

DIAL INDICATOR TESTER CODE 2396-25A



ATTENTION: NOT SUITABLE FOR DIAL INDICATORS WITH GRADUATION 0.001MM

- To calibrate dial indicators, test indicators and dial bore gages
- Dimension: 270x210x205mm
- Weight: 11kg

Micrometer head

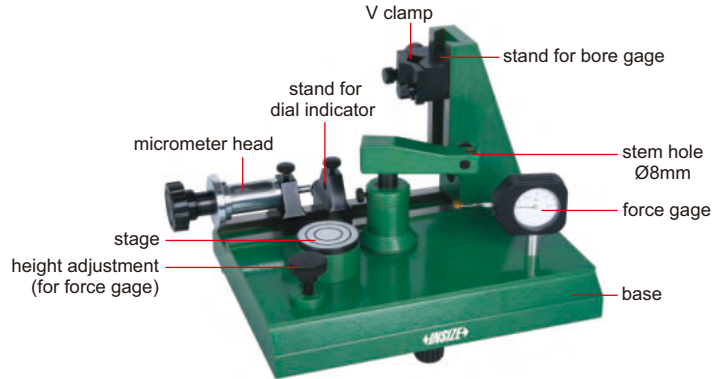
Range	Sampling interval	Accuracy	Hysteresis
0-25mm	0.1mm	4µm (0-25mm), 3µm (0-10mm), 2µm (0-1mm)	1µm

Force gage

Range	Graduation	Accuracy
0-1.6N	0.05N	±5% (of load capacity)

Stage

Diameter	Flatness	Roughness
50mm	1µm	0.05µm



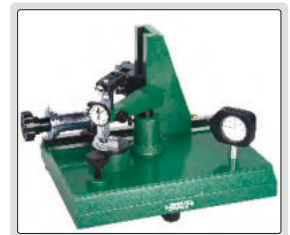
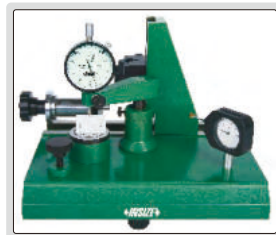
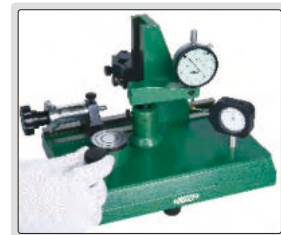
2396-25A

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Half round gage block (optional)

Code	Parallelism
2396-block	1µm



UNIVERSAL MAGNETIC STAND (ECONOMIC TYPE)

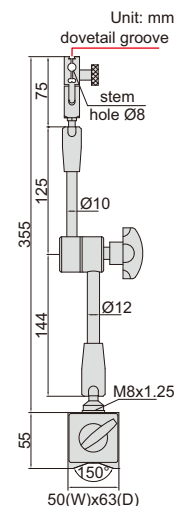
ATTENTION: LOW LOCKING FORCE

- For digital/dial indicators and dial test indicators

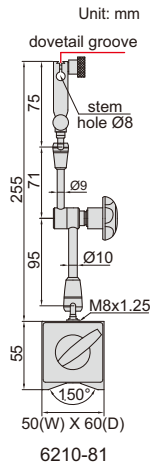
Code	Magnetic force	Applicable holding stem	Remark
6208-80A	80kgf	Ø8mm	with fine adjustment and dovetail groove



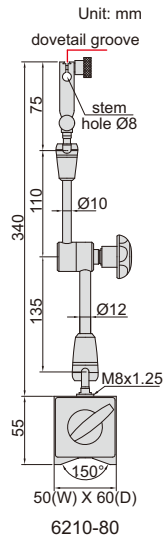
6208-80A



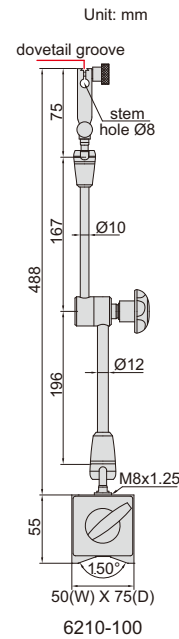
UNIVERSAL MAGNETIC STANDS



6210-81



6210-80



6210-100

- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6210-81	80kgf	Ø8mm	with fine adjustment and dovetail groove
6210-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6210-100	100kgf	Ø8mm	with fine adjustment and dovetail groove

MAGNETIC STANDS



6200-60



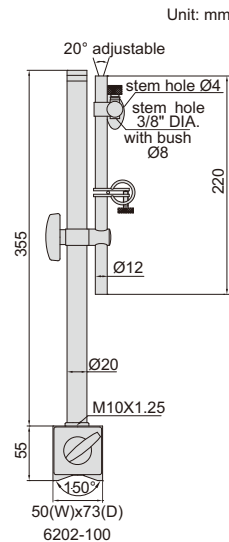
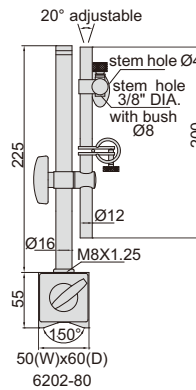
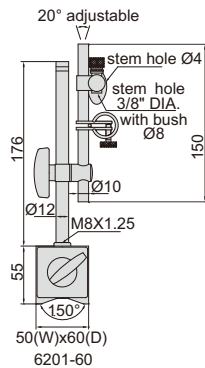
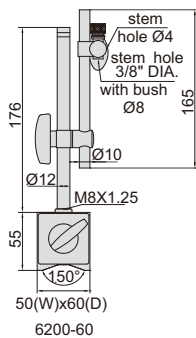
6201-60



