portable Measuring Microscopes



Table Magnifiers With Illumination



Magnifiers



Telescoping Inspection Mirrors



Telescoping Pick-up



Key Products

White Light Interference Measuring Microscope
ISM-A8000

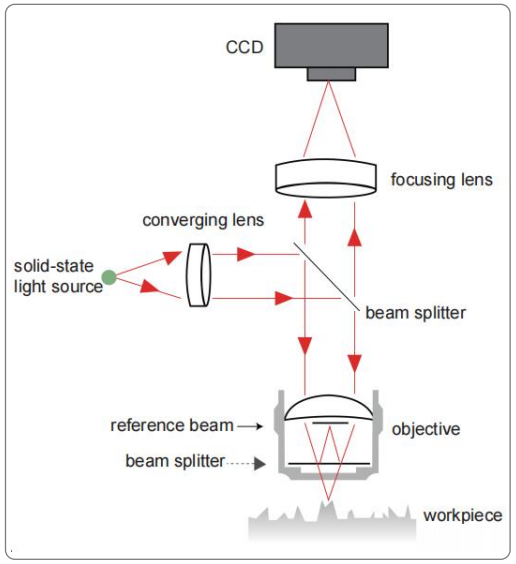
NON-CONTACT ROUGHNESS MEASUREMENT

SUB-NANOMETER VERTICAL RESOLUTION

MOTORIZED STITCHING

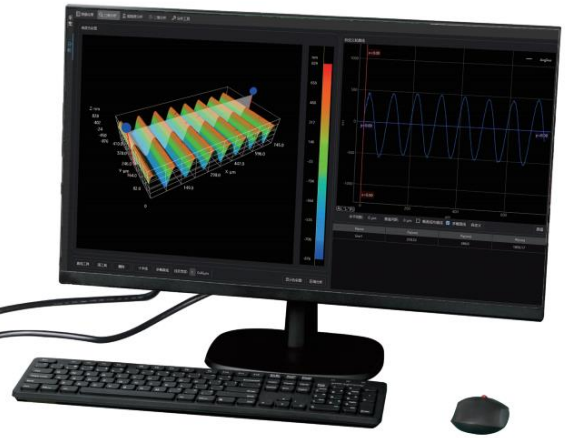
MICRO 3D MORPHOLOGY MEASUREMENT

working principle of white light interference measuring microscope





computer is included



- Measuring mode: PSI (physiognomic scanning)/VSI (vertical scanning)/bright field
- Light source: white light, green light
- Resolution of camera: 1600×1100
- View field (20X interference objective): 414×414μm

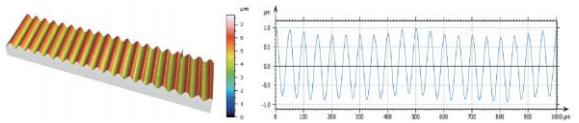
Key Products

Areal Confocal 3D Microscope ISM-A7000

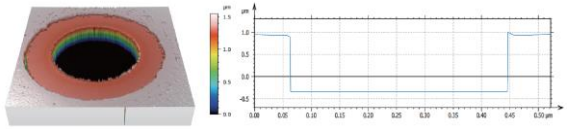
- Used to wafers, substrates, HDI boards, flexible printed circuits, glass wafers, glass substrates, microprisms, PV panels, Li batteries and etc.
- Suitable for critical dimension measurement of semiconductor wafer patterns, solder ball, probe indentation and MEMS device

NON-CONTACT ROUGHNESS MEASUREMENT | SUB-NANOMETER Z-RESOLUTION | FOCUS STACKING | MOTORIZED STITCHING | WHITE LIGHT AREA CONFOCAL

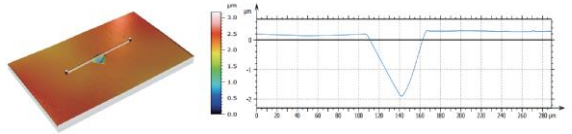
Applications



roughness measurement



IC carrier board laser vias measurement

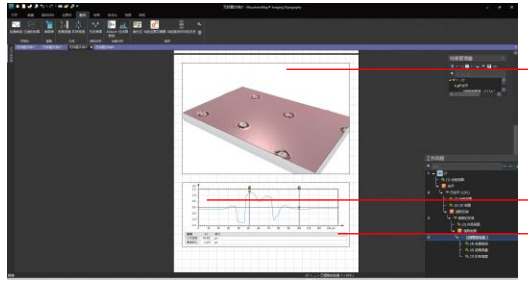


wafer dislocation measurement



computer (included)

Software (Included)



3D analysis chart

section view

measurement results

- Travel of Z-axis: 30mm
- Scanning range of Z-axis: 500μm (PZT), 30000μm (motor)
- Resolution of Z-axis: 0.01μm (PZT), 0.1μm (motor)
- XY stage resolution: 0.1μm
- XY stage control method: motorized
- Accuracy: ±(0.1+L/200)μm*

* L is measured height and μm is the unit

Key Products

Large Depth of Field 3D Measuring Microscope (Advanced Type) ISM-H5000



controller

STEREOSCOPIC 3D IMAGING

IMAGE STITCHING

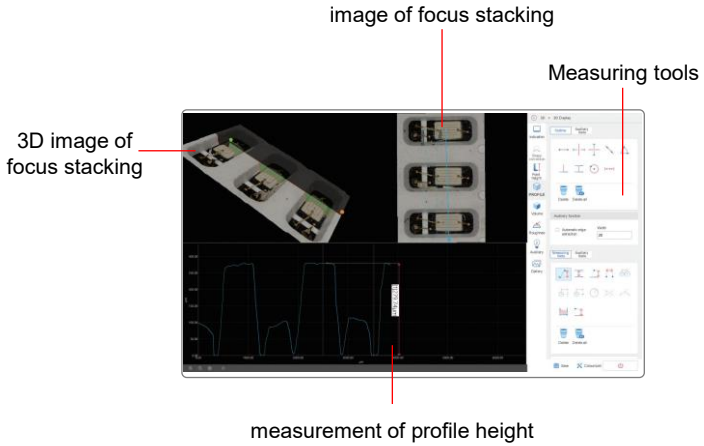
MOTORIZED XYZ AXIS

2D/3D MEASUREMENT

MAGNIFICATION 30~6000X

MOTORIZED ZOOM LENS

MAP NAVIGATION



- Objective: 1.5X, 5X, 20X, 50X
- Maximum depth of field: 30mm
- Max. height of workpieces: 90mm
- View field: 50.60×38.00μm-9977.30×7483.00μm
- Horizontal resolution: 0.42μm
- Working distance: 2-30mm
- Accuracy: ±(0.5+0.005L)μm
  (L is measuring length or height in μm)

Key Products

Large Depth of Field 3D Measuring Microscope



5324-K210



5324-K220

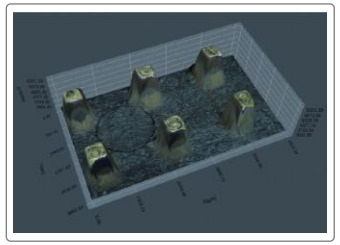
ROTATABLE WORKTABLE

PLANE MEASUREMENT AND PROFILE HEIGHT MEASUREMENT

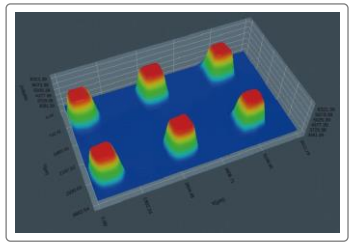
ROTATABLE OBSERVATION STEREOSCOPIC 3D IMAGING

AUTO FOCUS

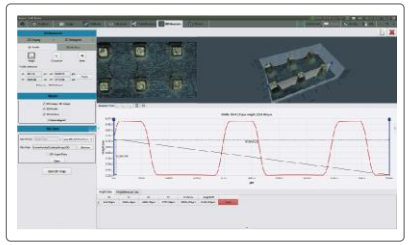
constructing stereoscopic 3D imaging that can be dragged and rotated for viewing



the chromatogram height clearly shows the difference in three-dimensional height



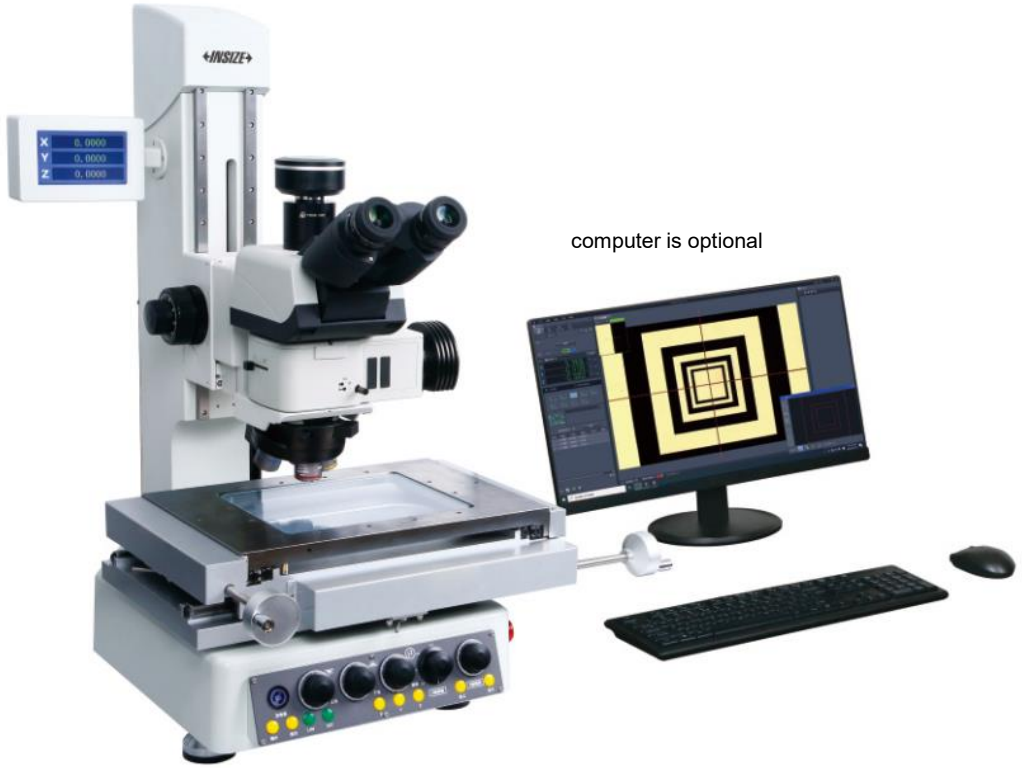
fast measurement of profile height difference



Code	5324-K210	5324-K220
Stand	vertical stand	tilted stand
Magnification	100X~750X	
Sensor	1/2" CMOS	
Pixel	2M	
Resolution	1920×1080	
Frame rate	60fps	

Key Products

High Magnification Toolmaker Measuring Microscopes (Advanced Type) ISD-TM Series



computer is optional

- Optical magnification: 50X-500X, up to 1000X with optional 100X objective
- Digital magnification:150X-1500X(on 23.8" monitor), up to 3000X with optional 100X objective

Code	ISD-TM215	ISD-TM320	ISD-TM330	ISD-TM430
X/Y axis travel	200×150mm	300×200mm	300×300mm	400×300mm
Metal stage size	400×280mm	500×350mm	500×450mm	600×450mm
Glass stage size	245×192mm	350×250mm	350×300mm	450×300mm

Digital Microscopes （P1）



Auto Focus Digital Microscopes (Large View Field) 5302-AF105/AF108



Manual 3d Rotation Microscope 5313-S407



Digital Measuring Microscopes ISM-DL301



Motorized Focus Stacking Microscope (Large Depth Of View) ISM-DL520

Digital Microscopes （P2）



Horizontal Microscope
5316-HM810



Flexible Arm Auto Focus Digital Microscopes
5317-AF



Auto Focus Digital Microscope (Advanced Type)
5319-AF290

Key Products

Smart Microscope ISM-DL402

dimension measurement

OK | out of tolerance,NG



automatically locate and measure, and judge OK or NG

circle diameter inspection

OK | out of tolerance,NG



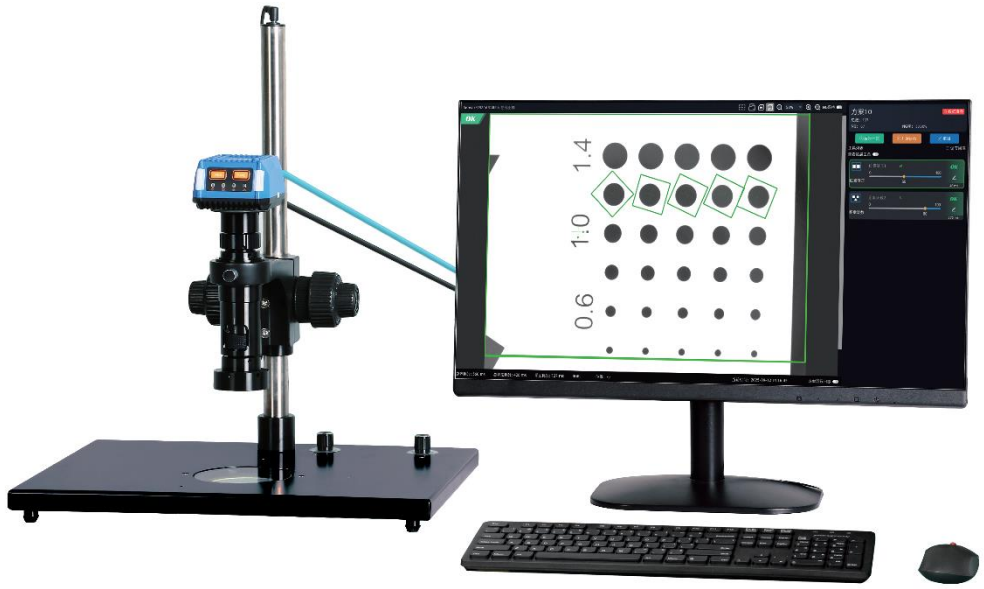
detection circle diameter, and judge OK or NG

counting

5 circles, OK | 4 circles, NG



automatically locate and count, and judge OK or NG

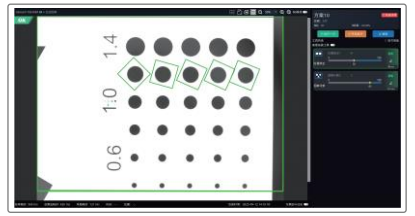


AUTOMATIC RECOGNITION

AUTOMATIC MEASUREMENT

AUTOMATICALLY LOCATE WORKPIECES REGARDLESS OF POSITION AND DIRECTION

Software for computer (included)



- Magnification*: 13.5X~90X
- View field: 17×14~2.5×2mm
- Sensor: 1/1.8" CMOS
- Pixel: 5M
- Resolution: 2448×2048
- Single pixel size: 2.74×2.74μm
- Frame rate: 30fps

*Magnification for using the measuring tool: 13.5X~54X

Key Products

Motorized Zoom Microscope (Basic Type) 5325-VM100

FOCUS STACKING | PROGRAMMABLE SEGMENTED RING LIGHT | DISPLAY ACTUAL MAGNIFICATION



Focus stacking



focus on the top | focus on the bottom | clear image of both top and bottom

Code	5325-VM100 (without contour illumination))	5325-VM200 (with contour illumination)
Sensor	1/2"CMOS	
Frame rate	60fps	
Magnification	10-68.5X（Objective: 1X (included)）	

