Dial Indicator Applications

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

Thickness Gages
SERIES 547, 7

- Dial thickness gages can quickly measure the thickness of thin products such as paper and felt.
- Contact point and anvil are both made of ceramic: rust-free (**547-401** is excluded.)
- Integrated molding of the bezel and crystal ensures protection against water and oil penetration via the front face.

Standard Type

547-301

547-321

High Accuracy Type

547-401

Standard Type

7301

Lightweight Type (integrated molding of the bezel)

7331S

7321

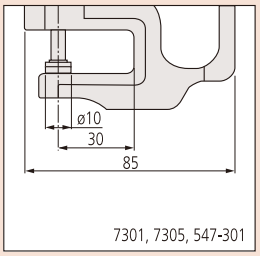
Usage examples

Measuring paper thickness

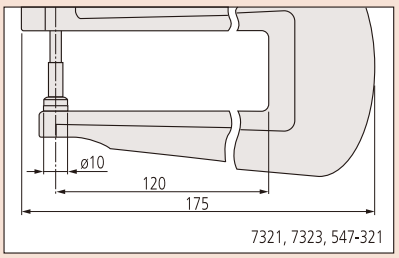
Measuring thickness of a human hair

DIMENSIONS

Unit: mm



7301, 7305, 547-301



7321, 7323, 547-321

Optional Accessories

905338: SPC cable (1m) for digital models
905409: SPC cable (2m) for digital models
02AZD790F: SPC cable for U-WAVE (160mm)
Digimatic Mini-Processor DP-1VR
Refer to page A-13 for details.

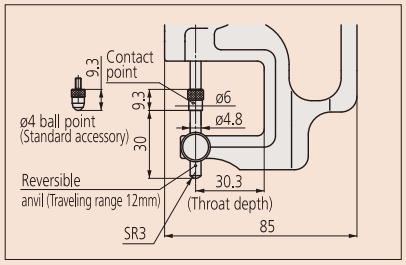
Input Tool

Convenient Interface Input Tools which enable the conversion of measurement data to keyboard signals and directly input them to cells in off-the-shelf spreadsheet software such as Excel.
(Refer to pages A-4 to A-8 for details.)

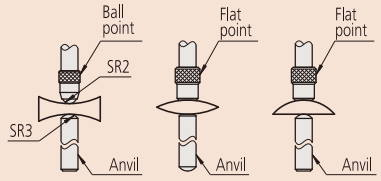
F

DIMENSIONS

Unit: mm



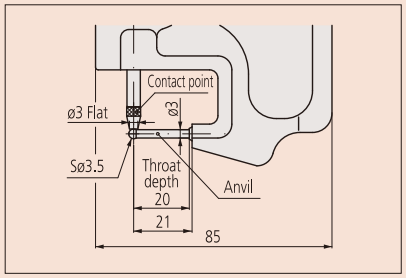
Application examples



Note: Parallelism between the flat point and anvil
547-313: 10µm
7313: 5µm

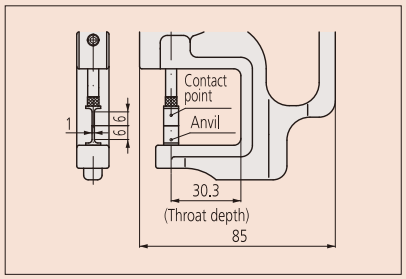
DIMENSIONS

Unit: mm



DIMENSIONS

Unit: mm



Lens thickness measurement

- Thickness of concave-convex lenses and surfaces can be measured.
- Anvils and contact points are interchangeable to enable concave surfaces to be measured.
- Provided with a ball point.

547-313

7313

Tube thickness measurement

- Pipe wall thickness, thickness of curved boards can be measured.

547-360

7360

Groove depth measurement

- Suitable for measuring narrow grooves.
- Measuring face of the contact point and anvil are blade-shaped (thickness: 1mm).

547-315

7315

F

Mitutoyo

Dial Indicator Applications

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

Thickness Gages
SERIES 547, 7

SPECIFICATIONS

Metric

Order No.	Range	Resolution	Accuracy	Measuring force	Remarks
547-401	0-12mm	0.001mm	±3µm	3.5N or less	High accuracy, carbide spindle anvil
547-301	0-10mm	0.01mm	±20µm	1.5N or less	Standard, ceramic spindle/anvil
547-321	0-10mm	0.01mm	±20µm	1.5N or less	Deep throat, ceramic spindle/anvil
547-313	0-10mm	0.01mm	±20µm	1.5N or less	Lens thickness
547-315	0-10mm	0.01mm	±20µm	1.5N or less	Groove depth
547-360	0-10mm	0.01mm	±20µm	1.5N or less	Tube thickness

Inch/Metric

Order No.	Range	Resolution	Accuracy	Measuring force	Remarks
547-400S/ -	0-.47"	.00005"/0.001mm	±.0001"/±3µm	3.5N or less	High accuracy, carbide spindle anvil
- / 547-526S*	0-.47"	.0001"/0.001mm	±.0002"/±5µm	1.5N or less	Standard, ceramic spindle/anvil
547-300S / 547-500S*	0-.4"/0-.47"*	.0005"/0.01mm	±.001"/±20µm	1.5N or less	Standard, ceramic spindle/anvil
547-320S / 547-520S*	0-.4"/0-.47"*	.0005"/0.01mm	±.001"/±20µm	1.5N or less	Deep throat, ceramic spindle/anvil
547-312S / 547-512S*	0-.4"/0-.47"*	.0005"/0.01mm	±.001"/±20µm	1.5N or less	Lens thickness
547-316S / 547-516S*	0-.4"/0-.47"*	.0005"/0.01mm	±.001"/±20µm	1.5N or less	Groove depth
547-361S / 547-561S*	0-.4"/0-.47"*	.0005"/0.01mm	±.001"/±20µm	1.5N or less	Tube thickness

* using ID-SX Digimatic indicator.

Metric

Order No.	Range	Graduation	Accuracy	Measuring force	Remarks
7327	0-1mm	0.001mm	±5µm	1.4N or less	Fine dial reading, ceramic spindle/anvil
7301	0-10mm	0.01mm	±15µm	1.4N or less	Standard, ceramic spindle/anvil
7305	0-20mm	0.01mm	±20µm	2.0N or less	Standard, ceramic spindle/anvil
7321	0-10mm	0.01mm	±15µm	1.4N or less	Deep throat, ceramic spindle/anvil
7323	0-20mm	0.01mm	±22µm	2.0N or less	Deep throat, ceramic spindle/anvil
7313	0-10mm	0.01mm	±15µm	1.4N or less	Lens thickness
7315	0-10mm	0.01mm	±15µm	1.4N or less	Groove depth
7360	0-10mm	0.01mm	±15µm	1.4N or less	Tube thickness

Inch

Order No.	Range	Graduation	Accuracy	Measuring force	Remarks
7326S	0-.05"	.0001"	±.0002"	1.4N or less	Fine dial reading, ceramic spindle/anvil
7300S	0-.5"	.001"	±.001"	1.4N or less	Standard, ceramic spindle/anvil
7304S	0-1"	.001"	±.002"	2.0N or less	Standard, ceramic spindle/anvil
7322S	0-1"	.001"	±.002"	2.0N or less	Deep throat, ceramic spindle/anvil
7312S	0-.5"	.001"	±.001"	1.4N or less	Lens thickness
7316S	0-.5"	.001"	±.001"	1.4N or less	Groove depth
7361S	0-.5"	.001"	±.001"	1.4N or less	Tube thickness