6202-80



6202-100

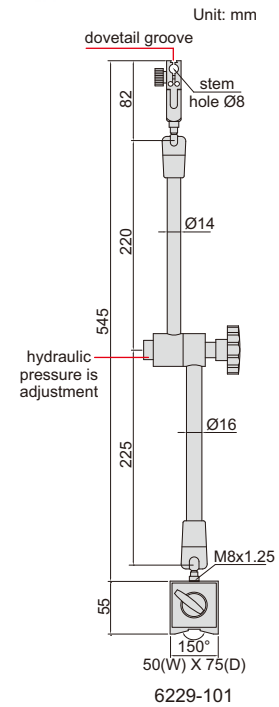
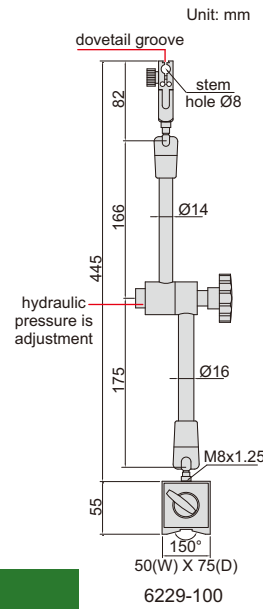
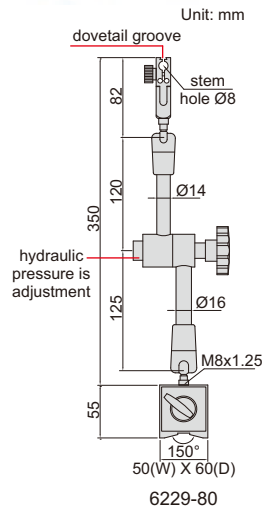
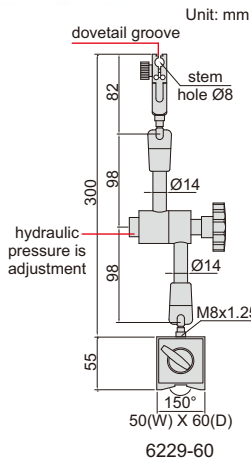


- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6200-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	without fine adjustment
6201-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-80	80kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment
6202-100	100kgf	Ø8mm, Ø4mm, 3/8" DIA.	with fine adjustment

HYDRAULIC UNIVERSAL MAGNETIC STANDS

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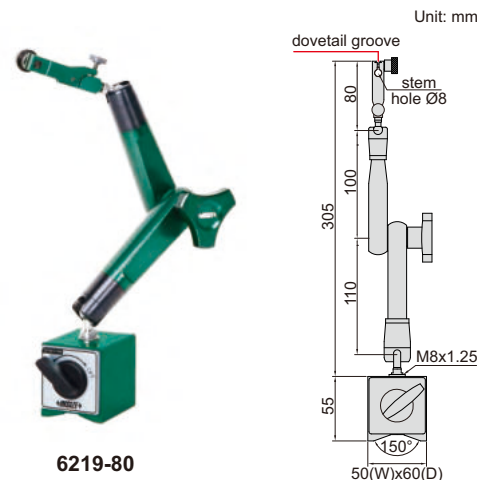
- Hydraulic pressure is adjustment
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6229-60	60kgf	Ø8mm	with fine adjustment and dovetail groove
6229-80	80kgf	Ø8mm	with fine adjustment and dovetail groove
6229-100	100kgf	Ø8mm	with fine adjustment and dovetail groove
6229-101	100kgf	Ø8mm	with fine adjustment and dovetail groove

LARGE LOCKING FORCE MAGNETIC STAND

- For digital/dial indicators and dial test indicators

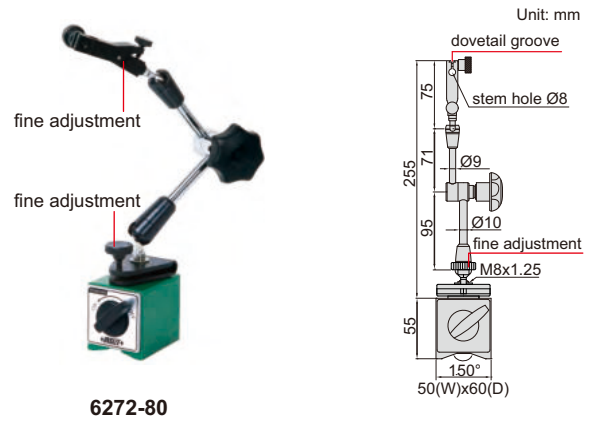
Code	Magnetic force	Applicable holding stem	Remark
6219-80	80kgf	Ø8mm	with fine adjustment and dovetail groove



MAGNETIC STAND WITH TWO FINE ADJUSTMENTS

- With two fine adjustments on the head and on the base
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6272-80	80kgf	Ø8mm	with two fine adjustments and dovetail groove

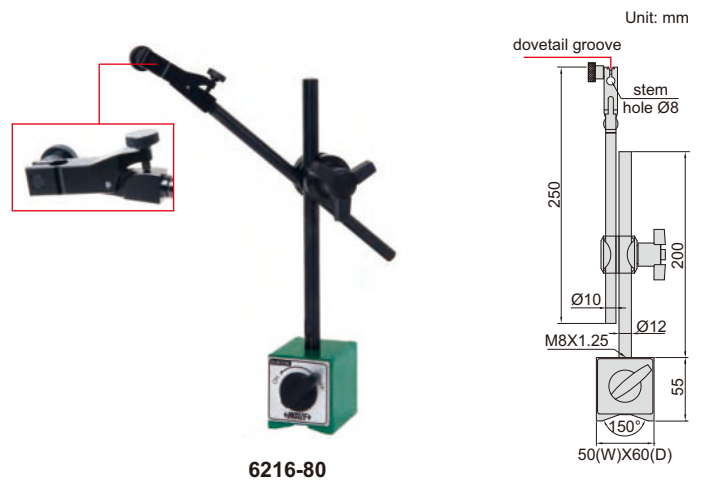


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MAGNETIC STAND

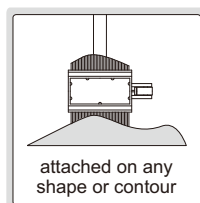
- For digital/dial indicators and dial test indicators

Code	Magnetic force	Applicable holding stem	Remark
6216-80	80kgf	Ø8mm	with fine adjustment and dovetail groove

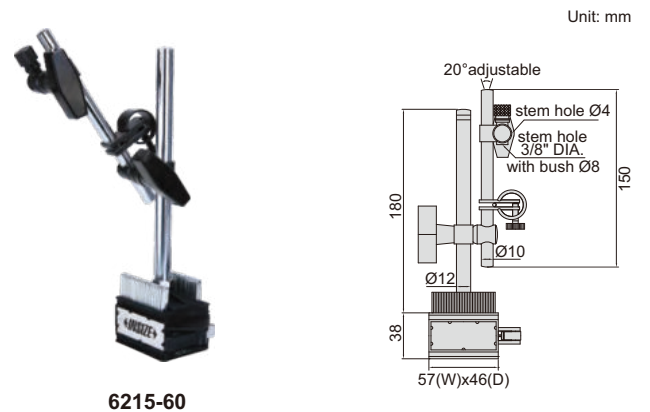


MAGNETIC STAND FOR UNEVEN SURFACE

- For digital/dial indicators and dial test indicators
- With fine adjustment



Code	Magnetic force	Applicable holding stem
6215-60	60kgf	Ø8mm, Ø4mm, 3/8" DIA.