Key Products

Metallurgical Microscopes (Advanced Type) 5108



- Infinite chromatic aberration correction optical system
- Three way observation tube with infinite hinge
- Translucent and reflective frame, front low-hand position coarse and fine coaxial focus adjustment mechanism, with adjustment elastic device to prevent sliding and random upper limit device
- Bright and dark field five-hole converter with DIC slot
- Adopt digital dimming, with light intensity reset and setting function
- With polarizer insert plate and 360° rotating analyzer insert slot

- Optical magnification: 50X-500X (up to 1000X with optional 100X objective)
- Digital magnification: 170X-1700X(on 21.5" monitor), up to 3400X with optional 100X objective

Key Products

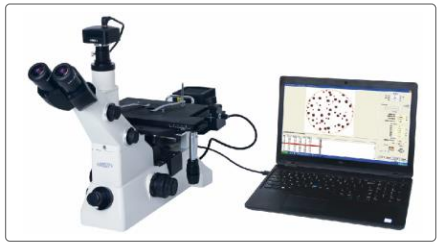
Metallurgical Analysis Software And Camera
ISM-MAS100



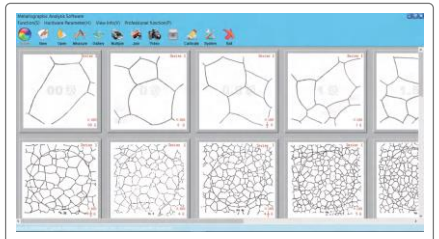
- Sensor: 1/1.8" CMOS
- Pixel: 6.3M
- Resolution: 3072×2048

- More than 100 standards (ISO, ASTM, JIS, etc.)
- For metallurgical microscopes
- The camera can be inserted into the eyepiece tube or camera connector of microscopes
- Metallurgical analysis software is included, which can make comparative analysis, measurement and evaluation of various materials

Application



Metallurgical analysis software (included)



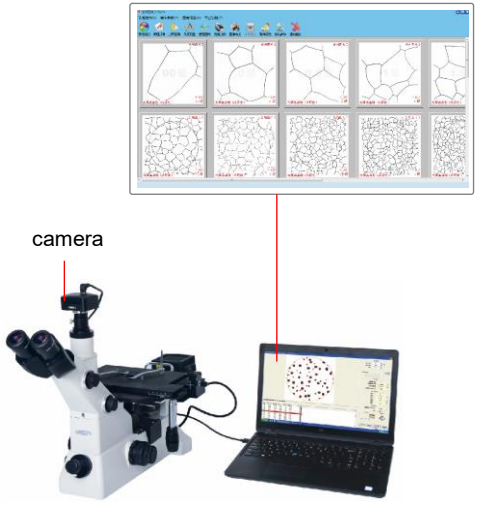
this software can be used with variety of metallographic microscopes for acquisition, processing, analysis, report generation of metallurgical images

Software And Cameras

Camera (included)

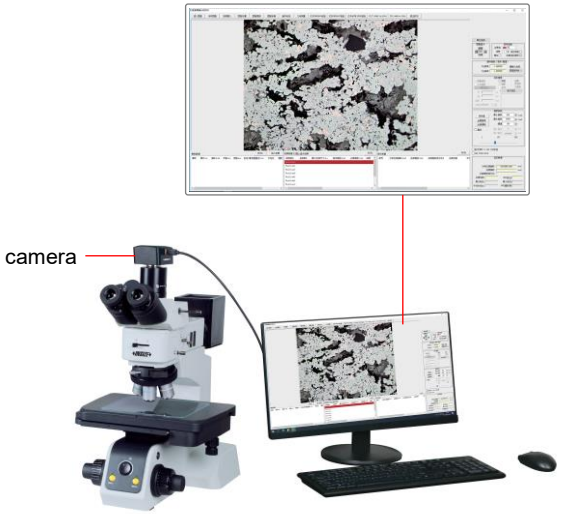


Metallurgical analysis software (included)



Metallurgical Analysis Software And Camera ISM-MAS100

Porosity measurement software (included)



Porosity Measurement Software And Camera ISM-MAS200

Weld seam measurement software (included)



Weld Seam Measurement Software And Camera ISM-MAS300

Key Products

Digital Depth Measuring Microscope ISM-PM110

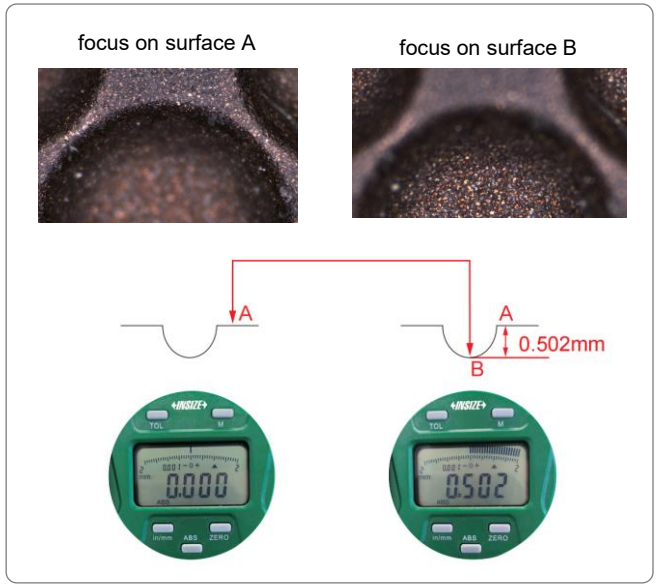
- Measuring the depth of scratches, chips, burrs, pitting, chattering, scribe lines, engraving, markings, etc.
- Built-in light source for on-the-spot detection
- Equipped with a display indicator that clearly shows the data



10X eyepiece with graduation

- Total magnification: 100X
- Eyepiece: 10X with graduation
- Objective (achromatic): 10X (numerical aperture 0.25)
- Working distance: 7mm
- Accuracy: ±0.02mm
- Viewing field: Ø1.8mm
- Focus range: 30mm
- Depth measurement distance: 7mm
- Illumination: LED light

Depth measurement



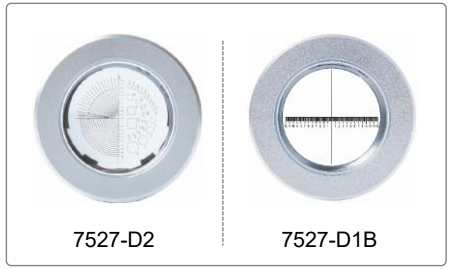
Key Products

Measuring Magnifiers (With Illumination) 7527

- Base with scale
- With 5 white LED and 5 UV LED
- Charging port: Type-C
- Work for 30min after fully charged



Base with scale



Code	7527-D2	7527-D1B
Magnification	10X	10X
Lens diameter (ØD)	Ø30mm	Ø30mm

Videoscopes

Videoscopes (Desk Type)



Videoscopes



Multipurpose Videoscopes



Carbon Fiber Telescopic Pole Videoscopes



Rigid Borescopes



Cameras (With Display)



Fixture For Rigid Borescopes



Key Products

Videoscope (Desk Type) ISV-Y



rigid straight lens tube, front view/side view/front view & side view

Lens tube:
- Diameter: Ø1.2-Ø6.0mm
- Length: 90mm-300mm (optional 90-1000mm)



bending spring lens tube

Lens tube:
- Diameter: Ø3.0-Ø7.0mm
- Length: 1000mm

Key Products

Videoscopes (Cable Is Optional) ISV-L Series

REAR FIBER ILLUMINATION



Changeable lens cable



Front view:
- One-direction cable (no bending): diameter: Ø0.95mm-Ø1.5mm
- Two-direction bending cable: diameter: Ø1.8mm-Ø2.4mm
- Four-direction bending cable: diameter: Ø2.8mm-Ø6.0mm

Side view:
- Two-direction bending cable: diameter: Ø1.8mm
- Four-direction bending cable: diameter: Ø2.8mm-Ø6.0mm

Key Products

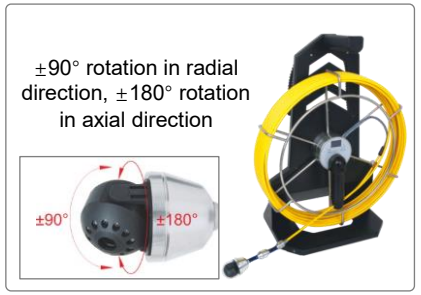
Multipurpose Videoscope VSP-201



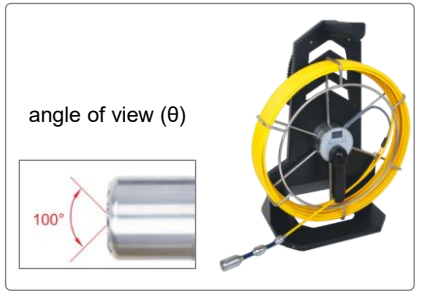
Four-direction bending cable



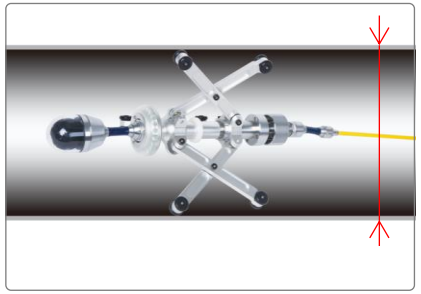
Rotating lens cable



Wide-angle lens cable



Adjustable support



Key Products

4K Carbon Fiber Telescopic Pole Videoscope ISV-CF5



7" LCD touch screen

IP65 WATERPROOF

- Resolution: 3840×2160
- Lens diameter (ØD): 40mm
- Pole: carbon fiber, can be fixed between 1~5 meters

- Dual motorized control of lens view, 300° horizontal and vertical 360° rotation
- 4K HD true color camera
- Built-in infrared and white light for night and day use

Application



underbody inspection



constructure inspection (WIFI real-time image transmission)



ceiling duct inspection



roof inspection



car roof inspection

Other Dimension Measuring Instruments (P1)

Pen Type Electromagnetic Ultrasonic Thickness Gauges



Built-In Wireless Ultrasonic Thickness Gauge



Ultrasonic Case Hardening Depth Gauge



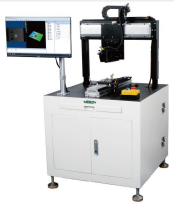
Hall-effect Thickness Gauge



Glass Thickness Meters



3D Line Laser Profile Measuring Machine



Laser Distance Meters



Laser Scan Micrometers



Other Dimension Measuring Instruments (P2)

Automatic Laser Scan Micrometer



Dual Axis Photoelectric Autocollimators



Linear Laser Interferometer Measurement System



Air Gauges And Displays



Length Presetters (Motorized Type)



Digital Gap Gauges



Manual Putty



Total Stations



Key Products

Pen Type Electromagnetic Ultrasonic Thickness Gauges EMU-A100/EMU-B100

- Compact size, easy to carry, comes with waveform display and full-function keyboard, easy to adjust the measurement parameters
- Non-contact measurement of rough, corroded surfaces without sanding
- Suitable for inspection of workpieces of various shapes, such as pipes, small tubes, elbows, etc.

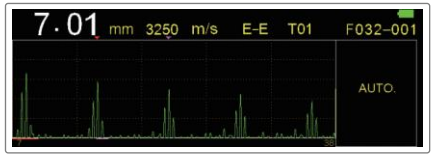
COUPLING AGENT IS NOT REQUIRED

MEASUREMENT THROUGH COATING AND RUST LAYER

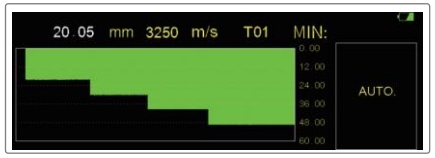
WORK AT MAXIMUM 600°C

WITH A AND B SCAN

A-Scan



B-Scan







high temperature probe (optional)



calibration block (included)

- Measuring range: 1.5-300mm
- Resolution: 0.01mm
- Accuracy*: ±0.05mm (H＜10mm)
  ±(0.01+H/200)mm (10≤H＜100mm)
  ±(0.1+H/100)mm(H≥100mm)
  H is measuring thickness in mm

*On C45 carbon steel

Ultrasonic Thickness Gauges



Ultrasonic Thickness Gauge
ISU-810D



Ultrasonic Thickness Gauge
ISU-720D



Ultrasonic Thickness Gauge (For Thick Workpieces Made Of Organic Materials) ISU-710D



Ultrasonic Thickness Gauge (For Thin Workpieces)
ISU-700D



Ultrasonic Thickness Gauge
(Through Coating) ISU-300D



Ultrasonic Thickness Gauge
ISU-250C



Ultrasonic Thickness Gauge
ISU-200D



Ultrasonic Thickness Gauge (Basic Type)
ISU-100D

Key Products

Built-In Wireless Ultrasonic Thickness Gauge (Advanced Type) ISU-800DWL

PENETRATE COATING AND MEASURE THE THICKNESS OF SUBSTRATE

BUILT-IN WIRELESS

REAL-TIME TEMPERATURE COMPENSATION

DATA OUTPUT



transducer ISU-S15-P06
(included)



- Measuring (included): I-E: 0.9-28mm
  E-E: 0.15-14mm
- Resolution: 0.01mm/0.001mm
- Accuracy*: ±0.02mm/0.3%H ** (take the larger one)

* On C45 carbon steel

** H is the measured thickness in mm

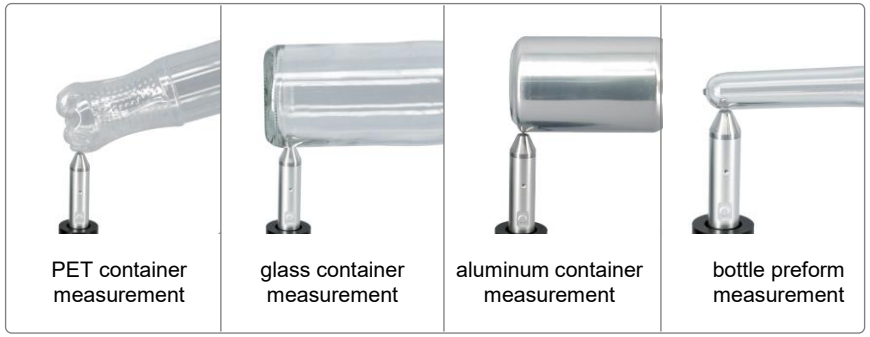
Key Products

Hall-effect Thickness Gauge 5408-HE25



DATA OUTPUT

Measurement Application



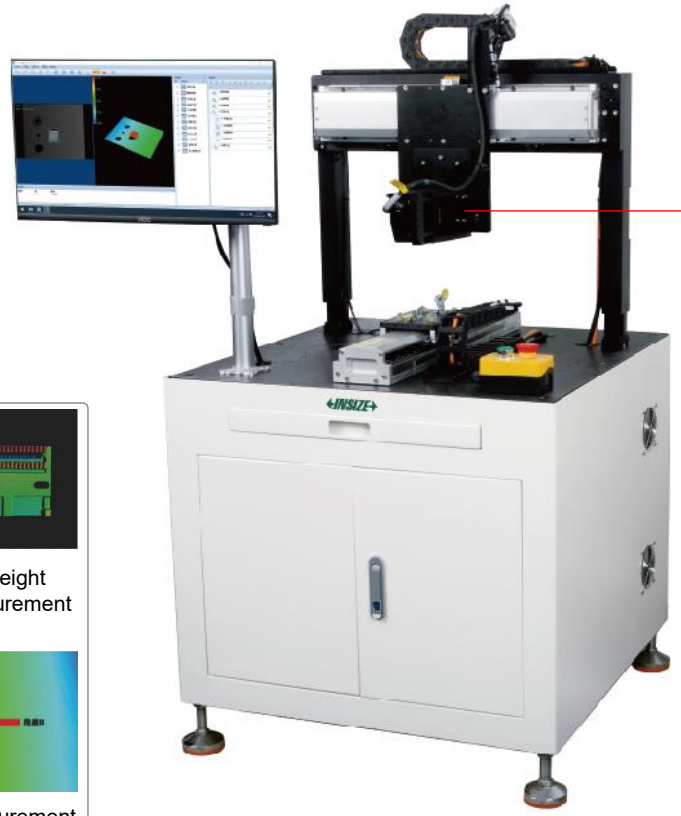
- Range : 4mm/ 6mm/ 8mm/ 10mm
  (determined by the calibration performed with standard gauge blocks)

