MEASURING DATA MANAGEMENT SOFTWARE
CODE 7316-10

Quality Control Chart

Quality Report

Data Management

DATA BASE

VIDEO

Direct Transmission
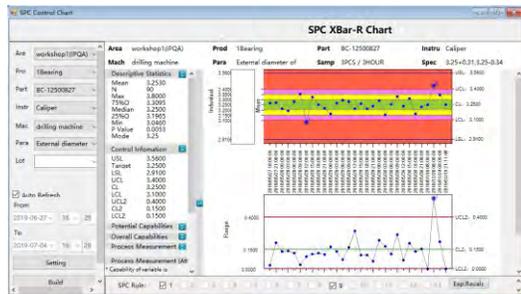
Measuring tools are connected with computer, press button to transmit data

cable connection

wireless connection
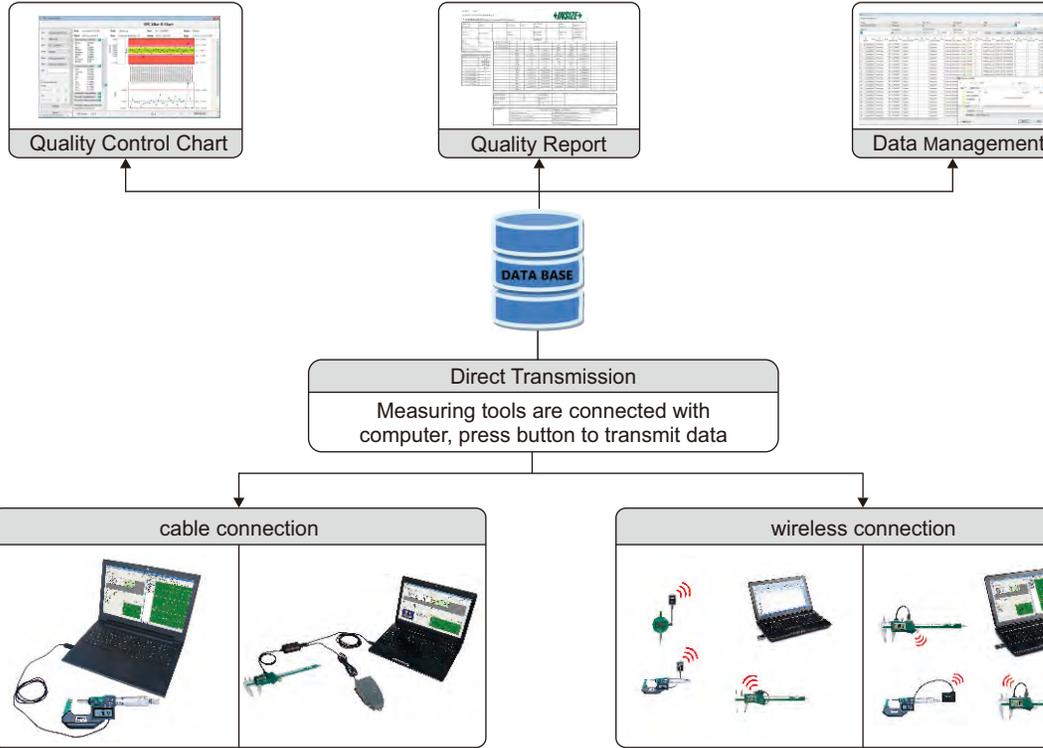
Direct Transmission
- Transmit data through cables or wireless systems

Data Management
- Measuring data are stored in database
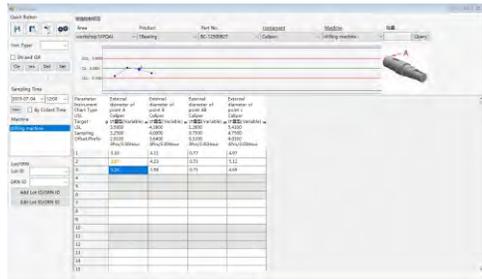
Quality Control Chart
- Analyze the tendency of data, make production adjustment in advance