FLEX ARM MAGNETIC STAND

ATTENTION: FOR DIAL TEST INDICATORS ONLY

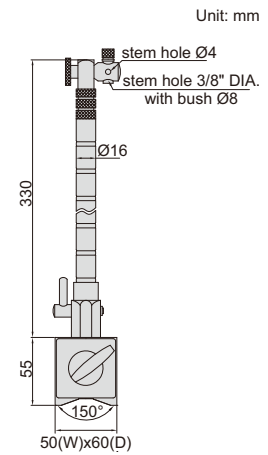
- For dial test indicators

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Code	Magnetic force	Applicable holding stem
6207-80A	80kgf	Ø8mm, Ø4mm, 3/8" DIA.



6207-80A



HYDRAULIC MINI MAGNETIC STAND

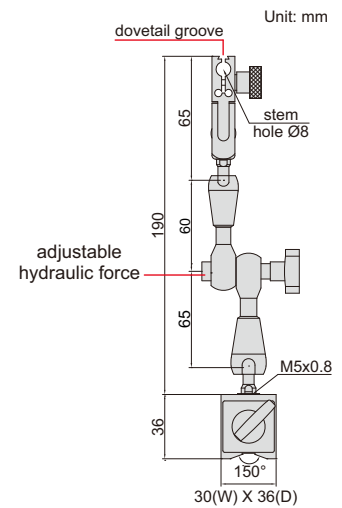
ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With fine adjustment and dovetail groove
- Adjustable hydraulic force

Code	Magnetic force	Applicable holding stem
6228-40	40kgf	Ø8mm



6228-40



MINI MAGNETIC STAND

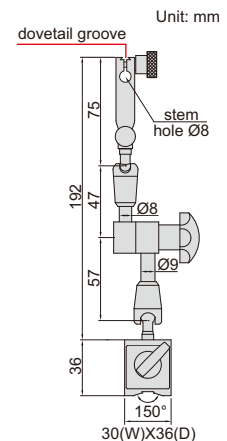
ATTENTION: FOR DIAL TEST INDICATORS ONLY

- For dial test indicators
- With fine adjustment and dovetail groove

Code	Magnetic force	Applicable holding stem
6224-40	40kgf	Ø8mm



6224-40



ATTENTION: FOR DIAL TEST INDICATORS ONLY

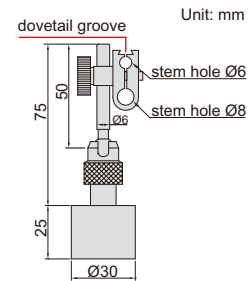
- For dial test indicators
- With dovetail groove

Code	Magnetic force	Applicable holding stem
6211-10	10kgf	Ø6mm, Ø8mm



6211-10

MINI MAGNETIC STAND

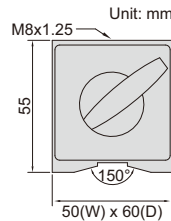


MAGNETIC BASES

Code	Magnetic force
6212-80	80kgf
6212-100	100kgf



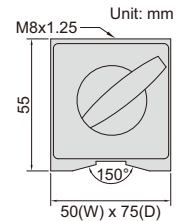
6212-80



6212-80

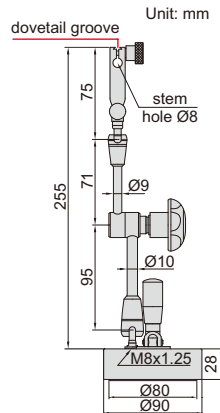


6212-100



6212-100

- Suitable for granite surface plates or cast iron surface plates
- For digital/dial indicators and dial test indicators



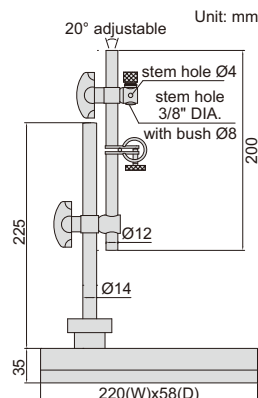
6217-B

VACUUM STAND

Code	Diameter of vacuum disc	Vacuum force	Applicable holding stem	Remark
6217-B	Ø80mm	80kgf	Ø8mm	with fine adjustment and dovetail groove

UNIVERSAL STAND

- For digital/dial indicators and dial test indicators
- With fine adjustment



6214-A

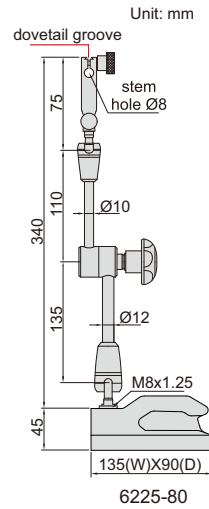
Code	Applicable holding stem
6214-A	Ø8mm, Ø4mm, 3/8" DIA.

UNIVERSAL DIAL INDICATOR STANDS (NON-MAGNETIC)

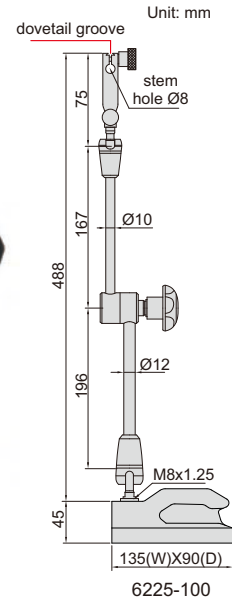
- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators



6225-80

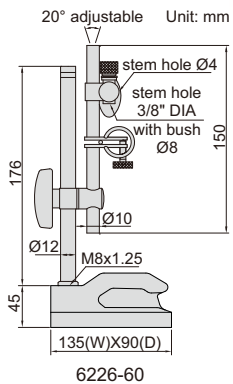


6225-100

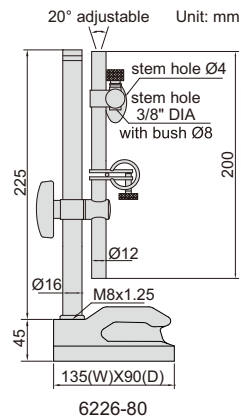


Code	Applicable holding stem	Remark
6225-80	Ø8mm	with fine adjustment and dovetail groove
6225-100	Ø8mm	with fine adjustment and dovetail groove