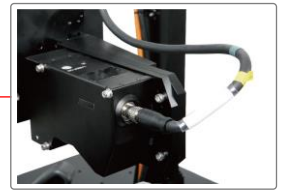
Accuracy of single-point calibration	Accuracy of multi-point calibration	Suggested measuring range
5%+0.003mm (calibrated with 1.59mm steel ball)	3%+0.003mm (calibrated with gauge blocks and 1.59mm steel ball)	0~2mm
4%+0.003mm (calibrated with 3.18mm steel ball)	2%+0.003mm (calibrated with gauge blocks and 3.18mm steel ball)	0~4mm
3%+0.003mm (calibrated with 4.76mm steel ball)	1%+0.003mm (calibrated with gauge blocks and 4.76mm steel ball)	0~4mm or 0~6mm
3%+0.003mm (calibrated with 5.00mm steel ball)	1%+0.003mm (calibrated with gauge blocks and 5.00mm steel ball)	1~8mm or 1~10mm

Key Products

3D Line Laser Profile Measuring Machine VIM-P140

NON-CONTACT SCANNING | HIGH SPEED MEASUREMENT | FLATNESS/HEIGHT DIFFERENCE MEASUREMENT | CUSTOM-MADE

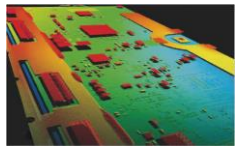




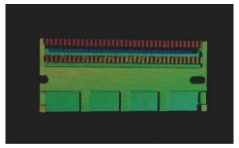
3D line laser scanning camera

- Flatness and height difference measurement of machinery, electronics, cell phones, molds, circuit boards and other products
- Full-range focusable optical system allows you to take pictures in focus range, even when the target height is changed
- Combing 2D and 3D data for complete detection; 2D data can be used for localization, code reading, character recognition, etc.
- The software is automatically corrected for workpiece position deviation; multiple scanned images can be automatically spliced to achieve stable detection

Application



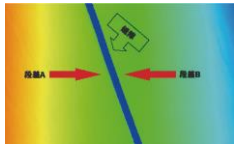
component height measurement on circuit boards



flatness and height difference measurement



character height measurement



gap depth measurement

- Travel range XY: 400×350mm
- Repeat positioning accuracy: 2μm
- Measuring range of Z-axis: 24mm
- Width of X-axis: 96mm
- Accuracy of Z-axis: ±0.02mm
- Repeatability of Z-axis: ±0.5μm
- Scanning speed: 2500-10000Hz

Laser Scan Micrometers

Laser Scan Micrometers LDM Series



- Measuring range: 0.1-130mm
- Accuracy (at 25ºC): ±(0.5+10%D)μm, D is measuring diameter in mm/±6μm/±10μm
- Small-range accuracy (calibration position ±4mm, at 25ºC)*: ±1μm/±2 μm
- Repeatability (at 25ºC): (0.3+5%D) μm, D is measuring diameter in mm/3μm
- Resolution: 0.01/0.1/1/10/100μm selectable

* The calibration position is set according to the customer's requirements before pre-factory

Dual-axis Laser Scan Micrometer LDM-XY14



- Measuring range: 0.05~14mm
- Resolution: 0.01/0.1/1/10/100μm selectable
- Single-axis accuracy (at 25ºC): ±(0.5+10%D)μm, D is measuring diameter in mm
- Single-axis repeatability (at 25ºC): (0.3+5%D)μm, D is measuring diameter in mm

Key Products

Automatic Laser Scan Micrometer LDM-AT01



- Motorised rotation with adjustable speed
- Auto-moving laser scan micrometer
- Measure the outer diameter, roundness and runout of workpieces at multiple sections

CUSTOMIZED ACCORDING TO WORKPIECES

Clamping workpieces by center-type bench center



Clamping workpieces by v-type bench center



Center-type bench center
- Measuring range of workpieces:
  length: 5-300mm
  Diameter: 3-60mm
  Max. Weight: 20kg

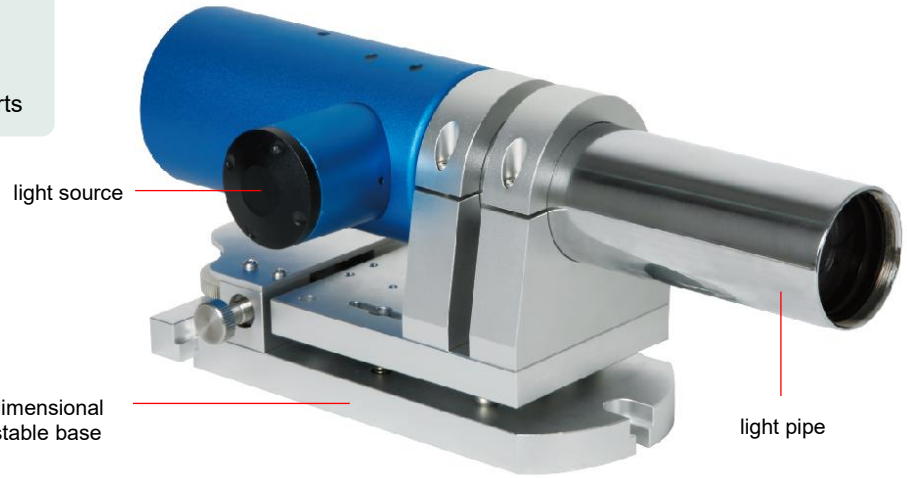
V-type bench center
- Measuring range of workpieces:
  length: 10-230mm
  Diameter: 10-60mm
  Max. Weight: 1.5kg

- Accuracy at 25°C: ±(0.5+10%d)μm, D is measuring diameter in mm

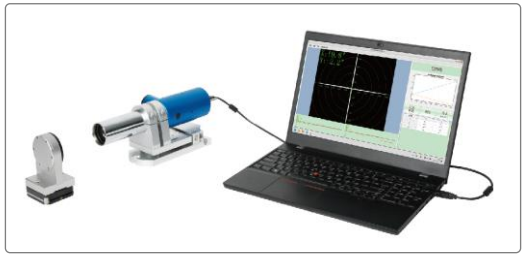
Key Products

Dual Axis Photoelectric Autocollimator CMS-L401

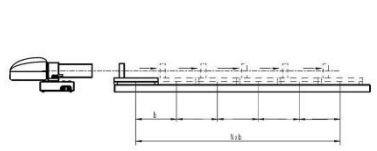
- Dual axis simultaneous measurement, convenient and efficient
- Electronic eyepiece, low aiming error
- High resolution photodetector, high measurement accuracy
- Semiconductor LED light source, long service life of the light source
- Automatic curve plotting, automatic error calculation
- Multiple data processing methods, can generate standard Excel reports

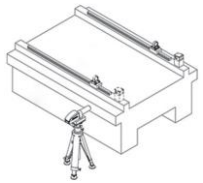


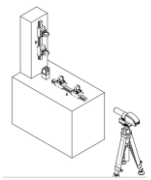
Software (included)

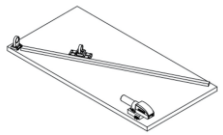


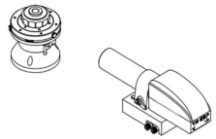
Application


straightness measurement


parallelism measurement


perpendicularity measurement


flatness measurement


turntable measurement

- Field of view range: 3200×2400"
- Accuracy: ±1000" within ±1"
- Resolution: 0.1"

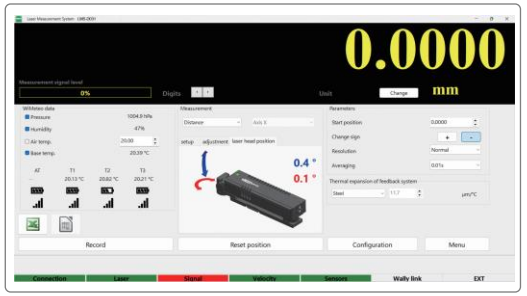
Key Products

Linear Laser Interferometer Measurement System
LMS-D301

- Built-in alignment tools indicator for the laser head, it shows the pitch and yaw angles, it helps to reduce setup time
- Unique machine tools analysis capability, high dynamic sampling frequency
- Compensated measurement of linear positioning accuracy for CNC/CMM machines



Software (included)



Laser head and tripod (included)





linear retro-reflector (included)



linear interferometer (included)



environment compensation sensor (included)



material temperature compensation sensor (included)

Laser head specification
- Laser type: He-Ne laser
- Wavelength accuracy: ±0.005ppm
- Short term stability: ±0.001ppm
- Long term stability: ±0.001ppm

Distance specification
- Range: 0~30m
- Resolution: 100pm (0.1nm)
- Accuracy: ±0.4μm/m

Key Products

Air Gauges And Air Gauge Displays

9408



- Can store 10 measuring programs, and the program can be switched quickly
- Data storage and query function

9401



Range	Resolution		Accuracy
	LED	Display	
10μm	0.1μm	0.1μm	0.2μm
20μm	0.2μm	0.1μm	0.4μm
50μm	0.5μm	0.5μm	1μm
100μm	1μm	0.5μm	2μm

Key Products

Multi Channel Air Gauge Displays 9440-DP Series

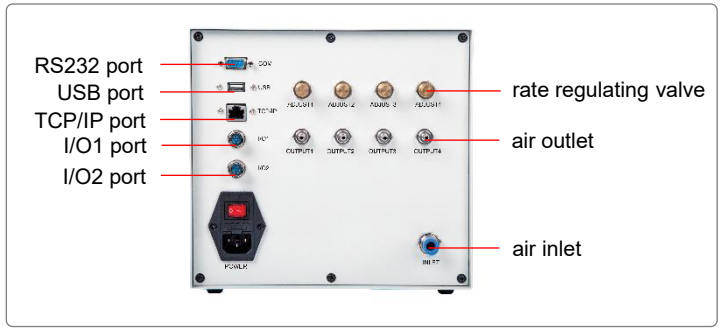
- With data statistics and analysis functions, can display graphs and Xbar-R control charts

DATA TRANSMISSION CAN BE CUSTOMIZED

TOUCH SCREEN



Back of display



- Number of channels: 1-8
- Resolution: 0.1μm
- Range: 10-100μm(adjustable)
- Accuracy: 0.2-3μm

Scanning gun input product code function (customised)



Air filter (optional)



Foot switch (optional)



RS232 cable (optional)



Key Products

Length Presetters (Motorized Type) ISQ-S Series



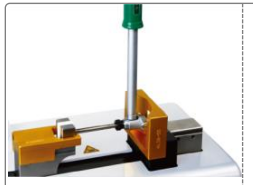
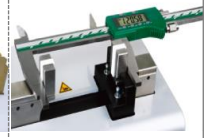
REPLACING RING GAUGES AND GAUGE BLOCKS

CAN BE USED IN WORKSHOPS

ATTENTION: WORKING TEMPERATURE 10-35°C, TEMPERATURE CHANGE ≤1°C/h

ATTENTION: ADAPTERS ARE NEEDED

Application

						
zero setting and calibration of bore gauges	zero setting and calibration of split type dial bore gauges	zero setting and calibration of internal/external snap gauges	zero setting and calibration of three-point internal micrometers	zero setting and calibration of micrometers	zero setting and calibration of tubular inside micrometers	caliper calibration

- Range: inter diameter0.1-5000mm
  outer diameter 40-5040mm
- Resolution: 0.5μm
- Accuracy: (1.5+L/500)μm/ (3+L/500)μm
  (L is measuring length in mm)
- Repeatability: 0.8μm

Key Products

Length Presetters (Motorized/Manual Type)
ISQ-M Series

- Range: inter diameter 0.1-2950mm
  outer diameter 40-2990mm
- Resolution: 0.5μm
- Accuracy: (1.5+L/500)μm
  (L is measuring length in mm)
- Repeatability: 0.8μm



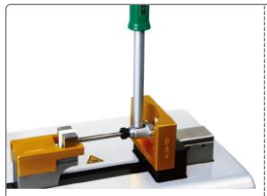
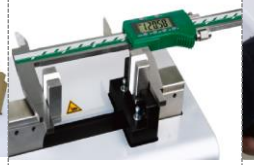
REPLACING RING GAUGES AND GAUGE BLOCKS

CAN BE USED IN WORKSHOPS

ATTENTION: WORKING TEMPERATURE 10-35°C, TEMPERATURE CHANGE ≤1°C/h

ATTENTION: ADAPTERS ARE NEEDED

Application

							
zero setting and calibration of bore gauges	zero setting and calibration of split type dial bore gauges	zero setting and calibration of internal/external snap gauges	zero setting and calibration of three-point internal micrometers	zero setting and calibration of micrometers	zero setting and calibration of tubular inside micrometers	caliper calibration	measuring workpieces (manual mode)

Key Products

Digital Gap Gauges（P1）



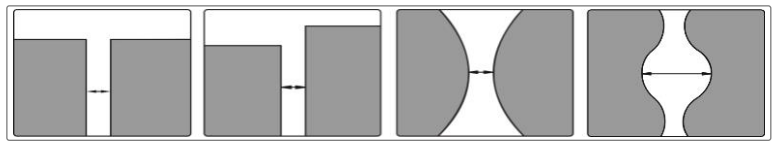
ISE-DF11



ISE-DF10

- Customizable measuring range: 0.35-6mm
- Effective range: ±0.5mm
- Accuracy: range: (0.35-2)mm, Accuracy: ±0.03mm
  range: (0.35-6mm), Accuracy: ±0.04mm
- Resolution: 0.1/0.01/0.001mm
- Max. customizable length: 500mm
- Repeatability: 0.02mm
- Measuring force: < 3.5N

Application



Key Products

Digital Gap Gauges（P2）

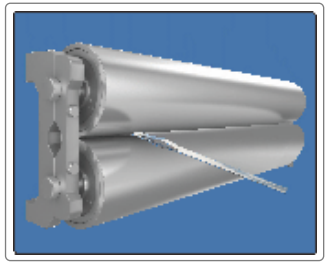
Measuring car body seam



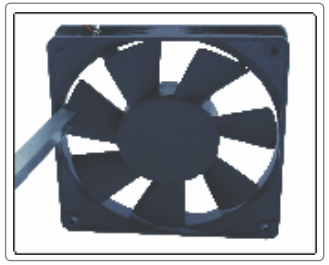
Measuring gaps on the car dashboard



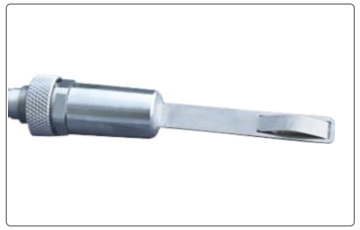
Measuring roll gap



Measuring blade to sidewall gap



Bilateral probe (optional)



Depth positioning probe (optional)



Single-side hockey stick shaped probe (optional)



