

4721-75A

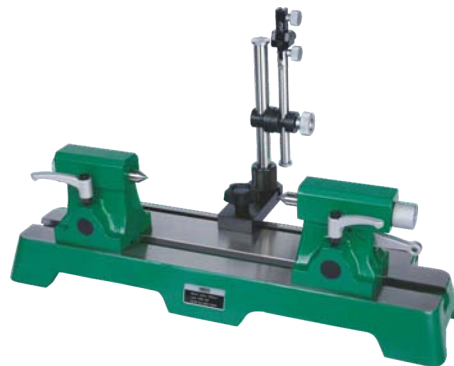
Code	Runout accuracy	Center height (H)	Distance between two centers (D)	Diameter of center (Ød)	Taper of center	Weight	Load
4721-75A	2µm	40mm	35-100mm	6mm	MT1	4.5kg	4kg

**BENCH CENTERS**

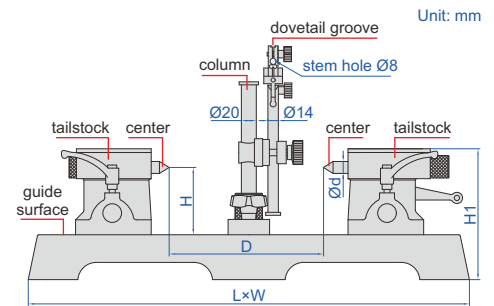
umbrella centers (optional)



rotary 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

**Standard 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

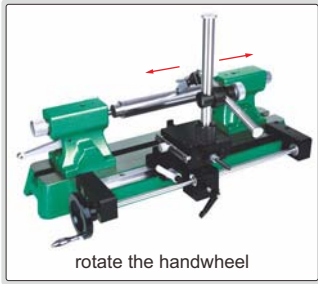
\*Parallelism of two centers to the guide surface

## BENCH CENTER WITH STRAIGHTNESS MEASUREMENT



VIDEO

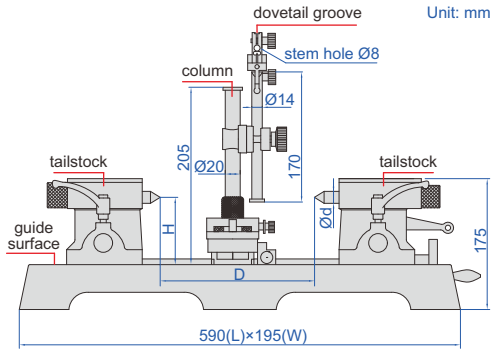
straightness measurement



rotate the handwheel



4723-300



Unit: mm

- 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

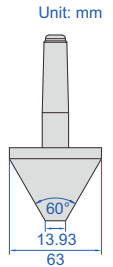
## BULL NOSE CENTERS

- Supplied in pair
- Suitable for 4723 and 4788 series bench centers

application



6391-MT2



Unit: mm

Code	Taper of handle
6391-MT2	MT2
6391-MT3	MT3

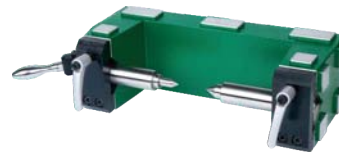
## VERTICAL AND HORIZONTAL BENCH CENTER



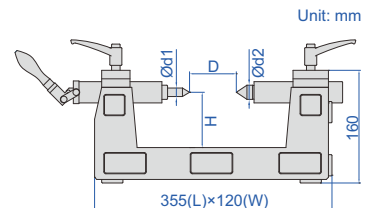
vertical use



horizontal use



side use

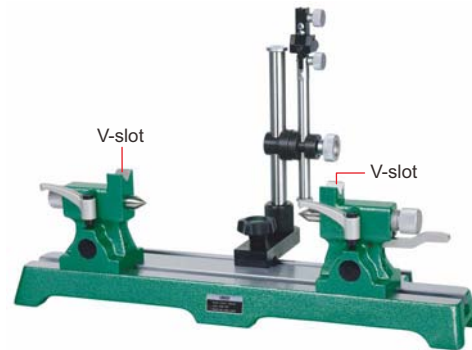
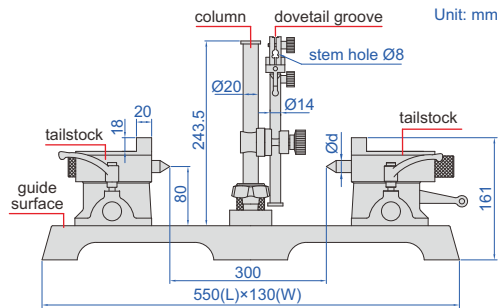


Unit: mm

- For vertical, side and horizontal use

Code	Runout accuracy	Center height (H)	Distance between two centers (D)	Diameter of center (Ød1/Ød2)	Weight	Load
4722-200	2µm	80mm	200mm	16mm/20.2mm	22kg	25kg

## BENCH CENTER (BASIC TYPE)



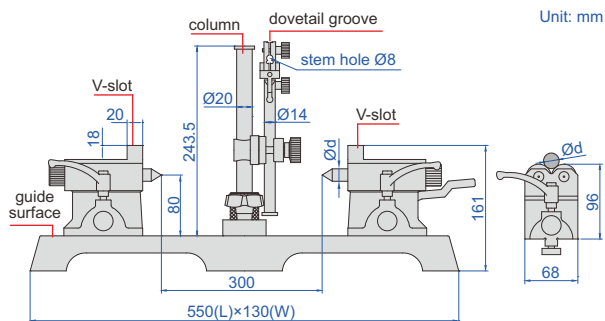
4782-300

- Hardened cast-iron guide surface
- Movable column
- V-slot for cylinder  $\text{Ø}4\text{--}\text{Ø}22\text{mm}$

