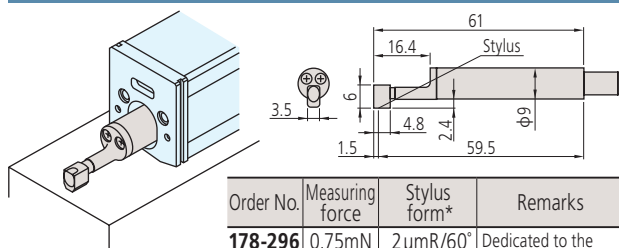


Dimensions: Detectors

Detectors

Unit: mm

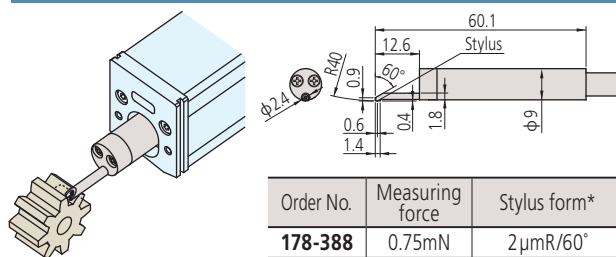
Standard detectors



Order No.	Measuring force	Stylus form*	Remarks
178-296	0.75mN	2 μ mR/60°	Dedicated to the standard/retractable drive unit
178-390	4 mN	5 μ mR/90°	
178-387	0.75mN	2 μ mR/60°	Dedicated to the transverse tracing drive unit
178-386	4 mN	5 μ mR/90°	
178-391	4 mN	10 μ mR/90°	Dedicated to the standard/retractable drive unit

*Tip radius / Tip angle

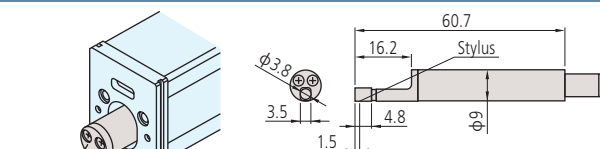
Gear-tooth surface detectors



Order No.	Measuring force	Stylus form*
178-388	0.75mN	2 μ mR/60°
178-398	4 mN	5 μ mR/60°

*Tip radius / Tip angle

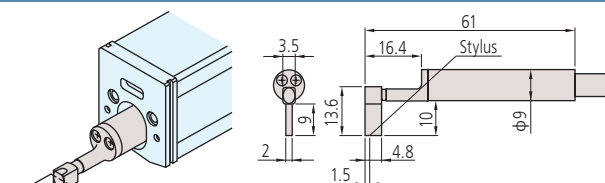
Small hole detectors



Order No.	Measuring force	Stylus form*	Remarks
178-383	0.75mN	2 μ mR/60°	Minimum measurable hole diameter: ϕ 4.5mm
178-392	4 mN	5 μ mR/90°	

*Tip radius / Tip angle

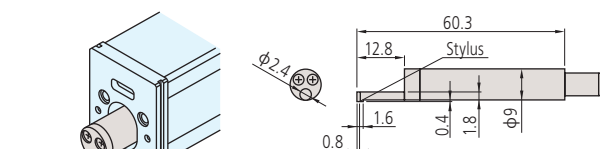
Deep groove detectors



Order No.	Measuring force	Stylus form*	Remarks
178-385	0.75mN	2 μ mR/60°	Not available for the transverse tracing drive unit
178-394	4 mN	5 μ mR/90°	

*Tip radius / Tip angle

Extra small hole detectors



Order No.	Measuring force	Stylus form*	Remarks
178-384	0.75mN	2 μ mR/60°	Minimum measurable hole diameter: ϕ 2.8mm
178-393	4 mN	5 μ mR/90°	

*Tip radius / Tip angle



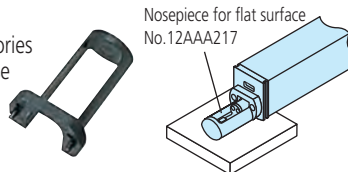
Dimensions: Display Unit and Drive Unit

Drive unit, Display unit

Nosepiece for flat surfaces

No.12AAA217

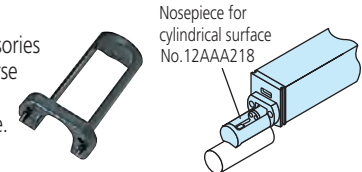
- SJ-310/310R standard accessories
- Not available for the transverse tracing drive unit.