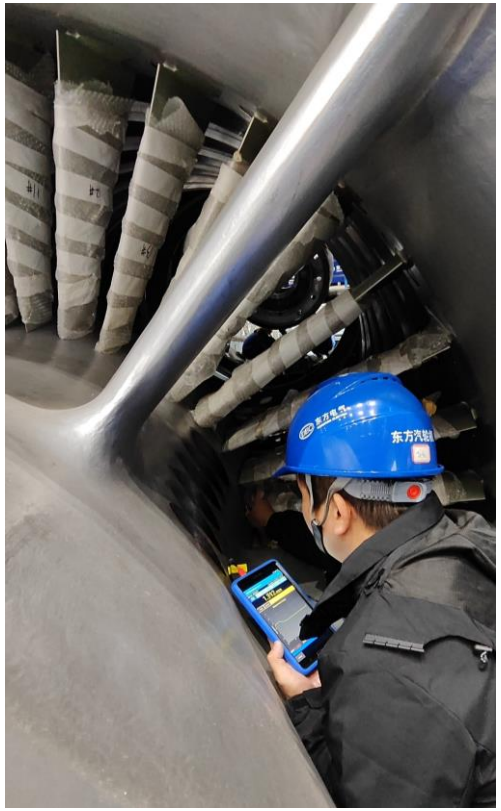
90° probe (optional)



Single-side positioning probe (optional)



Digital Gap Gauge -- Application



In the steam turbine assembly workshop, measure the gap between the rotor and the cylinder block

Hardness Testers (P1)

Rockwell Hardness Testers



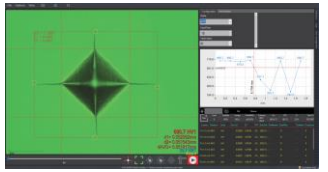
Micro-Vickers Hardness Testers



Vickers Hardness Testers



Vickers Hardness Measuring Systems



Brinell Hardness Testers



Rockwell/Brinell/Vickers Hardness Testers



Brinell Indentation Hardness Measuring Systems



Brackets



Ultrasonic Hardness Testers



Portable Leeb Hardness Testers



Portable Rockwell Hardness Tester



Aluminum Hardness Testers



Hardness Testers (P2)

Aluminum Hardness Testers



Shore Durometers

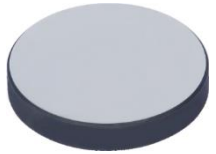




Fruit Hardness Testers



Hardness Test Blocks



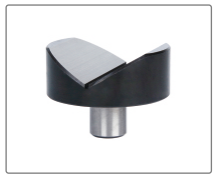
Concrete Strength Testers



Key Products

Motorized Digital Rockwell/Superficial Rockwell Hardness Testers (Dolphin-Nose Type) HDT-DM Series

V-type anvil (included)



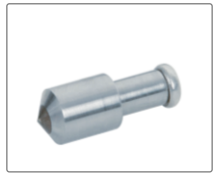
Ø150mm flat anvil (included)



4mm high Rockwell indenter (optional)



14mm high Rockwell indenter (included)





test interface



FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

TOUCH SCREEN

Can test rings, tubes, internal Surfaces of frame parts, etc.



- Full closed-loop precise control, real-time monitoring of test force, greatly increase the accuracy
- Dolphin-nose structure indenter, more measuring space
- Measurements on 30 Rockwell and Superficial Rockwell scales
- Convertible to various hardness standards such as HB, HV, HLD, HK and tensile strength

Key Products

Motorized Digital Rockwell/Superficial Rockwell Hardness Testers HDT-RT Series

FORCE LOADING BY ELECTRIC MOTOR (WITHOUT WEIGHTS)

TOUCH SCREEN



Test interface



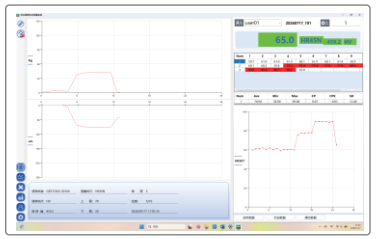
Test result display interface



Chart interface



Computer software (included)



Key Products

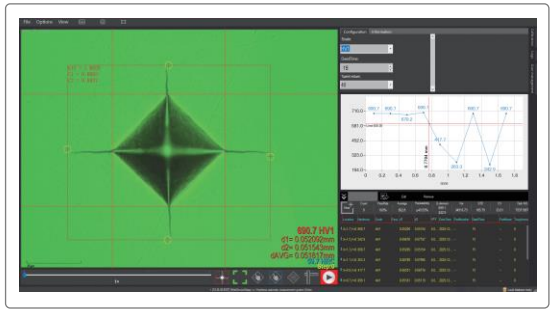
Motorized Digital Vickers Hardness Testers
HDT-HV410/HV450

TOUCH SCREEN

MOTOR DRIVEN TURRET

PRESS INPUT BUTTON TO HAVE DIRECT READING OF HARDNESS

Vickers measuring software (optional)





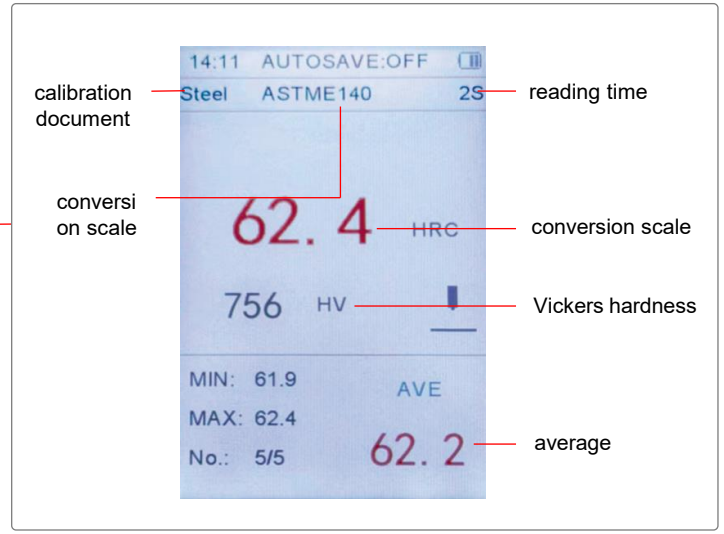
- Closed-loop loading control for superior test-force accuracy
- Touch screen color LCD display, group-based data storage
- Data storage and average value calculation
- Automatic switch between the indenter and objective lens
- Automatic Vickers measuring system optional

Code	HDT-HV410	HDT-HV450
Range	1~3000HV	1~3000HV
Test force	2.94N(0.3kgf), 4.9N(0.5kgf), 9.8N(1kgf), 19.6N(2kgf), 24.5N(2.5kgf), 29.4N(3kgf), 49N(5kgf), 98N(10kgf)	4.9N(0.5kgf), 9.8N(1kgf), 19.6N(2kgf), 24.5N(2.5kgf), 29.4N(3kgf), 49N(5kgf), 98N(10kgf), 196N(20kgf), 294N(30kgf), 490N(50kgf)

Key Products

Ultrasonic Hardness Testers 9646





ATTENTION: NEED TO CONFIRM IF THE WORKPIECES ARE SUITABLE BEFORE PURCHASE

SMALLTEST INDENTATION

ATTENTION: HARDNESS BLOCKS FOR CALIBRATION ARE OPTIONAL

WIRELESS TRANSMISSION IS OPTIONAL

Applications:

1. Hardness measurement of flange edges and gear root stampings, gears and gear grooves with surface hardening of lamina, taper sections
2. Hardness measurement of shafts and thin-walled pipes and container
3. Hardness measurement of thin plating, wheels, turbine rotors and welded parts
4. Measurement of the depth of a certain diameter deep holes, dents of the larger curvature and convex marks, irregular planes
5. Covering the majority of hardness measurement of industrial production of ferrous metals, non-ferrous metals and their alloys

Code	9646-300	9646-301	9646-310	9646-311
Data printout	without printer	with bluetooth printer	without printer	with bluetooth printer

- Small size, light weight, portable, convenient for on-line measurement and can be used to measure large workpieces
- Support 360°measurement, fast test speed, the fastest results in 1 second
- Standard Vickers indentation, small test indentation and low damage to the workpiece

Key Products

Test Stands For Ultrasonic Hardness Testers

9646-STANDV/9646-300-STAND

- Suitable for 9646 series ultrasonic hardness testers
- Reduce the human error caused by manual operation of hardness tester, and improve the measuring accuracy and repeatability



9646-STANDV



9646-300-STAND

Code	9646-STANDV	9646-300-STAND
Type	magnetic base	normal base
Applicable workpiece	large flat and shaft-shaped workpieces	small workpieces
Workpiece dimension	Min. magnetic suction plane size: 170×50mm Min. magnetic suction cylinder diameter: Ø20mm	Max. workpiece height: 210mm

Key Products

Portable Leeb Hardness Tester With Wireless Probe

HDT-WP201

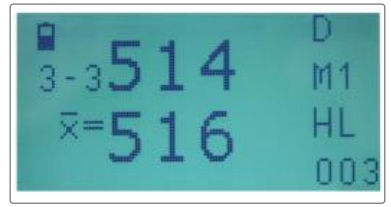




large font display



statistics display



- Wireless digital probe
- Universal testing angle, no need to set impact direction
- Based on Leeb (HLD), converted to Vickers (HV), Brinell (HB), Rockwell (HRC, HRB, HRA), Shore (HSD) and tensile strength (MPa)
- Dual value display, shows both Leeb and converted hardness
- Large LCD display with backlight
- Can choose large font display and statistics display
- Automatically calculate maximum, minimum and average value
- Save 300 data

- Resolution: 1HLD/1HV/1HB/0.1HRC/0.1HRB/0.1HRA/0.1HS/1MPa
- Accuracy: ±6HLD (when HLD=800)

Hardness Test Blocks



Rockwell



Vickers



Leeb



Knoop



Micro-Vickers



Brinel



Shore



Ultrasonic

Metallography Preparation And Analysis

Cutting Machines



Mounting Presses



Grinders And Polishers



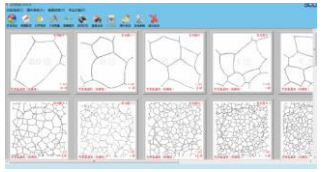
Automatic Liquid Droppers



Metallurgical Microscopes



Metallurgical Analysis Softwares



Cutting Machine Accessories



Mounting Press Accessories



Grinder And Polisher Accessories



Cutting Machines



Automatic Specimen Cutting Machine (Advanced Type) MLP-ACM160



Automatic Cutting Machine (Advanced Type) MLP-HCM102



Cutting Machine (Standard Type) MLP-CM60



Cutting Machine (Basic Type) MLP-CM86

Key Products

Manual Precision Cutting Machine MLP-PCM100

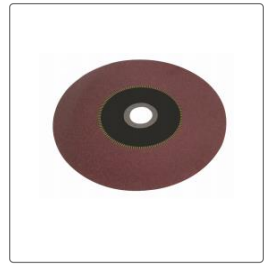


- Equipped with a high-torque DC motor and stepless speed control system, boasting strong power and high efficiency
- The rotation speed is digitally displayed for simple operation
- With a magnetic safety switch, the motor automatically stops when the protective cover is opened, ensuring safety performance
- Integrally formed high-strength composite material shell, anti-corrosive and rust-proof
- Panoramic transparent observation window, facilitating the observation of the sample cutting process
- With circulating cooling water tank, lightweight in volume

Cutting coolant (optional)



Cutting blade (optional)



Diamond blade (optional)



- Maximum cutting diameter: Ø40mm
- Maximum travel: 190mm
- Diamond blade: Ø200×0.8×Ø12.7mm
- Cutting method: manual cutting, Y-axis

Mounting Presses



Mounting Presses (Advanced Type) MLP-MP53



Mounting Press (Standard Type) MLP-MP30



Mounting Press (Basic Type) MLP-MP62



Vacuum Mounting Press MLP-MP25

Grinders And Polishers



Automatic Grinder And Polisher
(Advanced Type) MLP-GP406



Automatic Grinder And Polisher
(Advanced Type) MLP-GP505



Automatic Grinder And Polisher
(Standard Type) MLP-GP305



Automatic Grinder And Polisher
(Standard Type) MLP-GP260



Manual Grinders And Polishers
(Standard Type) MLP-GP280



Manual Grinder And Polisher
(Basic Type) MLP-GP314

Flaw Detectors (P1)

Portable Eddy Current Flaw Detectors



Ultrasonic Flaw Detectors



Ultrasonic Phased Array Detectors



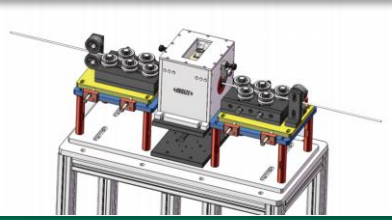
Standard Test Blocks For Ultrasonic Flaw Detection



Ultrasonic Water Immersion Detection Systems



Online Eddy Current Testing System



Air-Coupled Ultrasonic Detector



Ultrasonic Flaw Detector For Concretes



Portable Magnetic Particle Flaw Detectors



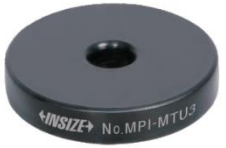
Permanent Magnet Yoke Flaw Detector



Fluorescent Magnetic Particle Flaw Detectors



Magnetic Particle Test Blocks



Flaw Detectors (P2)

Magnetic Field Indicator Sets



UV Flaw Detection Lights



Penetration Standard Test Blocks



Supplementary Materials



Variable Frequency Portable X-Ray Flaw Detectors



Industrial Automatic X-Ray Film Processor



Industrial Viewing Lamps



Black And White Densitometers



Wire Rope Flaw Detectors



Key Products

Portable Eddy Current Flaw Detector ECT-S610



Right angle probe (included)



Pen probe (included)



- Real-time impedance plane and time base sweep display modes available
- Applicable to all kinds of metal materials and parts, such as weld cracks, copper pipe, seamless steel pipe, stainless steel pipe, folding, scars, pits, cracks, delamination and other defects, with high sensitivity

- Detection channel: channel 1 (X1-Y1), channel 2 (X2-Y2), mixing channel
- Detection frequency: 2
- Transmission frequency: 50Hz-10MHz
- Sampling frequency: 40MHz, 12-bit data acquisition

Ultrasonic Flaw Detectors



Digital Ultrasonic Flaw Detector (Advanced Type) UFD-P710



Digital Ultrasonic Flaw Detector (Excellent Type) UFD-C870



Digital Ultrasonic Flaw Detector (Standard Type) UFD-F720



Digital Ultrasonic Flaw Detector (Basic Type) UFD-B450



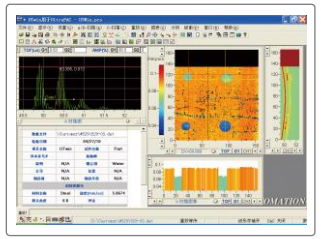
Digital Ultrasonic Flaw Detector (Basic Type) UFD-T680

Key Products

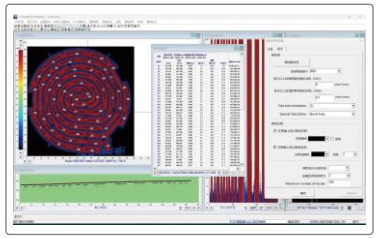
Ultrasonic Water Immersion Detection System



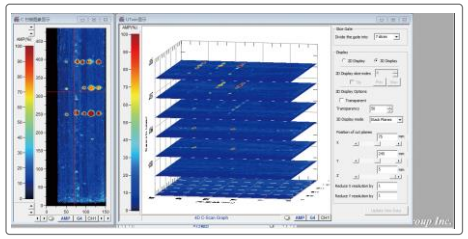
A, B, C, scanning integrated image interface