Quality Report
- Generate different EXCEL report formats according to requirements

VIDEO

- Through wireless transmission, the measurement data can be transmitted to computers or mobile phones
- For windows and android systems
- Wireless zigbee protocol, conforming to IEEE802, 2.4GHz band
- Transmission distance is 15 meter (Under the condition of no obstruction and no electromagnetic interference. The transmission distance of built-in wireless measuring tools can be found in their respective introduction.)
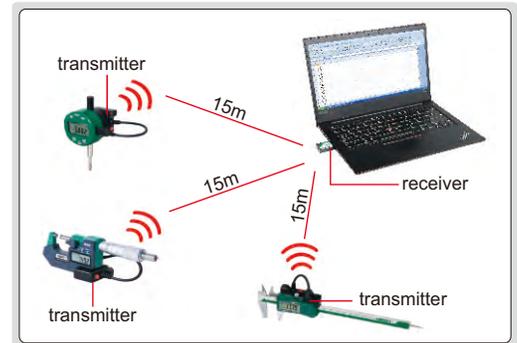
Transmitter

- Connecting to digital measuring tools such as calipers, micrometers and indicators
- Press the transmit button to send data
- CR2032 battery
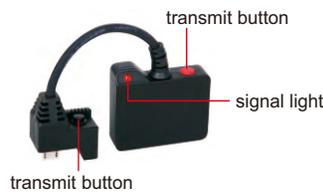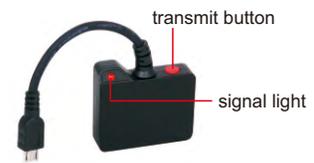
7315-21   **7315-22**

Code	Description	Plug to product	Remark
7315-21	transmitter for digital calipers	transmit button	digital calipers and digital depth gages
7315-22	transmitter for large digital calipers		large digital calipers (range≤1000mm) and digital height gages
7315-30	transmitter for digital micrometers		digital micrometers
7315-50M	transmitter for digital indicators		digital indicators, digital thickness gages and digital internal/external caliper gages
7315-60	transmitter for high precision digital indicators		**2140-6** and **2133** series high precision digital indicators

To be continued

1

Receiver (keyboard signal)

- For computers and mobile phones with windows and android systems
- Recognized as HID keyboard device, press transmit button of transmitter, which is recognized by computers or mobile phones as keyboard input data and press enter, such as 12.34↙.
- No need to install drivers and softwares
- Data can be transmitted to excel, word, txt etc.
- Suitable for any softwares which can receive keyboard signal

Code	Product	Description	Remark
7315-3	USB port	single channel receiver	connected with 1 transmitter only
7315-6	USB port	multichannel receiver	connected with 6 transmitter, each channel has a transmitter status indicator
7315-7	Type-C port		
7315-8	Micro USB port		
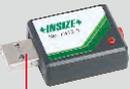
Receiver (text format, virtual com port)

- Suitable for computers with windows system
- Text format virtual com port, converted to keyboard format with supplied software
- Supplied with EXCEL directional input software (please refer to the next page for details)
- Measurement data can be transmitted to excel, word, txt etc. and any software which receives keyboard signal

Code	Product	Description	Remark
7315-2	antenna / USB port	multichannel receiver	connected with maximum 16 transmitters, each of them has unique identification code

3

EXCEL directional input software

- Included in **7315-2** receiver
- The measurement data of multiple measuring tools can be transmitted to the designated area of excel, which facilitates data management and improves efficiency

Excel directional input software (included in **7315-2**), application example 1

Set the display area of caliper at B4-B9, the readings of caliper are displayed at B4, B5...B9.
Set the display area of micrometer at C4-C9, the readings of micrometer are displayed at C4, C5... C9.
Set the display area of height gage at D4-D9, the readings of height gage are displayed at D4, D5... D9.