Nosepiece for cylindrical surfaces

No.12AAA218

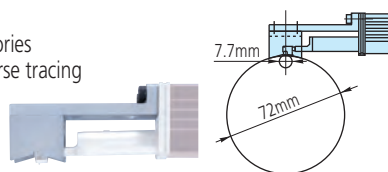
- SJ-310/310R standard accessories
- Not available for the transverse tracing drive unit.
- $\phi 30\text{mm}$ or smaller workpiece.



V-type adapter

No.12AAE644

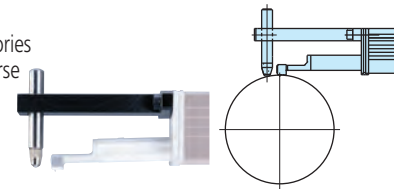
- SJ-310S standard accessories
- Dedicated to the transverse tracing drive unit.



Point-contact adapter

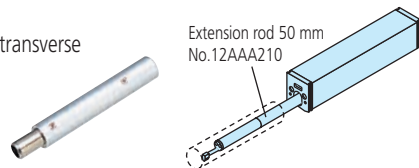
No.12AAE643

- SJ-310S standard accessories
- Dedicated to the transverse tracing drive unit.



Extension rod (50 mm)

- Not available for the transverse tracing drive unit.



Extension cable (1 m)

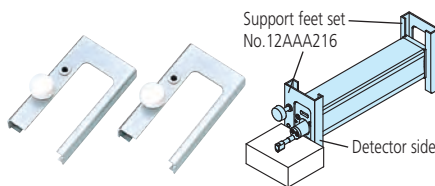
No.12BAA303

- For connecting calculation display unit and drive unit.

Support feet set

No.12AAA216

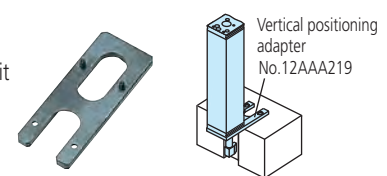
- SJ-310 standard accessory
- Not attachable to the detector side of the transverse tracing drive unit.



Vertical positioning adapter

No.12AAA219

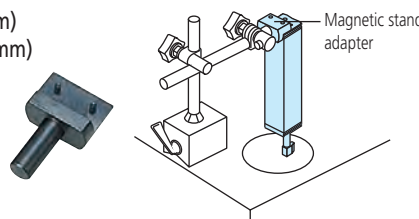
- Not available for the transverse tracing drive unit



Magnetic stand adapter

No.12AAA221($\phi 8\text{mm}$)

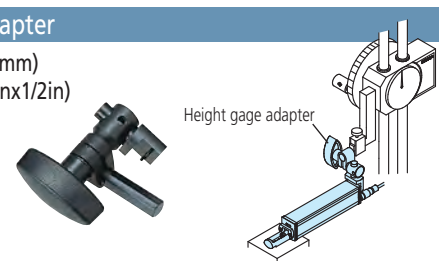
No.12AAA220($\phi 9.5\text{mm}$)



Height gage adapter

No.12AAA222(9x9mm)

No.12AAA233(1/4inx1/2in)



Setting attachments

(Note: Not available for the transverse tracing drive unit)

Enhances measurement efficiency by facilitating the measurement setup of multiple workpieces of the same type and of the hard-to-access sections of a workpiece.

V-type for measuring axially

No.178-033

The V-width is adjustable to the cylindrical workpiece diameter, facilitating axial measurement of a wide range workpiece sizes.

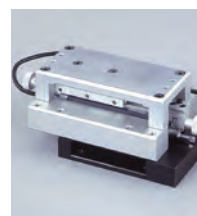
- Adjustable range: $\phi 5 \sim 150\text{ mm}$



Slider type

No.178-034

This attachment is ideal for measuring a flat area of a workpiece that has an indentation or step that makes it difficult to attach the drive unit. You can further improve the ease of use by using this attachment with the magnetic installation base (option: No. 12AAA910).



Inside diameter type

No.178-035

Greatly facilitates measurement of internal wall surfaces of, for example, a cylinder block.