Defect automatic measurement Function interface



Ultrasonic tomography (CT) interface



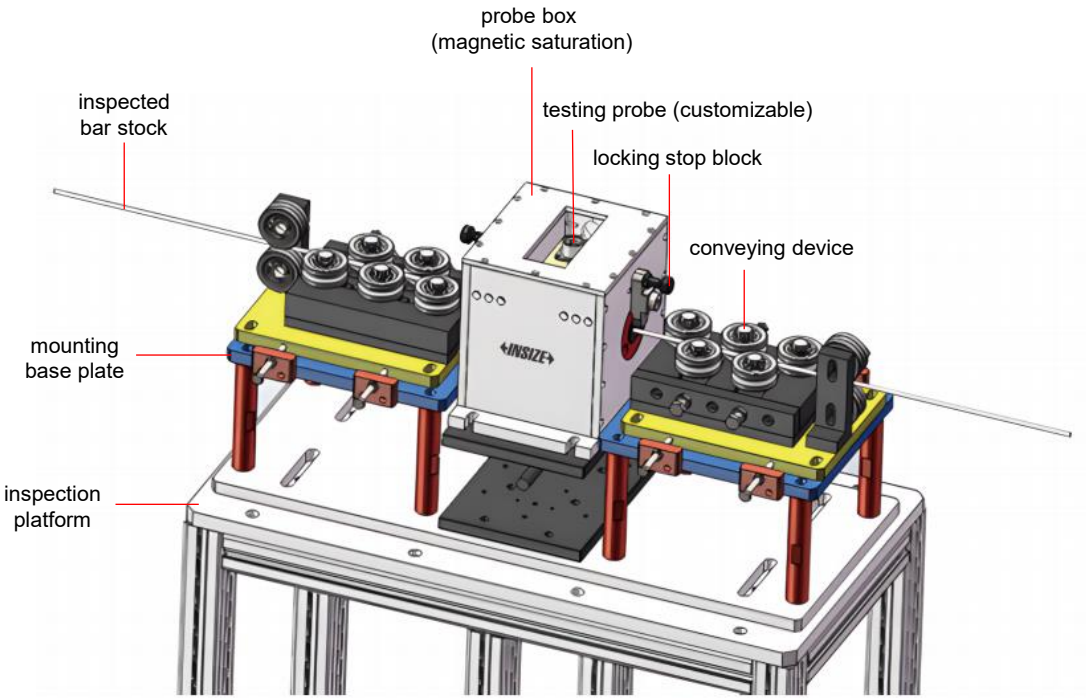
UT reporting interface



- Suitable for automatic scanning of inclusions, cracks, porosity, delamination and other defects in metal and composite parts
- Automatic localization, quantification, and statistical calculation of defects

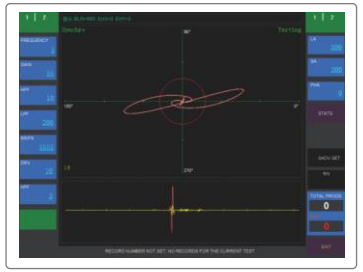
Key Products

Online Eddy Current Testing System ECT-WZ

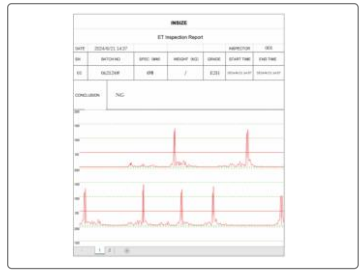


CUSTOMIZ ABLE

eddy current testing window



ET report display



- Capable of high-speed data processing, with a detection speed up to 1~1200 m/min
- High-performance DSP algorithm and signal processing enable the detection of microcracks with a depth of 0.05mm

- Measuring range: Ø1mm-Ø100mm(customizable)
- Detection sensitivity: detection of 0.05×0.01×5mm (D×W×L) crack notch with signal-to-noise ratio≥10dB
- Flaw detection speed: ＞0.5m/min

Key Products

Fluorescent Magnetic Particle Flaw Detector
MPI-FX1000

CAN BE CUSTOMIZED ACCORDING TO CUSTOMER NEEDS



Key Products

Intelligent Image UV Flaw Detection Light
MPI-SC608





3" touch LCD



Imaging

- UV-B/C content is 0
- Without preheating, instant start, instant on/off, no need to wait
- Continuous irradiation surface spot uniform, no dark areas, no point-like strong light source
- 13M UV-resistant specialized lens for high-definition photos and videos
- Precise measurement of small defects
- High-definition defects can be freely magnified up to 12 times (3 times optical magnification, 4 times electronic magnification)

- UV(Light)Lux: about 4000μW/cm²
- Covering area: Ø180mm (at 381mm distance)

Testing Machines, Force Gauges, Tension Meters (P1)

INSIZE

Electronic Universal Testing Machines



High And Low Temperature Test Chambers For Electronic Universal Testing Machines



Hydraulic Universal Testing Machines



Extensometers



Video Extensometers



Gauge Marking Instruments (Marking Point)



Gauge Marking Instruments (Marking Line)



Electro-Hydraulic Servo Flexural And Compressive Testing Machines



Servohydraulic Fatigue Testing Machines



Impact Testing Machines



Impact Standard Samples



Impact Specimen Notch Broaching Machines



Testing Machines, Force Gauges, Tension Meters (P2)

INSIZE

Impact Specimen Notch Projectors



Impact Broaches



Melt Flow Index Tester



Steel Bar Bending Testing Machines



Friction And Wear Testing Machines



Friction/Peel Testers



Terminal Tension Testers



Bond Force Testers



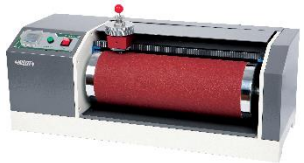
Package Drop Testing Machines



Paperboard Bursting Strength Tester



DIN Abrasion Tester



Pneumatic Key Life Testers



Testing Machines, Force Gauges, Tension Meters (P3)

Spring Hammers



Tablet Hardness Tester



Tensile And Compression Testing Machines



Automatic Spring Testing Machines



Digital Spring Testers



Force Gauges



Test Stands For Force Gauges



Force Gauges



Testing Machines, Force Gauges, Tension Meters (P4)

Tensile/Compression Sensors



Tube Force Gauges



Handheld Force/Torque Indicators



Wire Tension Meters



Cable Tension Meters



Infrared Belt Tension Meter



Belt Tension Meters



Spindle Tension Meters

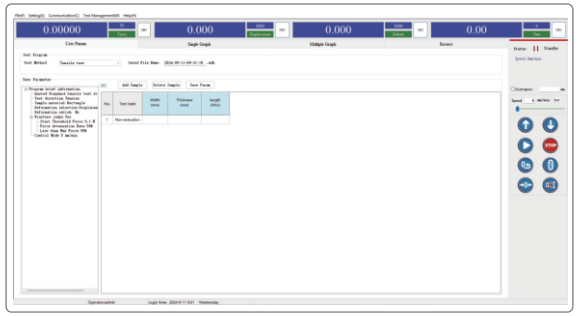


Key Products

Electronic Universal Testing Machines UTM-Z Series



Computer and software (included)



- Max. test force: 50N-5000N
- Accuracy class: class 0.5
- Accuracy of test force: ±0.5% of indicating value
- Range of test force: 0.4%-100%FS
- Resolution of test force: 1/300000FS
- Accuracy of displacement: ±0.5% of indicating value
- Resolution of displacement: 0.2μm
- Range of crossbeam speed: 0.001-1000mm/min
- Accuracy of crossbeam speed: ±0.5% of indicating value
- Range of force control speed: 0.05%-10%FS/s
- Accuracy of force control speed: ±0.5% of indicating value

Key Products

Electronic Universal Testing Machines

CUSTOMIZABLE

Electronic Universal Testing Machines UTM-E series



- Max. test force: 10kN-600kN
- Accuracy class: class 0.5
- Accuracy of test force: ±0.5% of indicated value
- Range of test force: 0.2%-100%FS
- Resolution of test force: 1/500000FS

High And Low Temperature Test Chambers For Electronic Universal Testing Machines UTT-M Series



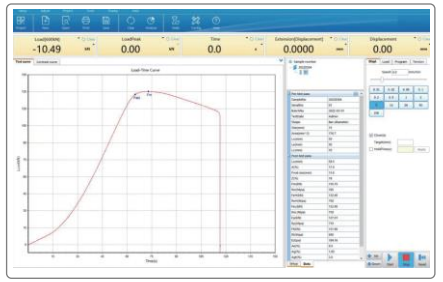
- Temperature range: -60~300°C
- Temperature accuracy: ±1°C
- Temperature fluctuation: ±0.5°C
- Temperature uniformity: ≤2°C
- Temperature resolution: 0.1°C

Key Products

Hydraulic Universal Testing Machines UTM-H Series



Computer and software (included)



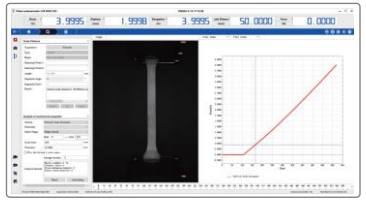
- Max. test force: 300kN-3000kN
- Accuracy: ±1%
- Test force measurement range: 2%-100%FS
- Resolution of test force measurement: 1/300000 of Max. test force (same resolution all the way)

Key Products

Video Extensometers UTM-M Series

- It is used for testing and analyzing the performance of specimens in tension, compression, bending, creep, fatigue, etc. It includes strain (elongation) measurement, tensile/compressive strength measurement, modulus of elasticity measurement and Poisson's ratio measurement

Software (included)





Application



- Resolution: 0.1μm
- Range of deformation: standard: 60-240mm
  extensions:100-1500mm (±1%)

Key Products

Electro-hydraulic Servo Flexural And Compressive Testing Machine UTM-RA10300



- Suitable for cementitious sand flexural test, cementitious sand compressive test and concrete flexural test
- With constant stress control and load holding function

Cementitious sand flexural fixture (included)



Cementitious sand compression fixture (included)



Application	flexural	compression
Max. test force	10kN	300kN
Accuracy class	0.5 class	
Accuracy of test force	±0.5% of indicated value	
Range of test force	1%-100%FS	
Resolution of test force	1/300000FS	

Key Products

Servohydraulic Fatigue Testing Machines

Servohydraulic Fatigue Testing Machines (Cylinder Down-mounted) FTM-D Series



- Max. test force: 50kN-500kN
- Accuracy of static force measurement: ±0.5% of indicated value
- Accuracy of dynamic force measurement: ±2% of indicated value
- Actuator stroke: ±75mm
- Accuracy of displacement measurement : linearity error<40μm, repeatability<0.001%FS
- Range of frequency: 0-100Hz

Servohydraulic Fatigue Testing Machines (Cylinder Up-mounted) FTM-U Series





- Max. test force:10kN-2500kN
- Accuracy of static force measurement: ±0.5% of indicated value
- Accuracy of dynamic force measurement: ±2% of indicated value
- Actuator stroke: ±75mm
- Accuracy of displacement measurement: linearity error<40μm, repeatability<0.001%FS
- Range of frequency: 0-100Hz

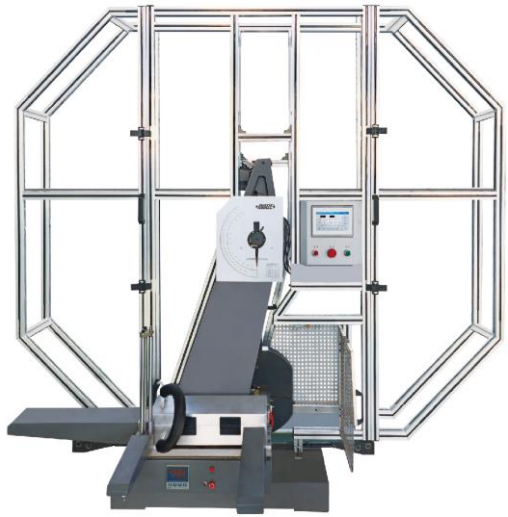
Key Products

Impact Testing Machines

- According to GB/T 3808, GB/T 229, JJG 145, ASTM E23(with American standard blade), ISO 148.1, ISO 148.2, ISO 148.3, ISO R83



Impact Testing Machines ITM-S Series



Low Temperature Automatic Impact Testing Machines ITM-T Series

Bending Testing Machines



Steel Bar Bending Testing Machines STM-D



Vertical Bending Testing Machine STM-E1



Metallic Material Reverse Bending Testing Machine STM-F1



Friction And Wear Testing Machine STM-C1

Key Products

Friction/Peel Testers STM-A Series



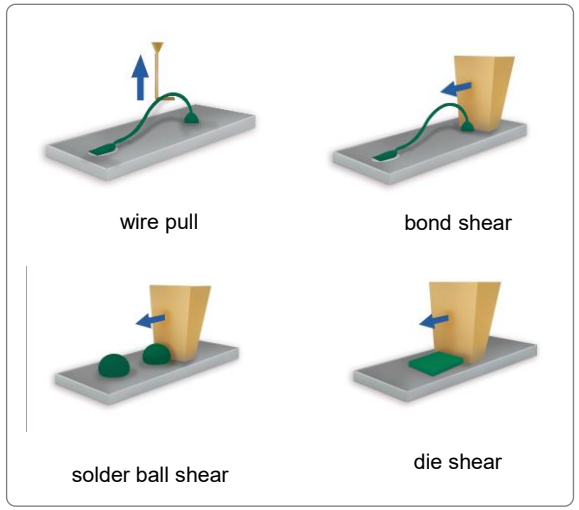
- Suitable for plastic film, foil, paper, cardboard, fabrics, communication cables and cables with metal materials composite belt, conveyor belt, paper and other related materials, dynamic and static coefficient of friction and adhesive composite products, medical patches, paper, protective film and other products, peel strength determination

- Max. test force: 5N-30N
- Accuracy of test force: ±0.5%
- Resolution of test force : 0.001N
- Range of test force: 0.5%-100%FS

Key Products

Bond Force Testers DTM-A Series

Measurement schematic





- Suitable for testing the strength of microelectronic after bonding, and adhesion testing between solder and substrate surfaces, and failure analysis
- Suitable for wire pull, bond shear, ball shear, die shear test

- Max. load capacity: 50KG-200KG
- Axis travel: X: 140-320mm
  Y: 140-320mm
  Z: 65-100mm
- Speed: 0.1-1000mm/min
- Min. travel distance of Z-axis: 0.25μm/0.1μm

Key Products

Electronic Tensile And Compression Testing Machines
UTM-SC Series

- Suitable for tensile, peeling and tearing tests of metal wires, metal foils, plastics, food packaging, textile fibres, wires and cables, adhesives, connectors and other industries

CUSTOMIZABLE



Test interface



- Max. test force: 100N-1000N
- Test force measurement range: 0.4%-100%FS
- Test force measurement resolution: 0.01N
- Test force measurement accuracy: ±0.5% of indicating value

Spring Testing Machines



Automatic Spring Testing Machines SRT-C Series



Automatic Spring Testing Machines SRT-W



Digital Spring Testers ISF-S Series

Digital Force Gauges (Standard Type) ISF-DF Series

• Type A and B can be used for tension and pressure tests, type C is only used for pressure tests

DATA OUTPUT



Type A

Type A (internal sensor):
• Load capacity: 5N-1000N
• Resolution: 0.0005N-0.1N
• Accuracy: ±0.2% FS



Type B

Type B (external sensor):
• Load capacity: 1000N-20000N
• Resolution: 0.1N-5N
• Accuracy: ±0.2% FS



Type C

Type C (external sensor):
• Load capacity: 10kN-200kN
• Resolution: 0.001kN-0.05kN
• Accuracy: ±0.2% FS