serial of workpieces

the next data display area is indicated in green

Excel directional input software (included in **7315-2**), application example 2

Set the display area of micrometer at B4-C9, data input is from the left to the right, the readings of micrometer are displayed at B4, C4, B5, C5... B9, C9.
Set the display area of caliper at D4-D9, the readings of caliper are displayed at D4, D5... D9.
Set the display area of depth gage at E4-E9, the readings of depth gage are displayed at E4, E5... E9.

serial of workpieces

the next data display area is indicated in green

DATA OUTPUT CABLES (KEYBOARD FORMAT)

application

Excel

press red button to transmit data

can also press the foot switch to transmit data (code **7304-2**, **optional**)

signal light —— transmit button
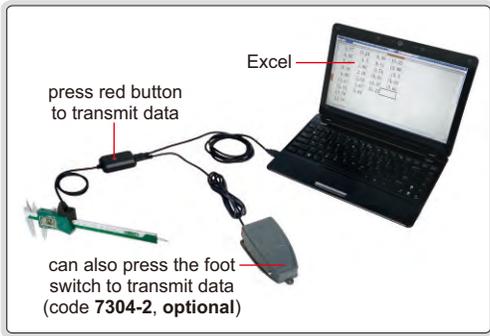
7302-40M

- 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, such as 12.34↙)
- Suitable for any softwares which can receive keyboard signal
- Optional accessory: foot switch (code: **7304-2**), hub (code: **7324-HUB4**, **7324-HUB7**) extension cables (code: **7325-ADD5**, **7325-ADD10**)

VIDEO

Code	Description	Plug to product	Plug to computer	Applicable products
7302-21	cable for digital calipers (length 3m)	transmit button		digital calipers and digital depth gages
7302-22	cable for large digital calipers (length 2.5m)			large digital calipers (range≤1000mm) and digital height gages
7302-30	cable for digital micrometers (length 2.5m)			digital micrometers
7302-40M	cable for digital indicators (length 2.5m)			digital indicators
7302-50M	cable for digital gages (length 2.5m)			digital thickness gages and digital internal/external caliper gages
7302-60	cable for high precision digital indicators (length 2.5m)			**2140-6** and **2133** series high precision digital indicators

DATA OUTPUT CABLES (TEXT FORMAT, VIRTUAL COM PORT)

application

press red button
to transmit data

can also press the foot
switch to transmit data
(code **7304-2**, **optional**)

VIDEO

signal light ⎯⎯ transmit button

7305-40M

signal light ⎯⎯ transmit button

7305-R40M
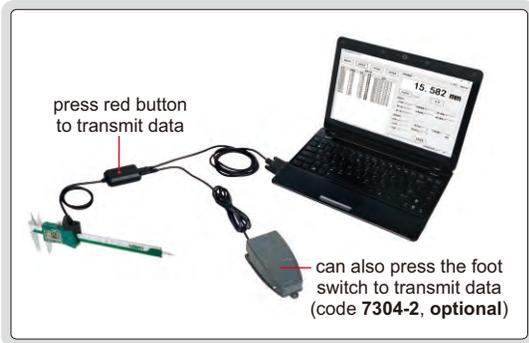
■ Optional accessory: foot switch (code: **7304-2**),
hub (code: **7324-HUB4**, **7324-HUB7**)

Single transmission (can be switched to continuous transmission)

Code	Description	Plug to product	Plug to computer	Applicable products
7305-21	cable for digital calipers (length 3m)	transmit button		digital calipers and digital depth gages
7305-R21				
7305-22	cable for large digital calipers (length 2.5m)			large digital calipers (range≤1000mm) and digital height gages
7305-R22				
7305-30	cable for digital micrometers (length 2.5m)			digital micrometers
7305-R30				
7305-50M	cable for digital gages (length 2.5m)			digital thickness gages and digital internal/external caliper gages
7305-R50M				

To be continued

Continued from previous page

Continuous transmission (can be switched to single transmission)

Code	Description	Plug to product	Plug to computer	Applicable products
7305-40M *	cable for digital indicators (length 2.5m)			digital indicators
7305-R40M *				