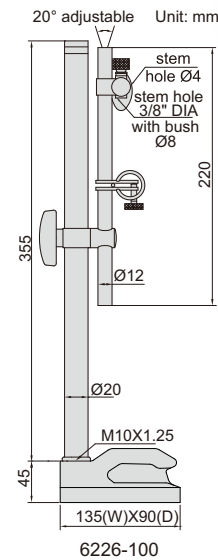
DIAL INDICATOR STANDS (NON-MAGNETIC)



6226-60



6226-80



6226-100

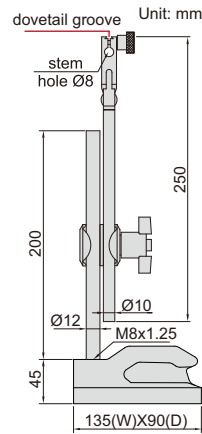
- Hardened base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

Code	Applicable holding stem	Remark
6226-60	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-80	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment
6226-100	Ø8mm, Ø4mm, 3/8" DIA	with fine adjustment

DIAL INDICATOR STAND (NON-MAGNETIC)

- Hardend base
- Suitable for granite surface plates and cast iron surface plates
- For digital/dial indicators and dial test indicators

Code	Applicable holding stem	Remark
6227-80	Ø8mm	with fine adjustment and dovetail groove



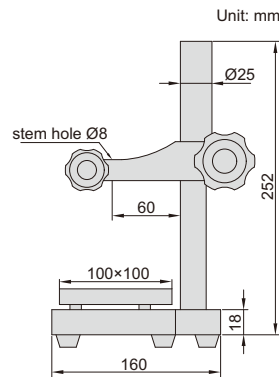
6227-80

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DIAL INDICATOR STAND

- Vertical travel of holder: 150mm
- Ceramic anvil
- Supplied with dust cover

Code	Applicable holding stem	Anvil
6876-150	Ø8mm	ceramic, plain, flatness 1.5µm

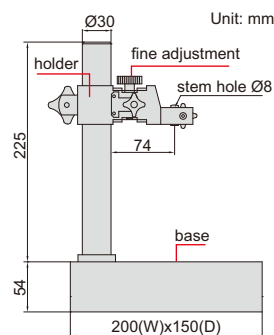


6876-150

GRANITE DIAL INDICATOR STAND

- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover

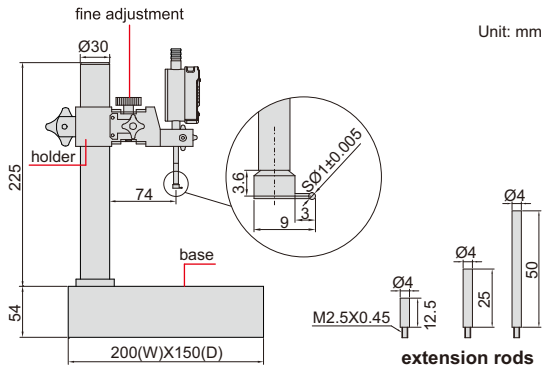
Code	Applicable holding stem	Base
6866-150	Ø8mm	flatness 2.5µm



6866-150

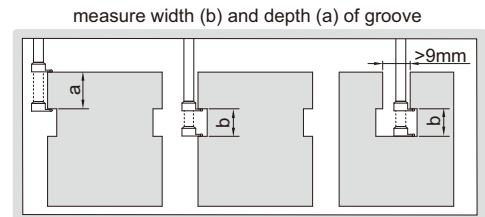
DIGITAL GROOVE MEASUREMENT STANDS

DATA
OUTPUT



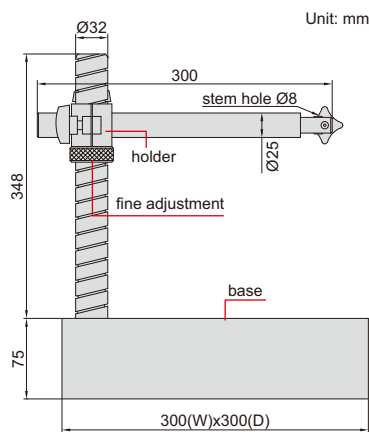
6870-150

- Button function: on/off, zero, mm/inch, measuring direction change, data preset, absolute/incremental measurement
- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- CR2032 battery, automatic power off
- Data output
- Supplied with extension rods: 12.5mm (1 pc), 25mm (1 pc), 50mm (1 pc)
- Supplied with groove point and dust cover
- Optional accessory: data output cable (code 7315-50M, 7302-40M, 7305-40M)



Code	Digital indicator stroke	Digital indicator resolution	Accuracy	Applicable holding stem	Base
6870-150	12.7mm/0.5"	0.01mm/0.0005"	±20µm	Ø8mm	flatness 2.5µm
6870-1501	12.7mm/0.5"	0.001mm/0.00005"	±5µm	Ø8mm	flatness 2.5µm

GRANITE DIAL INDICATOR STAND

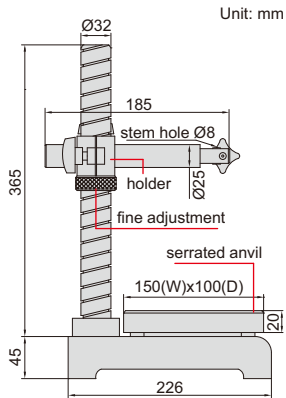


6867-250

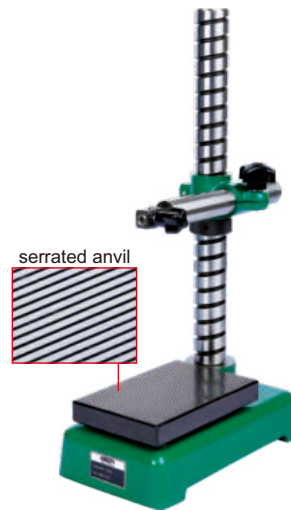
- Vertical travel of holder: 250mm
- Fine adjustment range: entire stroke
- Supplied with dust cover