Test Stand For Force Gauges



Test Stand For Digital Force Gauges ISF-MT1K



Manual Vertical Test Stands For Force Gauges ISF-V10A/ISF-V10D



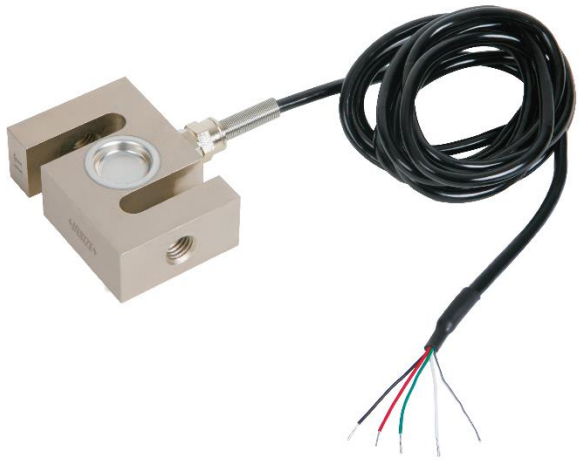
Manual Horizontal Test Stands For Force Gauges ISF-H20A/ISF-H20D



Manual Stripping Force Test Stands ISF-P30A/ISF-P30D

S-Type Tensile/Compression Sensors





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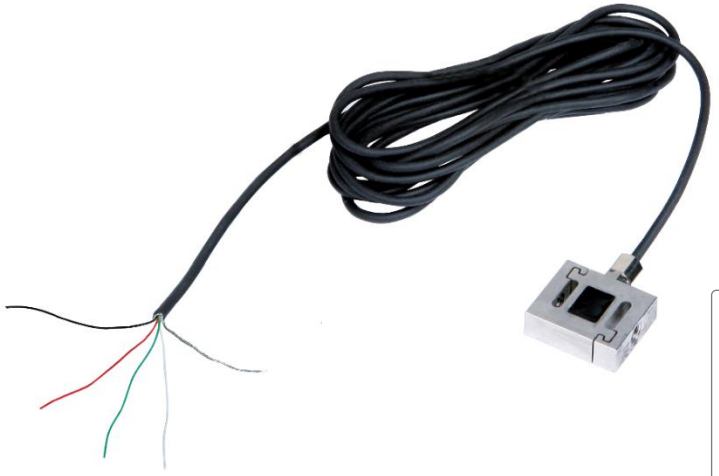
Connected with handheld indicator (optional)





8651

Connected with handheld indicator (optional)

Wire Tension Meters

- Suitable for testing the tension of stranding machines, winding machines, wire cutting machines, carbon fibre winding equipments, fibre optic winding equipments, fibre optic cable production equipments, glass fibre winding equipments, steel cord production equipments, steel wire rope production equipments and so on

Wire Tension Meters ISF-DT



- Accuracy class: ±2%FS
- Range of test force: 2.0cN-2000cN
- Test force resolution: 0.1cN-1N

- For tension measurement of high-speed threads: textiles,chemical fibers, fine wires

High-speed Wire Tension Meters ISF-DV



- Accuracy class: ±3%FS
- Range of test force: 1cN-500cN
- Test force resolution: 0.1cN/1cN

Torque Testers, Torque Wrenches (P1)

Torsion Testing Machines



Torque Testers



Torque Testers



Torque Wrench Test Stands



Dynamic Torque Sensors



Torque Sensors



Handheld Force/Torque Indicators



Torque Screwdrivers



Desktop Automatic Tightening Machines



Electric Screwdrivers



Torque Testers For Electric Screwdrivers



Digital Torque Wrenches



Torque Testers, Torque Wrenches (P2)

Interchangeable Head Preset Digital "Click" Torque Wrenches (WiFi Lan)



Interchangeable Head Production-Grade Color Digital Torque Wrenches (WIFI Lan)



Color Screen Multifunctional Digital Torque Wrenches



Torque Wrenches



Preset Torque Wrenches



Automatic Torque Wrench Calibrator



Dial Torque Wrenches



Torque Adapters



Torque Multipliers



Hydraulic Torque Wrenches With Drive Shaft



Electromagnetic Ultrasonic Bolt Axial Force Tester



Key Products

Electronic Torsion Testing Machines UTM-TT

- Suitable for torsion testing of metallic and non-metallic materials, composite materials and components

OPTIONAL ACCURACY CLASS: CLASS 0.5



Code	Type A	Type B
Max. test torque	2N.m-50N.m	200N.m-5000N.m
Accuracy of test torque	±1% of indicated value	
Range of test torque	2%-100%FS	
Min. resolution of test torque	0.0001N.m-0.001N.m	0.01N.m-0. 1N.m
Accuracy of torsion angle	±1% of indicated value	
Range of torsion angle	0-9999°	
Resolution of torsion angle	0.01°	
Accuracy of torsion angle speed	±1% of the set value	
Accuracy of constant load torque	±1% of the set value	

Key Products

Torque Sensors IST Series

Dynamic Torque Sensors



single key joint

- Overall accuracy: ±0.2%FS
- Repeatability: 0.1%FS
- Response frequency: 2kHz
- Maximum range: 1N.m-20000N.m

Static Torque Sensors



- Output sensitivity: 1.0-2.0mV/V
- Zero output: ±1%FS
- Accuracy: ±0.2%FS
- Repeatability: ±0.2%FS
- Maximum range: 10N.m-5000N.m

Key Products

Handheld Force/Torque Indicators ISF-DG Series

- For use with force sensors and torque sensors
- Three modes of real-time value display, peak value display and valley value display
- High sampling rate captures peak value accurately
- Parameter backup and restoration, even if the parameters are messed up, you can restore them with a single click
- Weightless calibration, just enter the sensor parameters and you are ready for calibration
- A variety of alarm options: upper limit alarm, lower limit alarm, peak and valley alarm, over 1.2 times of the range alarm





graph mode



example of torque sensor connection



example of force sensor connection

- Max. sampling frequency: 3200Hz-12800Hz
- Accuracy: ±0.1%(of load capacity)

Torque Screwdrivers



Digital Torque Screwdrivers
IST-SD Series

- Range: 10-400cN.m
- Resolution: 0.1cN.m
- Accuracy: ±2.5%/±3% (clockwise)
  ±3.5%/±4% (counter-clockwise)



Bluetooth Digital Torque Screwdrivers
(Keyboard Signal) IST-3SD Series

- Range: 10-600cN.m
- Resolution: 0.1cN.m
- Accuracy: ±2% (clockwise)
  ±3% (counter-clockwise)



Torque Screwdrivers
IST-MG Series

- Range (clockwise): 20cN.m–6.0N.m
- Graduation: 2cN.m/5cN.m/0.1N.m
- Accuracy: ±6%

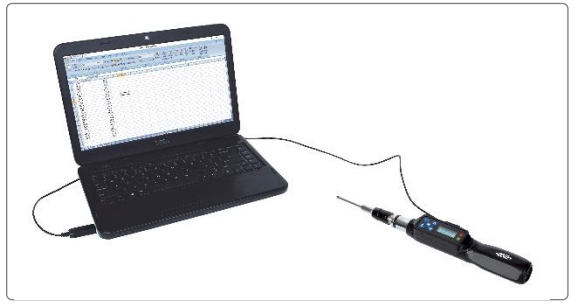
Key Products

Digital Torque Screwdrivers

Wired Transmission Digital Torque Screwdrivers IST-5SD Series



Application



Build-in Wireless Digital Torque Screwdrivers IST-4SD Series



Application



Key Products

Desktop Automatic Tightening Machine ATM

CUSTOMIZED ACCORDING TO WORKPIECES

Screw feeding system





- Positioning repeatability: ±0.05mm
- Number of preset positioning programs: 80
- Number of positioning points for one program: 350
- Applicable torque range: 0.01-7.50n.M
- Applicable screw outside diameter: 1.0-7.0mm
- Torque accuracy: ±5% at 30%~80% of maximum output torque, ±8% in other range

Key Products

Intelligent Electric Screwdrivers (Current Control)
HES-E



- Torque range: 0.01-5.50N.m
- Max. speed: 800-5000rpm
- Torque accuracy: ±5% at 30%~80% of maximum output torque, ±8% in other range

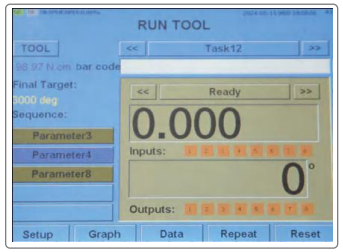


Controller type A



Controller type B

Controller (included)



Interface of tightening parameter setting



Balance arm (optional)



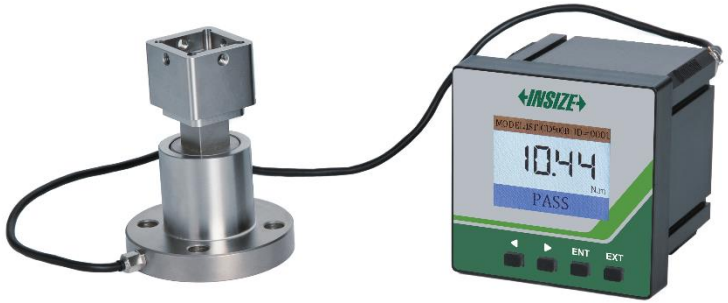
Key Products

Torque Testers For Electric Screwdrivers
IST-CD Series

- Compatible with all electric screwdrivers
- Widely used in manufacturing sectors such as 3C, new energy, automotive parts and etc.
- Compact in size, extremely easy to integrate, and designed specifically for automated assembly lines
- Set upper and lower tolerance limits and output pass/fail signals via I/O ports which can be connected to external alarm indicator or PLC



IST-CD50A



IST-CD500B

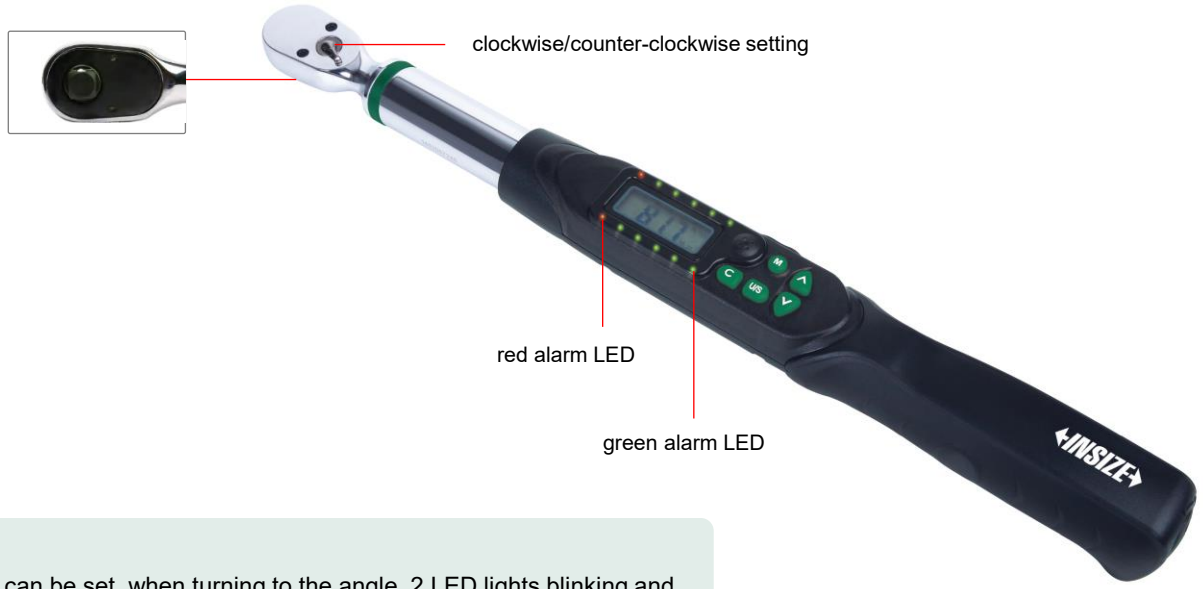
Code	IST-CD08A	IST-CD50A	IST-CD100A	IST-CD02B	IST-CD08B	IST-CD50B	IST-CD100B	IST-CD500B
Type	A (integrated type)			B (split type, embedded mounting of display meter)				
Optimal measurement range	0.08~0.8N.m	0.5~5N.m	1~10N.m	0.02~0.2N.m	0.08~0.8N.m	0.5~5N.m	1~10N.m	5~50N.m
Accuracy	±1% of indicated value							

Key Products

Quality Inspection Torque Wrenches IST-4W Series

OPTIONAL ACCURACY: CLOCKWISE: ±1%
COUNTER-CLOCKWISE: ±2% ONLY FOR RANGE 6~340N.m

MEASURE THE TORQUE OF TIGHTENED BOLTS



- Three measuring modes:
  Angle mode: rotation angle can be set, when turning to the angle, 2 LED lights blinking and buzzer beeping, capturing torque values
  Maximum value display mode: capturing peak torque values
  Real-time value display mode: real-time tracking of torque values
- In angle mode and maximum value mode, upper and lower tolerance limits can be set to determine pass or fail by LED lights
- Clockwise and count-clockwise operation

Type A
- Range: 6-340N.m
- Resolution: 0.01N.m/0.1N.m
- Accuracy: clockwise: ±2%
  counter-clock wise: ±3%

Type B
- Range: 170-2000N.m
- Resolution: 0.1N.m/1N.m
- Accuracy: clockwise: ±2.5%
  counter-clock wise: ±3.5%

Key Products

Interchangeable Head Wired Transmission Digital Torque Wrenches IST-47W Series

DATA OUTPUT



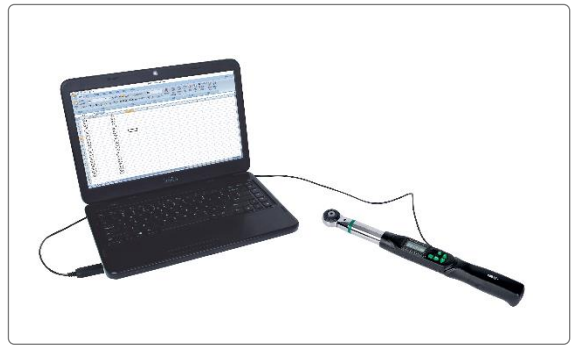
Type A



Type B

Type C

Application



Type	A	B	C
Range	1.2-20N.m	6-340N.m	100-850N.m
Resolution	0.001/0.01N.m	0.01/0.1N.m	0.1N.m
Accuracy	cw: ±2%, ccw: ±3%		cw: ±2.5%, ccw: ±3.5%

Key Products

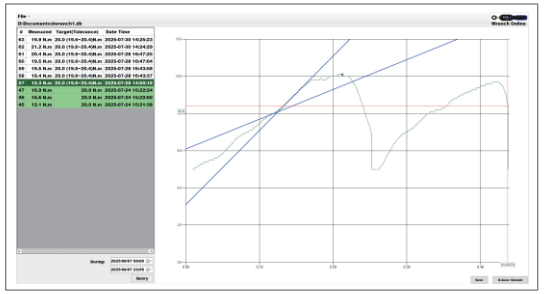
Color Screen Multifunctional Digital Torque Wrenches
IST-40W



- Clockwise and counter-clockwise operation
- Maximum value and real-time value displayed simultaneously
- Three display modes for torque values: pointer, numerical, and curve
- Upper and lower tolerance limits can be set to determine pass or fail by LED lights
- The data is stored in the wrench when the wrench is disconnected, and the data is automatically uploaded to computer after transmission cable is connected to the software
- Real-time uploading of data when transmission cable is connected to the software

DATA OUTPUT

Software (included)





pointer mode



numerical mode



curve mode

- Range: 6-340N.m
- Resolution: 0.01N.m/0.1N.m
- Accuracy: clockwise: ±2%
  counter-clock wise: ±3%