* Long press transmission button or foot switch to zero the digital indicators

* Supplied with software

Software (included in 7305-40M and 7305-R40M)

- Real-time display
- Tolerance setting, automatic judgment, out-of-tolerance alarm
- Real time statistics: max, min, average, Go/No-Go number
- Data transmission: single transmission with button on cable/foot switch, single transmission operated on computer, continuous transmission operated on computer
- Can save results as EXCEL
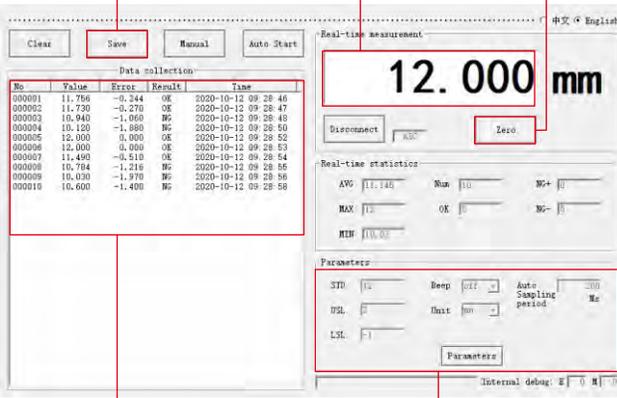
export Excel   real-time display   setting zero of measuring tools

measurement results and judgment   setting tolerance and sampling period

Communication protocol

- Baud: 9600bps
  Data bit: 8
  Stop bit 1
  Check bit: None
  No flow control

- Pin definition of RS232 plug:

  ⑤④③②①
  ⑨⑧⑦⑥

- Data output format

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10

+or-   Data section (floating point)   CR

Data format example
Display   Output
1.234 ➡ +0001.234↙
-1.234 ➡ -0001.234↙
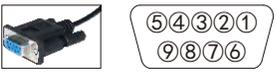
Pin No.	Symbol	Description
2	TXD	Data OUT
3	RXD	Data IN
4	VDD	+5V Power
5	GND	Ground

EXTENSION CABLES

application
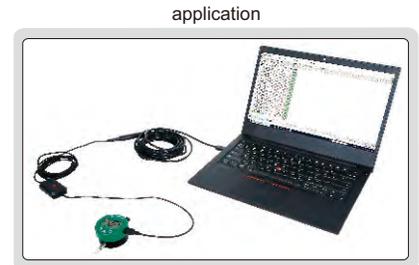
7325-ADD5

Code	Description	Applicable products
7325-ADD5	data extension cable (length 5m, USB plug)	**7302** series data cables
7325-ADD10	data extension cable (length 10m, USB plug)	**7305** series data cables (USB plug)

INSIZE » M&B Calibr | info@insz.hu | +36 1 5507991 | www.insz.hu | www.mbcalibr.hu

application

7324-HUB7

connect multiple data cables
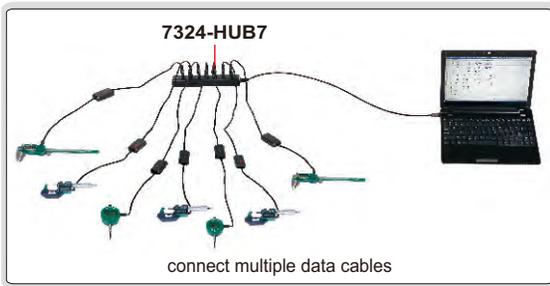
7324-HUB4

7324-HUB7

■ Suitable for USB plug data cable

Code	Description	Applicable products
7324-HUB4	4-channel hub (length 0.2m, USB computer plug)	**7302** series data cables
7324-HUB7	7-channel hub (length 1m, USB computer plug)	**7305** series data cables (USB plug)