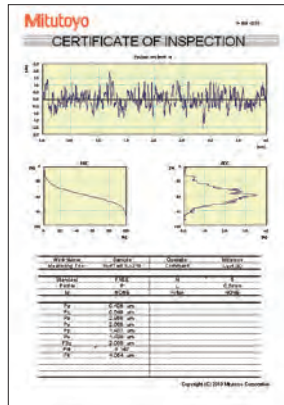
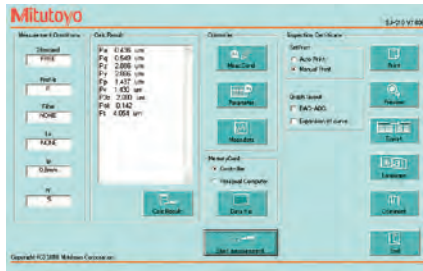
- Applicable diameter: $\phi 75 \sim \phi 95\text{ mm}$
- Accessible depth: $30 \sim 135\text{ mm}$



Optional Accessories: For External Output

Simplified communication program for SURFTEST SJ series

The SurfTest SJ-310 series has a USB interface, enabling data to be transferred to a spreadsheet or other software. We also provide a program that lets you create inspection record tables using a Microsoft Excel* macro.



Required environment*:

- OS:
Windows XP-SP3
Windows Vista
Windows 7
- Spreadsheet software:
Microsoft Excel 2002
Microsoft Excel 2003
Microsoft Excel 2007
Microsoft Excel 2010

*Windows OS and Microsoft Excel are products of Microsoft Corporation.

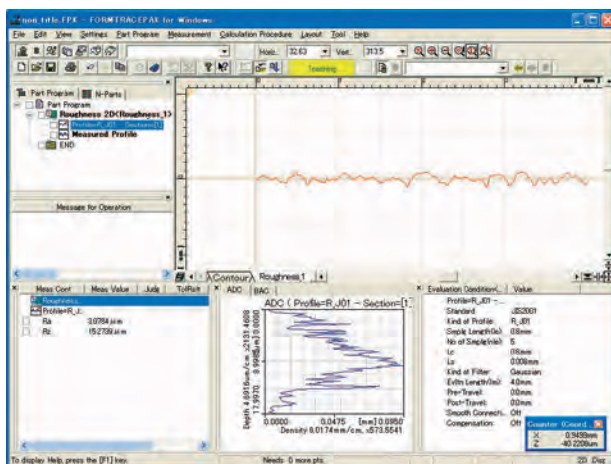
Required environment*:

- USB cable for SJ-310 series
No. 12AAD510

This program can be downloaded free of charge from the Mitutoyo website.
<http://www.mitutoyo.co.jp>

Contour / Roughness analysis software FORMTRACEPAK

More advanced analysis can be performed by loading SJ-310 series measurement data to software program FORMTRACEPAK via a memory card (option) for processing back at base.



Optional Accessories: For External Equipment

Digimatic mini processor DP-1VR

By connecting this printer to the Surftest SJ-310's digimatic output, you can print calculation results, perform a variety of statistical analyses, draw a histogram or D chart, and also perform complicated operations for X-R control charts.



No.264-504-5A

SJ-310→DP-1VR Connecting cable
1m: **No.936937**
2m: **No.965014**

Calculation results input unit INPUT TOOL

This unit allows you to load Surftest SJ-310 calculation results (SPC output) into commercial spreadsheet software on a PC via a USB connector. You can essentially use a one-touch operation to enter the calculation results (values) into the cells in the spreadsheet software.



USB Input Tool Direct
USB-ITN-D
No.06ADV380D



USB keyboard signal conversion type*
IT-012U
No.264-012-10

*Requires the optional Surftest SJ-310 connection cable.

1m: **No.936937**
2m: **No.965014**

Footswitch

A footswitch is used to trigger measurement. This tool is very useful in cases where you need to measure the same workpiece multiple times using jigs and other fixtures.



No.12AAJ088

Measurement Data Wireless Communication System U-WAVE

This unit allows you to remotely load Surftest SJ-310 calculation results (SPC output) into commercial spreadsheet software on a PC.

You can essentially use a one-touch operation to enter the calculation results (values) into the cells in the spreadsheet software.



U-WAVE-R
(Connects to the PC)
No.02AZD810D



U-WAVE-T *
(Connects to the SJ-310)
No.02AZD880D

*Requires the optional Surftest SJ-310 connection cable.

No.02AZD790D

Optional accessories and consumables for SJ-310

- | | |
|--|--------------------|
| • Printer paper (5 rolls) | No.270732 |
| • Durable printer paper (5 rolls) | No.12AAA876 |
| • Touch-screen protector sheet (10 sheets) | No.12AAN040 |
| • Memory card (2GB) * | No.12AAL069 |
| • Connecting cable (for RS-232C) | No.12AAA882 |

*micro SD card (with a conversion adapter to SD card)

Authorized Distributor: Willrich Precision
Ph: 866-945-5742

Email: sales@willrich.com



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