Key Products

Interchangeable Head Wired Transmission Preset Digital “Click” Torque Wrenches (Mini Type) IST-46W Series

- Mini-sized about of a palm
- Maintain the click audible alarm feature of mechanical wrench
- Mechanical structure adjusts torque value, digital sensor displays real torque value
- Track, peak and first peak “click” working modes
- Upper and lower tolerance limits can be set and measurement results automatically calculate % difference from target value
- 10 preset target torque values and usage modes, parameters can be locked to prevent change



mechanical torque adjustment



square socket



DATA OUTPUT

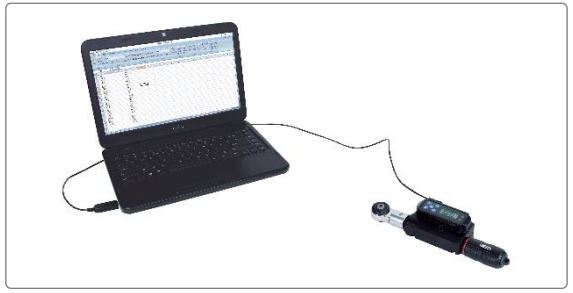


ratchet head (included)



torque adjustment tool (included)

Application



- Range: 1.2-20N.m
- Resolution: 0.001N.m/0.01N.m
- Accuracy: ±3%

Key Products

Built-in Wireless Digital Torque Wrenches (Keyboard Signal) IST-42W Series

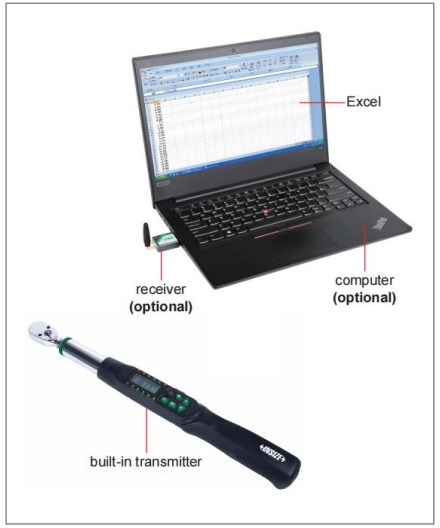
DATA OUTPUT

clockwise/counter-clockwise setting



Type B

Application



Type	Type A	Type B	Type C
Range	1.2N.m-20N.m	6N.m-500N.m	170N.m-2000N.m
Resolution	0.001N.m-0.1N.m		0.1N.m-1N.m
Accuracy	Clockwise : ±2%~±2.5%, counter-clockwise : ±3%~±3.5%		

Key Products

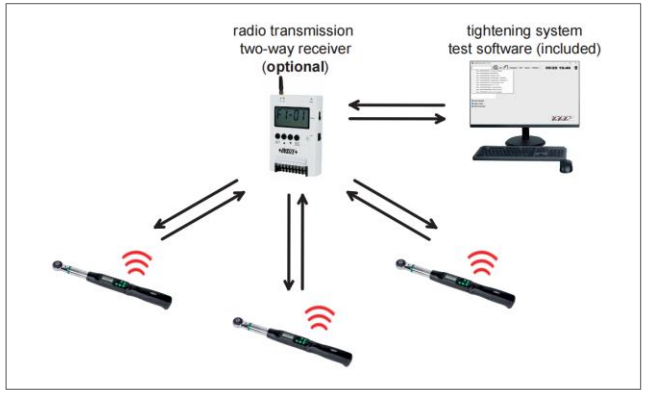
Interchangeable Head Two-way Wireless All-mode Digital Torque Wrenches IST-45W Series

ALL MODE | ANGLE CURVE | DATA OUTPUT



- Unit: N.m, in.lb, ft.lb, kg.cm, °
- Clockwise and counter-clockwise operation
- Includes all operating modes of the digital torque wrench
- Upper and lower tolerance limits can be set to determine pass or fail by LED lights, can set whether to send beyond tolerance limits
- 10 preset target values and usage modes, parameters can be locked to prevent change

Data transmission application

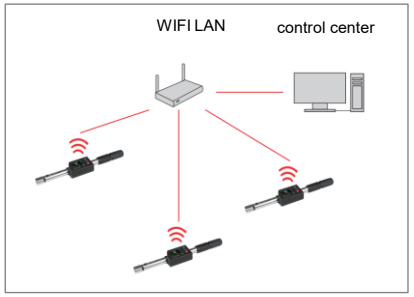


- Range: 2.4-410N.m
- Resolution: 0.01N.m/0.1N.m
- Accuracy: CW: ±2%
  CCW: ±3%, ±2° (rotate 90°)

Key Products

Interchangeable Head Digital “Click” Torque Wrenches (Wifi Lan) IST-WPE Series

Application

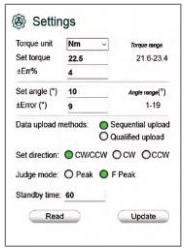




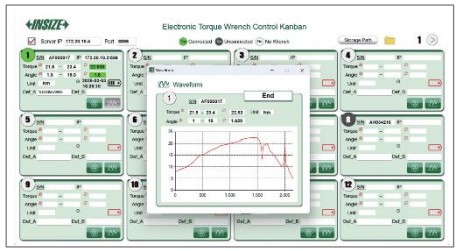
DATA OUTPUT

- Clockwise and counter-clockwise operation
- Mechanical structure adjusts torque value, digital sensor displays real torque value, wrench can be used without torque tester
- Set the angle range to strictly monitor angle of the screw from fitting surface to tightening
- Interval display of curved interface and main interface after unloading, upper and lower tolerance limits can be set to determine pass or fail by LED lights
- Provide torque graph for analyzing and adjusting the tightening strategy
- Scanning module and scanning windows to match corresponding screws
- Open communication protocols for users to develop and interface with factory MES, PLC and other systems

Parameter setting software (included)



Work display software (included)



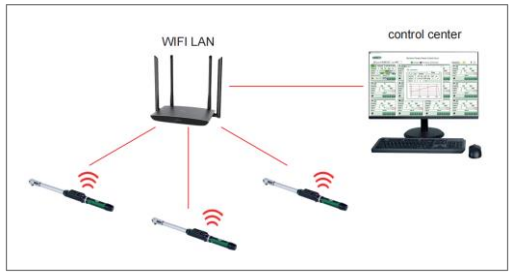
- Range: 2-400N.m
- Resolution: 0.001N.m-0.1N.m
- Accuracy: Torque: ±3%
  Angle: ±1% of indicated value + ±1° (speed 10°~180°/s) + ±1° (clamping error)

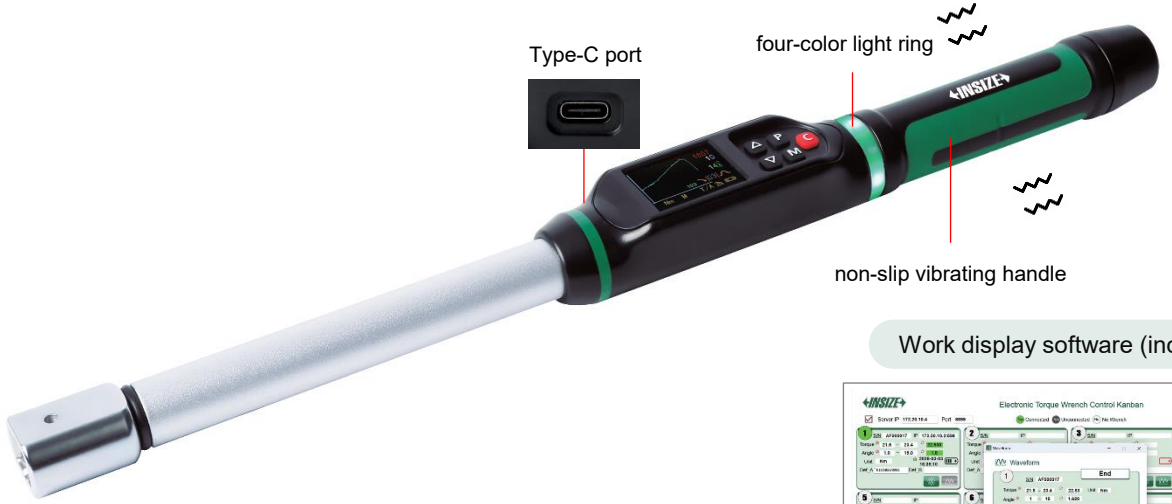
Key Products

Interchangeable Head Production-grade Color Digital Torque Wrenches (Wifi Lan) IST-WEC Series

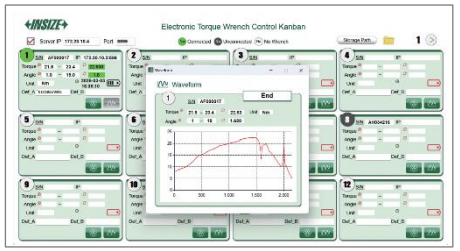
DATA OUTPUT

Basic transmission software application

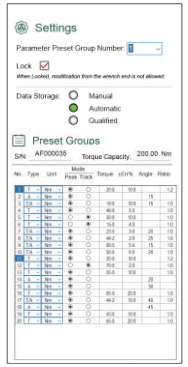




Work display software (included)



Parameter setting software (included)



- Aluminum tube body for lighter use
- Unit: N.m, cN.m, lb.in, lb.ft, kg.cm, kg.m, oz.in, °
- Clockwise and counter-clockwise operation
- 20 preset parameter groups are available for recall which can be locked to prevent changes and switching
- Interval display of curved interface and main interface after unloading

- Range: 1-400N.m
- Resolution: 0.001N.m-0.1N.m
- Accuracy: Torque: CW: ±2% , CCW: ±3%
  Angle : ±1% of indicated value + ±1° (speed 10°~180°/s) + ±1° (clamping error)

Torque Wrenches



Digital Torque Wrenches
IST-W Series



Mechanical Torque Wrenches
(Digital Setting) IST-19WM Series



Torque Wrenches
IST-9WM Series



Preset Torque Wrenches
IST-PW Series



Dial Torque Wrenches
IST-DW Series

Digital torque wrench transmission mode

Wired transmission (keyboard signal)

- Keyboard signal through a cable, can be transmitted to Excel, Word, Txt, etc.
- Press the output button once to output a value

Bluetooth transmission (keyboard signal)

- Built-in Bluetooth 4.0 module, which can be connected with computers (with Bluetooth function), mobile phones, tablets and other devices
- Keyboard signal, can be transmitted to Excel, Word, TXT
- Transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Bluetooth connection and disconnection are respectively shown by indicator lights

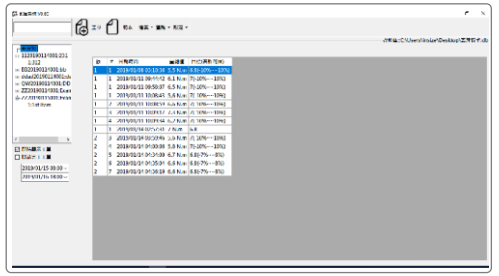
Two-way radio transmission

- A two-way receiver can be connected with up to 10 wrenches at the same time, and the maximum transmission distance is 100 meters
- Two data transmission modes: automatic or press button to send
- When the wrench is disconnected, data is stored in the wrench and automatically sent to computer after wireless connection

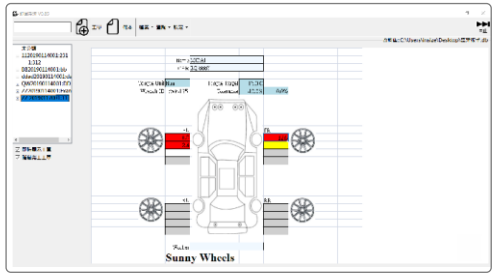
Two-way bluetooth transmission

- Data transmission via bluetooth (bluetooth 4.0)
- Two-way transmission and control
- Transmission distance: 10m (no obstacles, no electromagnetic interference)
- Bluetooth connection and disconnection are displayed by indicator light
- Two data transmission modes: automatic or press button to send
- When the wrench is disconnected, data is stored in the wrench and automatically sent to computer after connection via Bluetooth

Data transmission mode



Program guidance mode



Digital Torque Wrenches



Small Range Digital Torque Wrenches IST-WP Series



Short Handle Digital Torque Wrenches IST-WS Series



Interchangeable Head Quality Inspection Torque Wrenches IST-16W Series



Digital Angle Torque Wrenches IST-1W Series



Digital Torque Wrenches IST-W Series



Swing-head Digital Torque Wrenches IST-21W Series



Adjustable Open Head Digital Torque Wrenches IST-24W Series

Key Products

Automatic Torque Wrench Calibrator IST-HT1000

- Unit: N.m, cN.m, in.lb, ft.lb, kg.cm
- Automatically load clockwise or counterclockwise
- The test curve can be displayed in real time
- Four test modes: preset mode, preset mode (manual), indication mode (standard), indication mode (device under test)
- Single-point and multi-point automated testing and fatigue testing of torque wrenches

AUTO LOAD



computer and software (included)



selection of test modes on the calibrator



calibrator test process interface

- Automatic load torque range: 1~1000N.m
- Sampling frequency: ≥1500Hz
- Arm length range: 135~1575mm
- Limit stop angle: ±20°
- Adaptor: 3/4" to 1/2", 3/4" to 3/8", 3/4" to 1/4"

Key Products

Electromagnetic Ultrasonic Bolt Axial Force Tester
UFT-Q100

- Primarily applied in wind power, oil and petrochemical, nuclear power, hydrogen energy, heavy industry, and other sectors

PROBE CAN BE CUSTOMIZED ACCORDING TO SPECIAL BOLT SPECIFICATION

DATA OUTPUT

PROBE CAN BE CUSTOMIZED ACCORDING TO WORKING TEMPERATURE



Application



- Measurement method: electromagnetic ultrasonic single-wave and dual-wave measurement methods
- Applicable bolt range: M8~M42, length less than 6m
- Applicable bolt surface: front end is flat, rear end can adapt to different types
- Accuracy of axial force: ±5%(when calibrated precisely)
- Manual testing speed: 4~10s/piece

Component Analysis

Handheld XRF Alloy Analyzers



Handheld LIBS Spectrometers



XRF Spectrometers



XRF Precious Metals Analyzer



XRF Oil Analyzers



Standard Sheets For XRF Plating Thickness Instruments



Spark Direct Reading Spectrometers



Standard Samples For Spectral Analysis



Spectral Sample Grinders



Carbon And Sulfur Analyzers



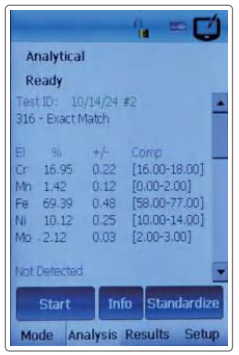
Oxygen|Nitrogen|Hydrogen Analyzers



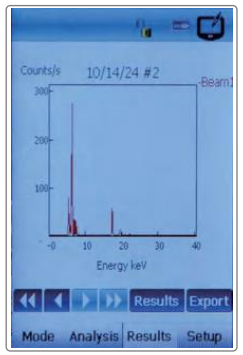
Key Products

Handheld XRF Alloy Analyzer (Basic Type)
HSM-A310

Test interface



Spectral analysis





- Fast and non-destructive test to identify alloy grade and composition
- For iron-based alloys (stainless steels, chromium/molybdenum alloys, low alloy steels, tool steels, seamless steels), nickel-based alloys, cobalt-based alloys, titanium-based alloys, copper-based alloys, high-temperature alloys (molybdenum/tungsten alloys), aluminium-based alloys