FOOT SWITCH

application

■ For data transmission

7304-2
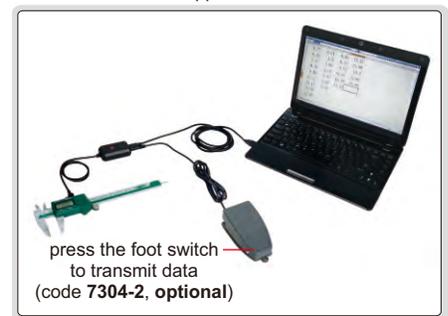
Code	Description	Applicable products
7304-2	data transmission foot switch with cable (length 2m)	**7302** series data cables **7305** series data cables

press the foot switch
to transmit data
(code **7304-2**, **optional**)

BLUETOOTH RECEIVER

application

7322-01

bluetooth receiver

■ Connect to computer USB interface
■ Transmission distance is 10 meter

Code	Applicable products		
7322-01		**1127** series built-in bluetooth digital calipers	**1542** series built-in bluetooth digital depth gages

VERNIER CALIPERS (ANTI MAGNETIC)

ATTENTION: NOT HARDENED

PURE COPPER

- Suitable for magnetic parts
- Made of pure copper

1224-150A

Unit: mm

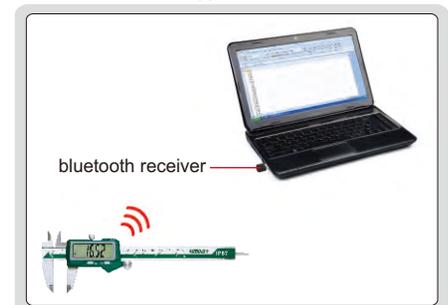236 · 21 · 16 · 40 · 16
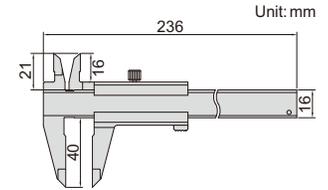
Code	Range	Graduation	Accuracy
1224-150A	0-150mm	0.02mm	±0.05mm
1224-1501A	0-150mm	0.05mm	±0.05mm

LEFT HAND VERNIER CALIPERS

- Designed for left handed users
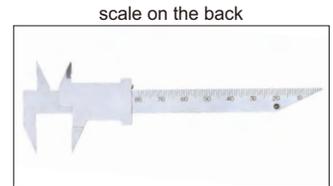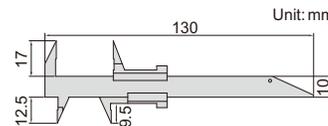- Made of stainless steel
- Satin chrome plated reading surface

Unit: mm

235 · 3.7 · 16.5 · 21 · 16 · 40
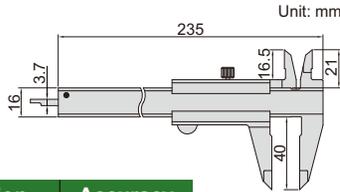
1239-1502

Code	Range	Graduation	Accuracy
1239-150	0-150mm/0-6"	0.05mm/1/128"	±0.05mm
1239-1503	0-150mm	0.05mm	±0.05mm
1239-1502	0-150mm/0-6"	0.02mm/0.001"	±0.03mm
1239-1501	0-150mm	0.02mm	±0.03mm

TEETH VERNIER CALIPER
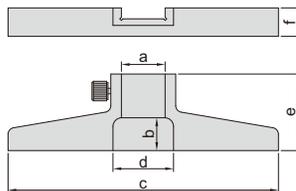
- Used for teeth
- Made of stainless steel

1226-70

scale on the back

Unit: mm

130 · 17 · 12.5 · 9.5 · 10

Code	Range	Graduation	Accuracy
1226-70	0-70mm	0.1mm	±0.1mm

DEPTH BASE ATTACHMENTS

w

a · b · c · d · e · f

- To increase the stability of depth measurement
- Suitable for digital calipers and dial calipers
- Made of stainless steel

6140

6140-16B

(mm)