Code	Applicable holding stem	Base
6867-250	Ø8mm	flatness 2.8µm

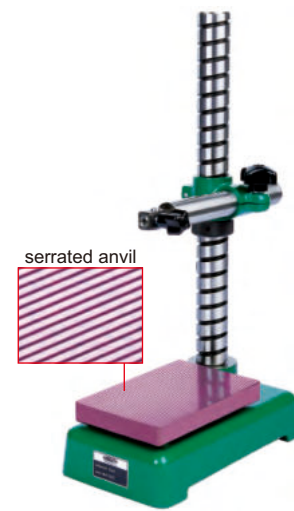
DIAL INDICATOR STANDS



- Vertical travel of holder: 250mm
- Fine adjustment range: entire stroke
- Supplied with dust cover



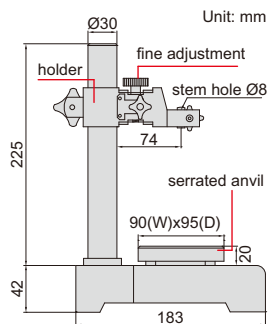
6864-250



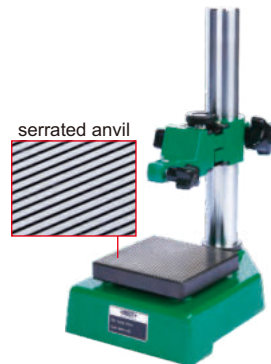
6864-250T

Code	Applicable holding stem	Anvil
6864-250	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6864-250T	Ø8mm	ceramic, serrated, flatness 1.5µm

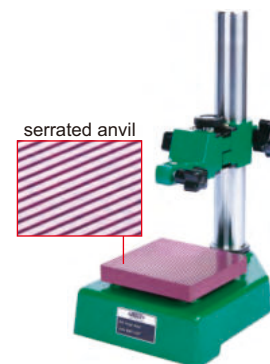
DIAL INDICATOR STANDS



- Vertical travel of holder: 150mm
- Fine adjustment range: 2mm
- Supplied with dust cover



6863-150



6863-150T

Code	Applicable holding stem	Anvil
6863-150	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6863-150T	Ø8mm	ceramic, serrated, flatness 1.5µm

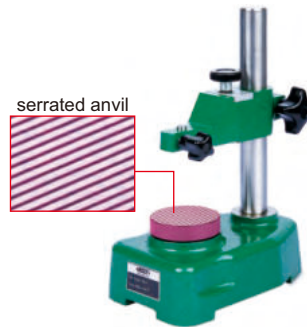
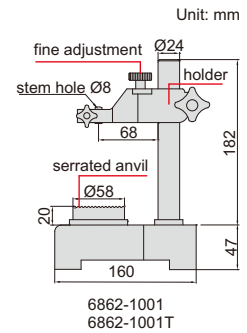
DIAL INDICATOR STANDS



6862-1001



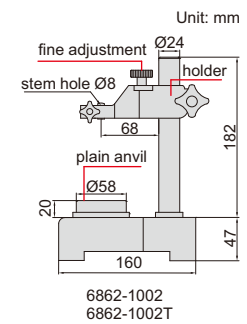
6862-1002



6862-1001T



6862-1002T

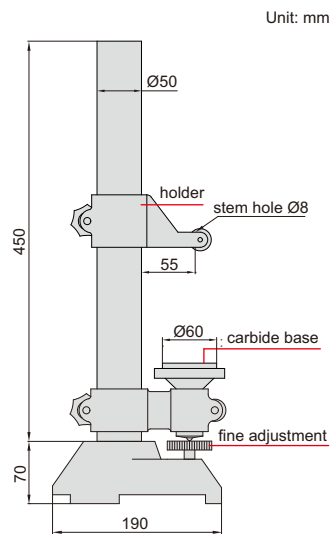


- Vertical travel of holder: 100mm
- Fine adjustment range: 2mm
- Supplied with dust cover

Code	Applicable holding stem	Anvil
6862-1001	Ø8mm	steel (hardness HRC60±2), serrated, flatness 1.5µm
6862-1002	Ø8mm	steel (hardness HRC60±2), plain, flatness 1.5µm
6862-1001T	Ø8mm	ceramic, serrated, flatness 1.5µm
6862-1002T	Ø8mm	ceramic, plain, flatness 1.5µm

HEAVY DUTY DIAL INDICATOR STAND

- Vertical travel of holder: 300mm
- Fine adjustment range: 5mm
- Carbide base
- Supplied with dust cover
- Optional accessory:
holder with stem hole Ø28 (code 6869-D28)



6869-300

Code	Applicable holding stem	Base
6869-300	Ø8mm	plain, flatness 1µm, carbide

TRANSFER STANDS

Application



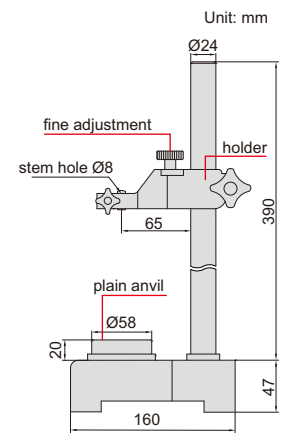
Rigid construction, designed to make comparison height measurement (set zero with gage block then measure height of workpiece) with dial indicators or digital indicators (variation of measuring force is high)



6865-300



6865-300T



- Vertical travel of holder: 335mm
- Fine adjustment range: 2mm
- Supplied with dust cover

Code	Applicable holding stem	Anvil
6865-300	Ø8mm	steel (hardness HRC60±2), plain, flatness 1.5µm
6865-300T	Ø8mm	ceramic, plain, flatness 1.5µm

REFER TO PAGE 66-67 FOR DETAILS

DIGITAL HEIGHT GAGES



1155-505



1157-501

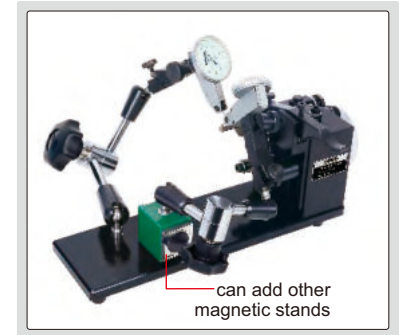
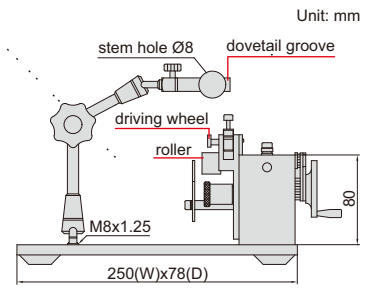
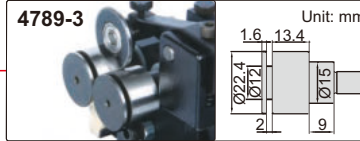
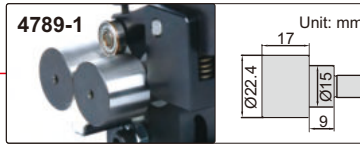