Elemental analysis range	**K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Zr, Nb, Mo, Ru, Rh, Pd, Ag, Cd, Sn, Sb, Ba, Ta, Hf, W, Re, Ir, Pt, Au, Hg, Pb, Bi**
Alloy analysis mode	**1. iron-based alloys (stainless steels, chromium/molybdenum alloys, low alloy steels, tool steels, seamless steels), nickel-based alloys, cobalt-based alloys, titanium-based alloys, copper-based alloys, molybdenum/tungsten-based alloys, aluminium-based alloys** **2. comes with 288 commonly used alloy grades** **3. can create your own grade database**

Key Products

Handheld XRF Alloy Analyzers (Advanced Type)
HSM-S Series

- Widely used in alloy identification, metal scrap recycling, and quality assurance/control processes within the metal manufacturing industry
- High accuracy, fast measurement speed, and intuitive display of alloy grades, element percentages (with up to 0.001% resolution), and ppm-level concentrations

CAN BE CUSTOMIZED

DATA OUTPUT



316 reference sample (included)



window protective film (included)



Code	HSM-S110	HSM-S130	HSM-S150	HSM-S620	HSM-S640	HSM-S650
Analysis mode*	alloy analysis	alloy analysis plating analysis	precious metal analysis	alloy analysis	alloy analysis plating analysis	precious metal analysis
Detector	Si-PIN			SDD		
Elemental analysis range	Ti~U			Mg~U		
Target material	Ag target			Rh target		

*can be customized according to user requirements: RoHS analysis mode, ore analysis mode

Key Products

Handheld Libs Spectrometer HLS-B410

- Widely used in metallurgy, casting, steel, non-ferrous metals and scrap metal recycling, etc.
- Ability to quickly analyze the metal elements of materials for quantitative characterization and grade differentiation

EYE SAFE LASER

LASER CLASS CLASS I

NO RADIATION

IP54 WATERPROOF



Application

alloy analysis	**can be used for almost all alloys, including scrap metal, high temperature alloys, alloy steel, stainless steel, tool steel, chromium molybdenum steel, aluminum alloys, nickel alloys, titanium alloys, cobalt alloys, copper alloys, precious metals, zinc alloys, anomalous alloys, zirconium alloys, mixed alloys, etc.**
material properties identification (PMI)	**can be used for quality control in the metal fabrication and processing industry to analyze material composition and identify alloy grades for a wide range of materials including critical components, raw materials, and welded seams**

Test interface



XRF Plating Thickness Instrument

MANUAL ZOOM



XRF Plating Thickness Instrument
XRF-PT230

AUTOMATIC MOBILE PLATFORM



Automatic XRF Plating Thickness Instrument
XRF-FA350

VACUUM SYSTEM MANUAL ZOOM



Vacuum XRF Plating Thickness Instrument/Rohs Analyzer XRF-VF300

Key Products

Spark Direct Reading Spectrometers

Spark Direct Reading Spectrometer (Basic Type) OES-T350



- Rowland circle of diameter: 350mm
- Wavelength range: 160-510nm
- Pixel resolution: 20pm
- Spark frequency: 100-1000hz

Portable Spark Direct Reading Spectrometer OES-P200



- Detector: high performance CMOS
- Optical system construction: paschen-runge double optical chamber structure
- Raster scribing: 3600 lines/mm
- Ultraviolet focal length: 298mm

Key Products

Handheld Raman Spectrometers

Handheld Raman Spectrometer (Basic Type) HHL-R240



- Excitation wavelength: 785±0.5nm
- Wavenumber range: 200-4000cm $^{-1}$
- Resolution: 10cm $^{-1}$

- Equipped with raman spectral recognition algorithms, including standard spectra of up to 10,000 kinds of substances

Handheld Raman Spectrometer (Advanced Type) HHL-S360



- Wavelength: 1064nm
- Wavenumber range: 200-2500cm $^{-1}$
- Resolution: 14cm $^{-1}$

- Widely used in industry, medicine, environmental protection, food, public security, defense, etc.
- For the qualitative identification of inorganic and organic substances in various forms

Coating and Paint Testing (P1)

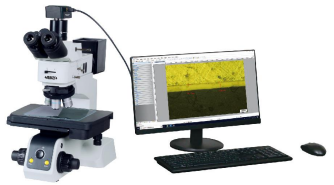
Coating Thickness Gauges



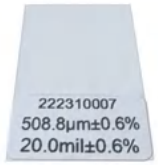
Coating Thickness Gauges (Advanced Type)



Coating/Film Thickness Measurement Systems



Calibration Foils For Coating Thickness Gauges



Surface Profile Gauges



Wet Film Gauges



Gloss Meters



Spectrophotometers



Holiday Detectors



Digital Adhesion Testers



Automatic Pencil Hardness Tester



Pencil Hardness Testers



Coating and Paint Testing (P2)

Rotational Abrasion Testers



Cross Cut Adhesion Testers



Conical Mandrel Test Apparatus



Impact Testers



ISO Flow Cups



Rotational Viscometers



Coating Thickness Gauges



Coating Thickness Gauge (Standard Type) 9501-1200



Coating Thickness Gauge (Advanced Type) 5402-TC21



Coating Thickness Gauge (Basic Type) ISO-1000FN



Coating Thickness Gauge (Basic Type) ISO-1200FN



Double Screen Coating Thickness Gauge 5404-QM42

Key Products

Coating Thickness Gauges (Advanced Type)



Coating Thickness Gauges (Advanced Type) 5411

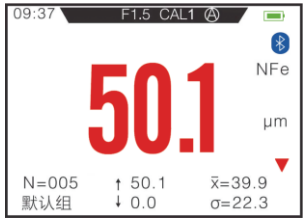


5413-TC31-FN15 probe (included)

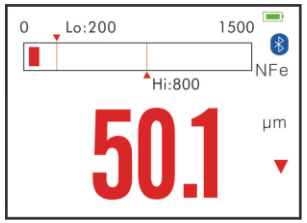
Coating Thickness Gauge (Advanced Type) 5413-TC31



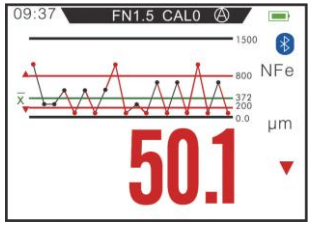
reading only



reading and statistics



reading and bar graph



reading and run chart

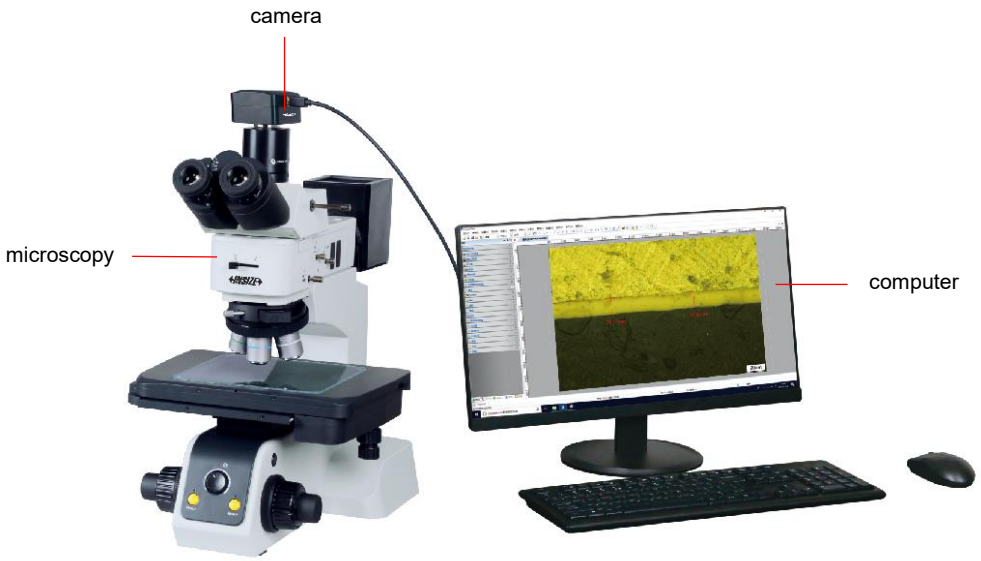
- Can measure the thickness of non-magnetic coating and non-metallic coating on magnetic metal substrate
  Substrate: iron, steel, magnetic stainless steel
  Coating: zinc, aluminum, copper, chrome, tin, plastic, powder, paint (not for nickel)
- Can measure the thickness of non-conductive coating on non-magnetic metal substrate
  Substrate: copper, aluminum, zinc, non-magnetic stainless steel
  Coating: plastic, powder, paint, anodizing (not for chrome and zinc plating)

Code	5413-TC31	5411-TC15	5411-TC30	5411-TF50
Measuring range	0~1500μm*	FE/NFE (auto recognition): 0~1500μm	FE/NFE (auto recognition): 0~3000μm	FE: 0~5000μm
Accuracy	±(2%L+1μm): ≤1500μm ±(3%L+1.5μm): >1500μm, L is measuring thickness in μm			

* Interchangeable probes provide multiple ranges

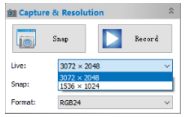
Key Products

Coating/Film Thickness Measurement Systems
MTF-Y430

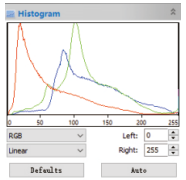


- Suitable for measuring the thickness of various coatings or multi-layer composite films, with a wide measurement range
- Capable of analyzing the quality of coatings and identifying the causes of defects (such as pores, cracks, inclusions, peeling, etc.)

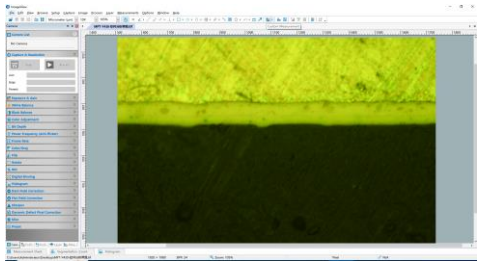
Image measurement software (included)

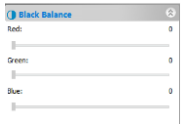


selectable resolution

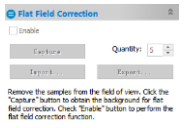


histogram (quantify the distribution of color and brightness)

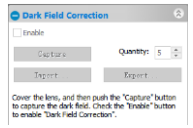




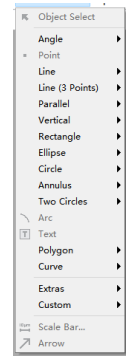
black balance (reduce color difference)



flat field correction (reduce brightness difference)



dark field correction (reduce thermal noise)



measurement items

Gloss Meters



Gloss Meters
5702-DG8



Built-In Bluetooth Microporous Gloss Meter
5712



Microporous Gloss Meter
(Advanced Type) 5711-SG60



20°/60°/85° Gloss Meter
ISQ-DG8

Colorimeters



Colorimeter
5700-LS35



Handheld Spectrophotometers
5701-D40



Portable Spectrophotometer
9710-30



Multi-angle Spectrophotometer
5705-MS45



Spectrophotometer
5706-DS01

Key Products

Digital Adhesion Tester SPT-AD21



Ø20mm dolly (included)



Cutting tool (included)



Glue gun and glue (included)



- Resolution: 0.01MPa (1psi)
- Accuracy: ±1% full scale
- Pull-off force: 0.7-20MPa

Other Instruments

Industrial Acoustic Imager



Parts Cleanliness Testing Cabinets



Automatic Cleanliness Analysis Systems



Oil Testing



Bearing Radial Clearance Tester



Contact Angle Goniometer



Laser Projection Systems



Vibration Isolation Platforms



Transport Simulation Vibration Tester



Key Products

Industrial Acoustic Imagers

IP56 WATERPROOF

Industrial Acoustic Imager SCX-DMM72





DATA OUTPUT

IP54 WATERPROOF

Industrial Acoustic Imager SCA-M136



Application



Key Products

Parts Cleanliness Testing Systems



Parts Cleanliness Testing Cabinet
OPP-GZ01



Automatic Cleanliness Analysis System (Advanced Type) OPP-OM53



Automatic Cleanliness Analysis System (standard Type) OPP-OS18

Oil Testing



Online Oil Particle Counters
PSC-ZX100



Portable Oil Particle Counter
(Basic Type) PSC-BX200



Portable Oil Particle Counter
(Standard Type) PSC-BX300



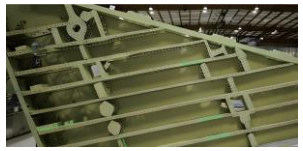
Oil Particle Counter (Standard Type)
PSC-TX100

Key Products

Laser Projection Systems DLP-L

- Used to composite layup, aerospace, automotive engineering, shipbuilding, rail transit, precast concrete production and heavy machinery
- Suitable for precision positioning, operation guidance, laser marking, drilling, welding and defect inspection

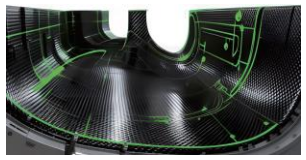
Application


aerospace


automotive


marine


construction & heavy industry


composite materials


rail transit

PARTIAL PROJECTION



can be used with a tripod
(computer is not included)



Code	DLP-L100	DLP-L600
Sensor	laser scanning sensor	high-precision binocular vision system+ laser scanning sensor
Working distance	1.5~10m (camera), 1.5~15m (laser)	
Projection accuracy	≥0.25mm	
Data formats	IGS, IGES, STP, STEP, DXF, DWG, PLY, compatible with FiberSIM, CATIA CPD software type	

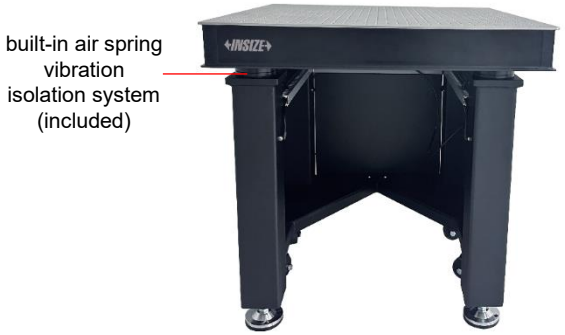
Key Products

Vibration Isolation Platforms



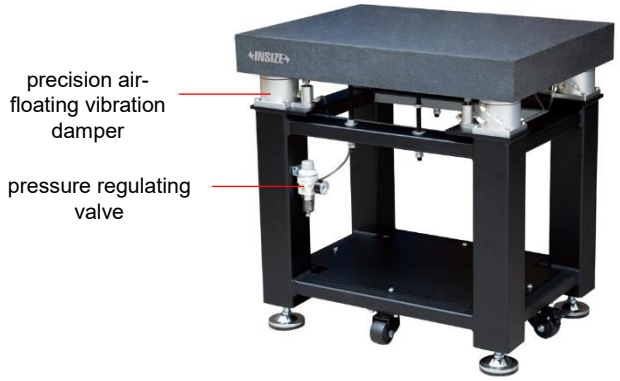
0790-B

- Countertop material: marble/honeycomb platen
- Countertop thickness: 100mm/200mm
- Max. load: 400kg-800kg
- Dimension (L×W×H):
  800×800×800mm-2000×1200×800mm



0791-S

- Countertop material: marble/honeycomb platen
- Countertop thickness: 100mm/200mm
- Max. load: 500kg/800kg
- Dimension (L×W×H):
  800×800×800mm-2000×1200×800mm



0792-A

- Countertop material: marble/honeycomb platen
- Countertop thickness: 100mm-200mm
- Max. load: 300kg-1500kg
- Dimension (L×W×H):
  800×600×780mm-1600×1200×780mm


INSIZE
THANKS !
Quality | Innovation | Service | Value