Code	a	b	c	d	e	f	Type	Application
6140	16.5	9	75	18	30	6	narrow base (f=6)	Suitable for calipers with beam width (w) 16mm
6140-300A	20	15	125	22	34	9	narrow base (f=9)	Suitable for calipers with beam width (w) 20mm
6140-16B	16	12.5	75	24.5	30	11	wide base (f=11), high stability	Suitable for calipers with beam width (w) 16mm
6140-300B	20	15	125	28	35	13	wide base (f=13), high stability	Suitable for calipers with beam width (w) 20mm

ACCESSORY SET FOR DIGITAL CALIPERS
CODE 6144

6144

VIDEO

Unit: mm

Ø9.5
3.7
50
2-M3x0.5
Ø2
3
Ø3
M3.0x0.5

Unit: mm
Ø3
25
0.8
Ø10±0.005

disk points
(stainless steel)

Unit: mm
Ø10±0.005
Ø3
10
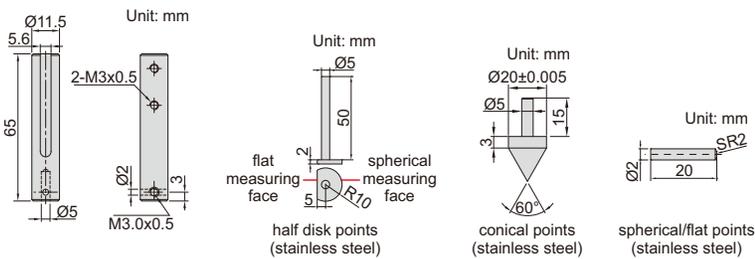3
60°

conical points
(stainless steel)

Unit: mm
Ø2
SR2
12

spherical/flat points
(stainless steel)
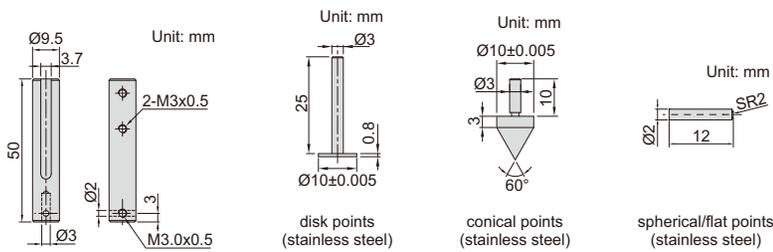
■ Suitable for 0-150mm/0-6" and 0-200mm/0-8"
digital calipers (thickness of lower jaws≤3.7mm)

Code
6144

16~20mm

measuring internal
groove diameter
(h≤3.5mm)
h

measuring center distance

0~6mm

spherical points for groove diameter
(inside hole) measurement

0~6mm

flat points for external
groove diameter measurement

ACCESSORY SET FOR LARGE DIGITAL CALIPERS
CODE 6145-500

6145-500

VIDEO

Unit: mm

Ø11.5
5.6
65
2-M3x0.5
Ø2
3
Ø5
M3.0x0.5

Unit: mm
Ø5
50
2
flat
measuring
face
spherical
measuring
face
5
R10

half disk points
(stainless steel)

Unit: mm
Ø20±0.005
Ø5
15
3
60°

conical points
(stainless steel)

Unit: mm
Ø2
SR2
20

spherical/flat points
(stainless steel)

■ Suitable for 0-500mm/0-20" and 0-600mm/0-24"
digital calipers (thickness of lower jaws≤5.6mm)

Code
6145-500

40~42mm

h1
measuring external
groove diameter
(h1≤7mm)

h2
measuring internal
groove diameter
(h2≤7mm)

measuring center distance

0~8mm

spherical points for
groove diameter
(inside hole) measurement

0~8mm

flat points for
external groove
diameter measurement

VIDEO
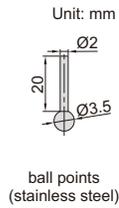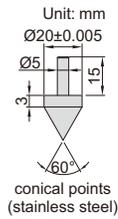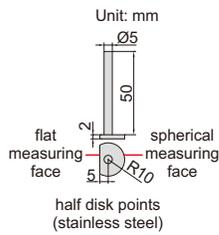
ACCESSORY SET FOR LARGE DIGITAL CALIPERS (WITH SIDE POINTS)
CODE 6146-500B