1157-502



1158-100

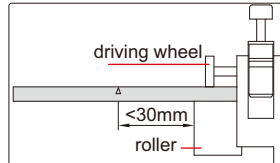
CONCENTRICITY GAGES



- Accuracy 2µm
- Optional accessory: dial test indicator, mini magnetic stand (code 6224-40)

Code	Applicable diameter
4789-1	Ø3.5mm-25mm
4789-2	Ø1mm-25mm
4789-3	Ø1mm-25mm

to ensure the accuracy 2µm, the distance between measuring point and roller should be <30mm



CONCENTRICITY GAGES

HIGH STABILITY,
LONG WORKING LIFE

dial test indicator is optional



4725-45

dial test indicator is optional



4725-60

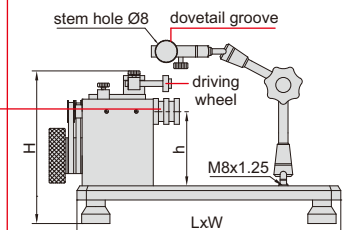
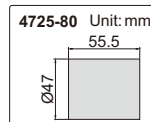
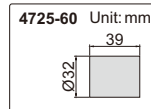
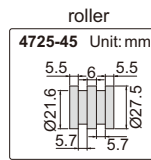
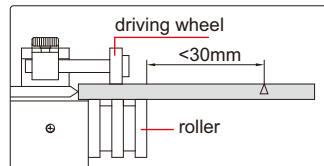
dial test indicator is optional



4725-80



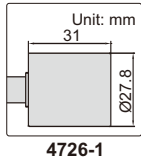
to ensure the accuracy 2µm, the distance between measuring point and roller should be <30mm



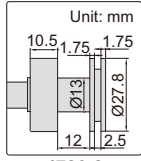
- With ball bearing, high stability, long working life
- Accuracy 2µm
- Optional accessory: dial test indicator

Code	Diameter range	Center height (h)	LxHxW	Weight
4725-45	3-45mm	80mm	280x130x170mm	6kg
4725-60	8-60mm	90mm	350x160x190mm	15.6kg
4725-80	8-80mm	130mm	400x200x250mm	25kg

QUICK-POSITIONING, SUITABLE FOR MASS MEASUREMENT

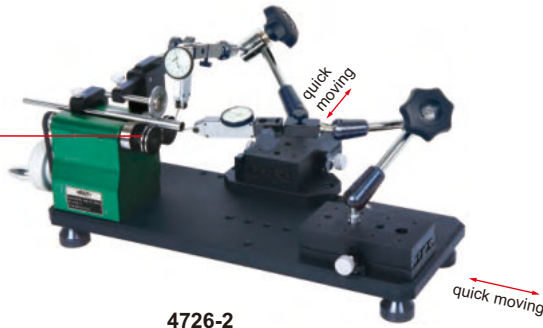


4726-1



4726-2

dial test indicator is optional



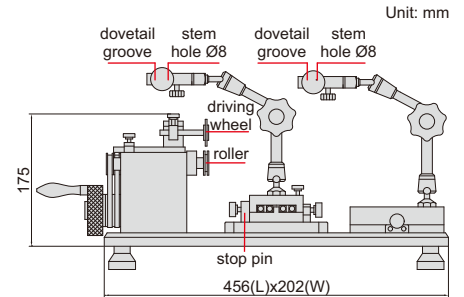
4726-2

- With ball bearing, high stability, long working life
- Accuracy: 2µm
- Optional accessory: dial test indicator

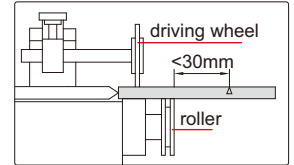
Code	Applicable diameter
4726-1	Ø4-40mm
4726-2	Ø2-40mm



CONCENTRICITY GAGES



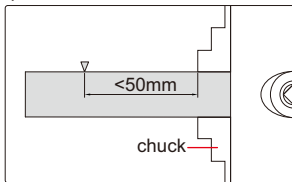
to ensure the accuracy 2µm, the distance between measuring point and roller should be <30mm



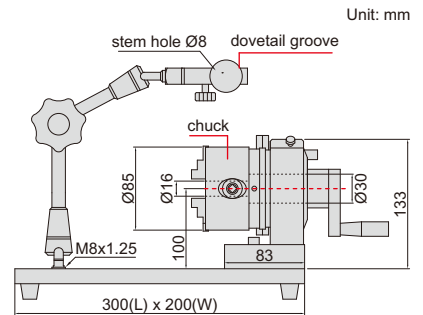
7

CONCENTRICITY GAGE

to ensure the accuracy 3µm, the distance between measuring point and roller should be <50mm



4786-1



- Accuracy: 3µm
- Ø50mm setting ring and Ø55mm calibration cylinder are included
- Optional accessory: dial test indicator

Code	Applicable inside diameter	Applicable outside diameter
4786-1	Ø24-64mm	Ø2-70mm

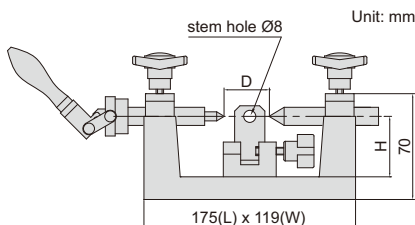
for cylinder



for tube



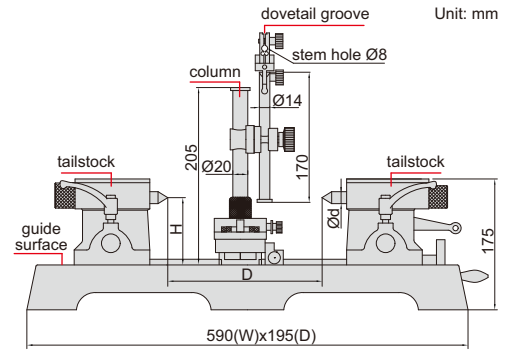
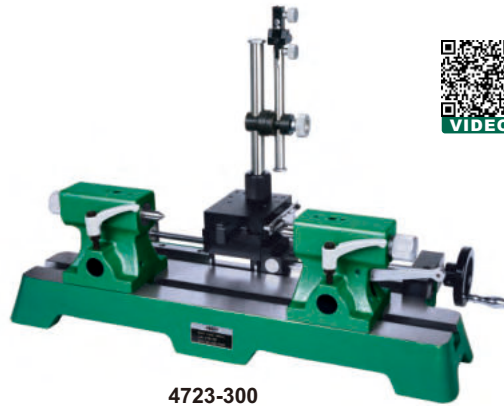
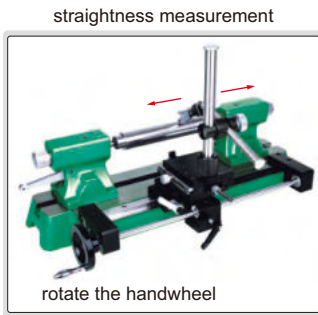
MINI BENCH CENTER



4721-75A

Code	Runout accuracy	Center height (H)	Distance between two centers (D)	Diameter of center (Ød)	Taper of center	Weight	Load
4721-75A	2µm	40mm	35-100mm	6mm	MT1	4.5kg	4kg

BENCH CENTER WITH STRAIGHTNESS MEASUREMENT

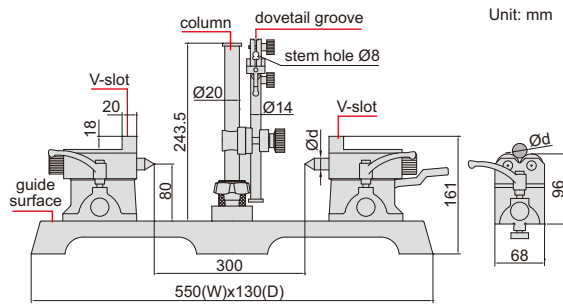


- Hardened cast-iron guide surface

Code	Parallelism *	Runout accuracy	Accuracy of straightness measurement	Center height (H)	Distance between two centers (D)	Diameter of center (Ød)	Taper of center	Weight	Load
4723-300	4µm	2µm	0.02mm	90mm	300mm	18mm	MT2	38kg	25kg

*Parallelism of two centers to the guide surface

BENCH CENTER WITH ROLLER TAILSTOCKS



roller tailstocks (included)



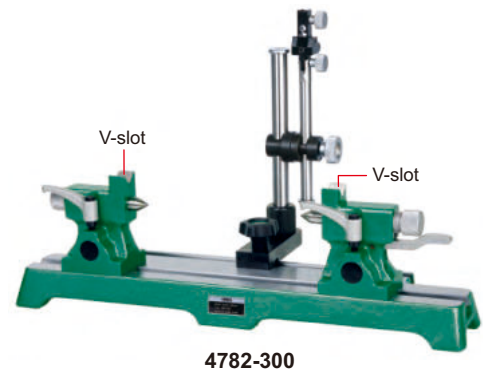
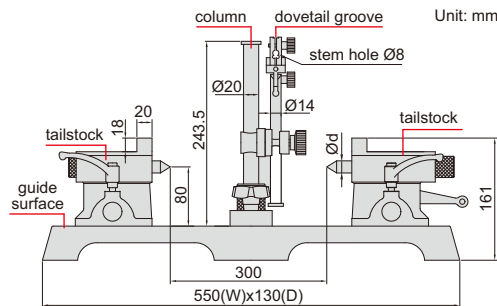
- Hardened cast-iron guide surface
- Supplied with V-slot/center tailstocks and roller tailstocks
- V-slot for cylinder Ø4~22mm
- Roller for cylinder Ø5~100mm

Code	Parallelism *	Runout accuracy	Center height	Distance between two centers	Diameter of center (Ød)	Taper of center	Load
4720-300	0.01mm	2µm	80mm	300mm	16mm	MT1	25kg (40kg for roller tailstocks)

*Parallelism of two centers to the guide surface

BENCH CENTER

- Hardened cast-iron guide surface
- Movable column
- V-slot for cylinder Ø4~Ø22mm



Code	Parallelism *	Runout accuracy	Center height	Distance between two centers	Taper of center	Diameter of center (Ød)	Load
4782-300	0.01mm	2µm	80mm	300mm	MT1	Ø16mm	25kg

*Parallelism of two centers to the guide surface

BENCH CENTERS

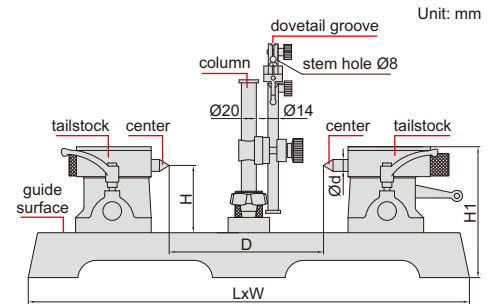
rotary centers
(optional)



umbrella centers
(optional)



4788-300



- Movable column
- Optional accessory: umbrella centers, rotary centers

High accuracy

(mm)

Code	Parallelism*	Runout accuracy	Center height (H)	Distance between two centers(D)	L	W	H1	Diameter of center (Ød)	Taper of center	Weight	Load
4788-300	0.010mm	2µm	90	300	590	192	175	18.0	MT2	34kg	25kg
4788-400	0.010mm	2µm	130	400	770	206	241	24.1	MT3	66kg	60kg
4788-600	0.010mm	2µm	130	600	930	220	250	24.1	MT3	90kg	60kg
4788-600H2	0.010mm	2µm	200	600	930	220	325	24.1	MT3	105kg	60kg
4788-1000	0.010mm	3µm	130	1000	1330	220	262	24.1	MT3	112kg	60kg
4788-1000H2	0.010mm	3µm	200	1000	1330	220	337	24.1	MT3	125kg	85kg
4788-1000H3	0.010mm	3µm	300	1000	1330	220	442	31.6	MT4	165kg	85kg

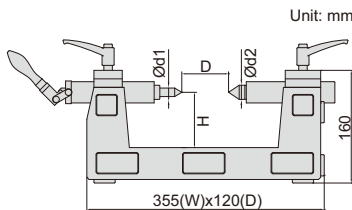
Low accuracy

(mm)