6146-500B

Ø11.5
5.6
2-M3x0.5
65
Ø2
3
M3.0x0.5
Ø5
Unit: mm

flat measuring face
spherical measuring face
half disk points (stainless steel)
Unit: mm
Ø5
50
2
5
R10

conical points (stainless steel)
Unit: mm
Ø20±0.005
Ø5
3
15
60°

ball points (stainless steel)
Unit: mm
Ø2
20
Ø3.5

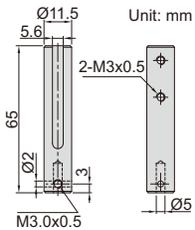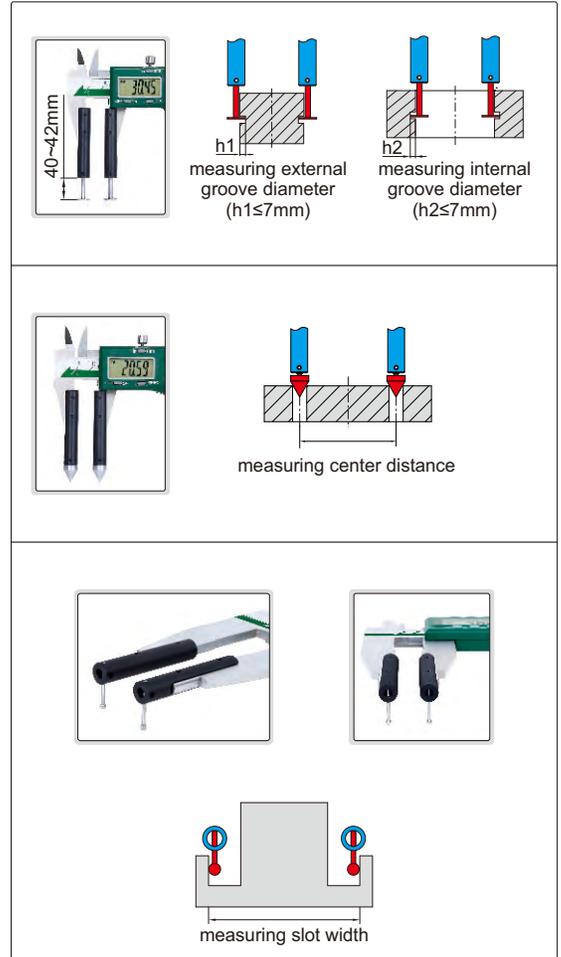■ Suitable for 0-500mm/0-20" and 0-600mm/0-24" digital calipers (thickness of lower jaws≤5.6mm)

Code
6146-500B

40~42mm

h1
measuring external groove diameter (h1≤7mm)

h2
measuring internal groove diameter (h2≤7mm)

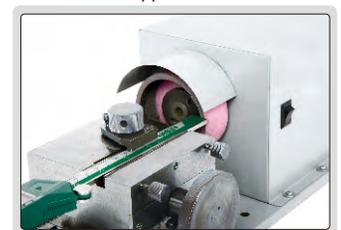measuring center distance

measuring slot width

VIDEO

CALIPER END GRINDING MACHINE
CODE 6309

■ Used for grinding the depth measuring surface of the end of calipers

on/off
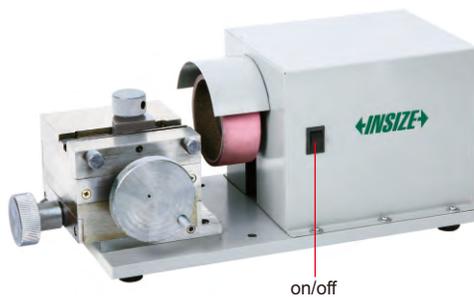
application

SPECIFICATION

Power supply	220V, 50/60Hz
Dimension (L×W×H)	370×200×160mm
Weight	15kg