Code	Parallelism*	Runout accuracy	Center height (H)	Distance between two centers(D)	L	W	H1	Diameter of center (Ød)	Taper of center	Weight	Load
4788-D2	0.010mm	3µm	90	200	490	180	175	20.0	MT2	27kg	25kg
4788-D3	0.010mm	3µm	90	300	590	195	175	20.0	MT2	36kg	25kg
4788-D4	0.012mm	3µm	130	400	730	205	241	28.0	MT3	68kg	60kg
4788-D6	0.015mm	3µm	130	600	930	220	250	28.0	MT3	91kg	60kg
4788-D8	0.015mm	3µm	130	800	1130	220	250	28.0	MT3	99kg	60kg
4788-D10	0.015mm	3µm	130	1000	1330	220	262	28.0	MT3	116kg	60kg

*Parallelism of two centers to the guide surface

VERTICAL AND HORIZONTAL BENCH CENTER



- For vertical, side and horizontal use



horizontal use



side use

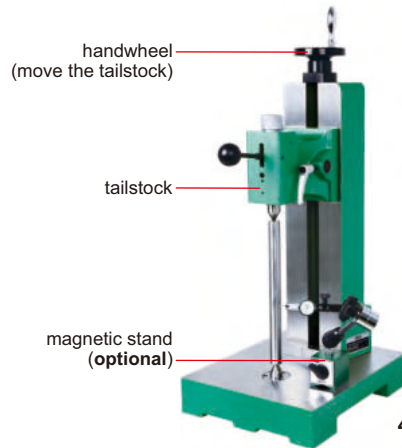


vertical use

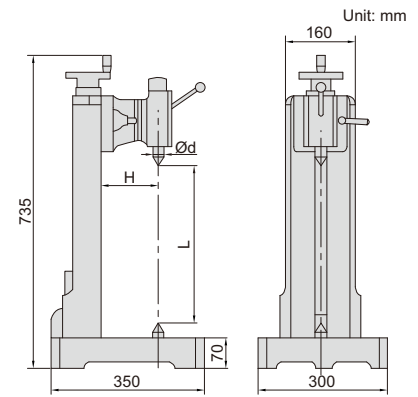
Code	Runout accuracy	Center height (H)	Distance between two centers (D)	Diameter of center (Ød1/Ød2)	Taper of center	Weight	Load
4722-200	2µm	80mm	200mm	12mm/20.2mm	MT1/MT3	22kg	25kg

VERTICAL BENCH CENTER

- Distance between two centers (L): 360mm
- Hardened cast-iron guide surface
- Use handwheel to move the tailstock
- Optional accessory: magnetic stands, dial test indicators



4728-360

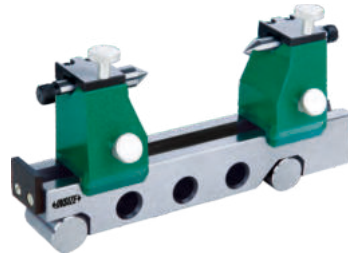
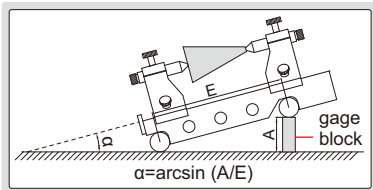


Code	Parallelism*	Runout accuracy	Center height (H)	Diameter of center (Ød)	Taper of center	Weight	Load
4728-360	0.01mm	2µm	130mm	24.1mm	MT3	85kg	80kg

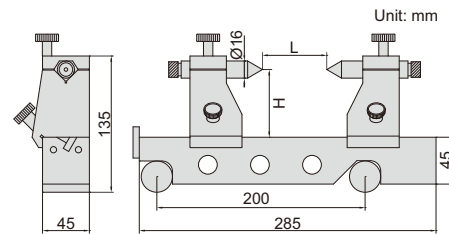
*Parallelism of two centers to the guide surface

7

TAPER INSPECTION INSTRUMENT



4157-200



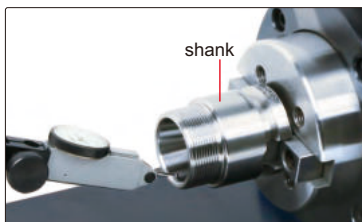
CAN BE CUSTOMIZED

- Check the taper angle of taper bar/ taper plug gages/Morse taper/ISO taper etc. The run out can be checked as well
- Sine bar accuracy (when $\alpha=30^\circ$): ± 5 seconds

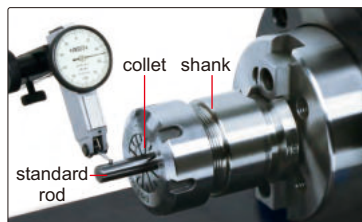
Code	Center height (H)	Center distance (L)
4157-200	65mm	200mm

SHANK RUNOUT TESTERS

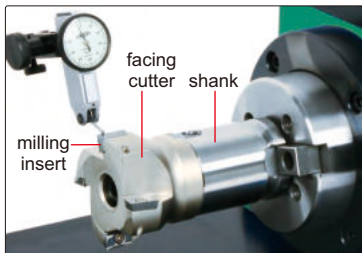
measure radial runout of shank



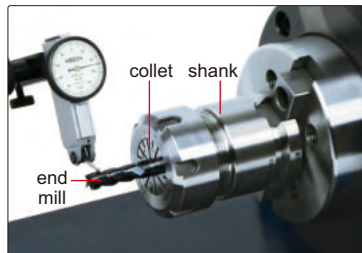
measure radial runout of collet



measure radial runout of cutter



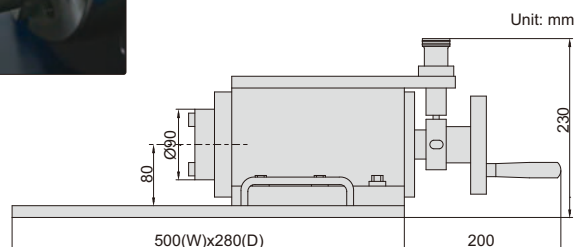
measure radial runout of end mill



4771-30

- Measure the radial runout of shanks, collets and cutting tools
- Optional accessory: dial test indicators, magnetic stands

Code	Taper	Accuracy
4771-30	BT30	1µm
4771-40	BT40	1µm
4771-50	BT50	1µm



standard shank (included)