Code	Parallelism *	Runout accuracy	Center height	Distance between two centers	Diameter of center ( $\text{Ø}d$ )	Load
4782-300	0.01mm	2 $\mu\text{m}$	80mm	300mm	$\text{Ø}16\text{mm}$	25kg

\*Parallelism of two centers to the guide surface

## BENCH CENTER WITH ROLLER TAILSTOCKS



4720-300

roller tailstocks (included)

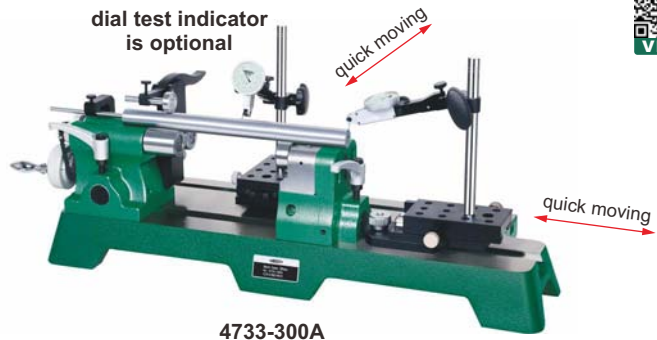
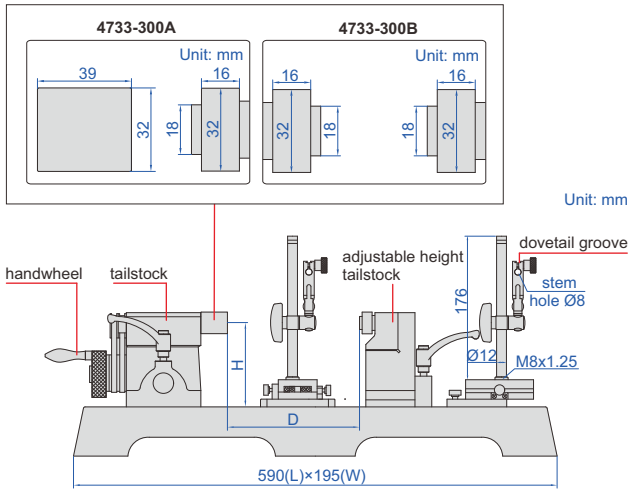


- Hardened cast-iron guide surface
- Supplied with V-slot/center tailstocks and roller tailstocks
- V-slot for cylinder  $\text{Ø}4\text{--}22\text{mm}$
- Roller for cylinder  $\text{Ø}5\text{--}100\text{mm}$

Code	Parallelism *	Runout accuracy	Center height	Distance between two centers	Diameter of center ( $\text{Ø}d$ )	Taper of center	Load
4720-300	0.01mm	2 $\mu\text{m}$	80mm	300mm	16mm	MT1	25kg (40kg for roller tailstocks)

\*Parallelism of two centers to the guide surface

## BENCH CENTERS

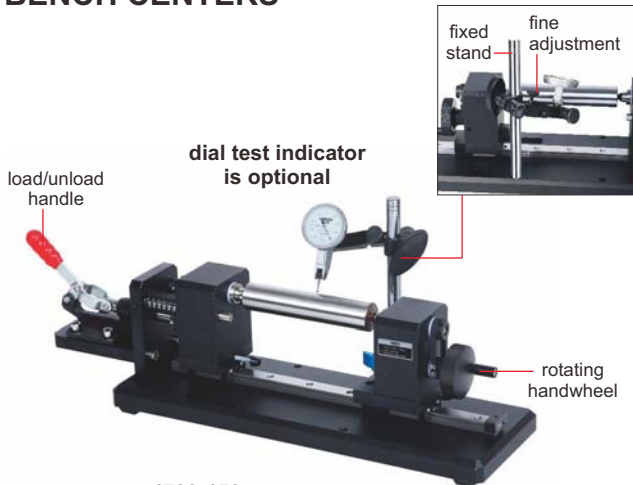


4733-300A

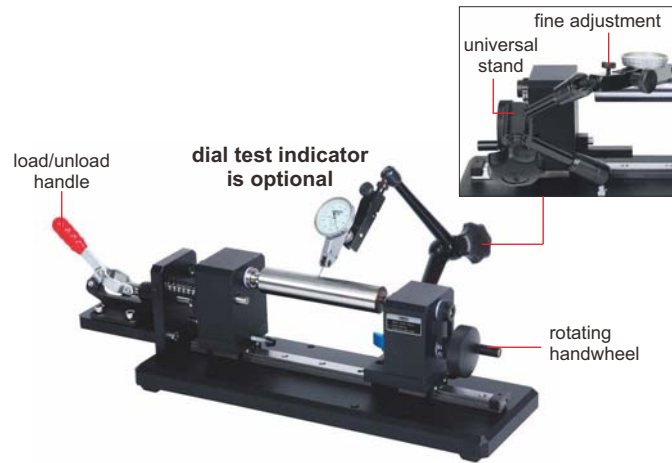
- Hardened cast-iron guide surface
- Quick moving is suitable for mass production inspection
- Adjustable height tailstock: 0-15mm, suitable for inspecting workpieces with different diameters
- Optional accessory: dial test indicator

Code	Runout accuracy	Center height (H)	Distance between two centers (D)	Applicable diameter	Adjustable height	Remarks
4733-300A	2µm	90mm	300mm	Ø8-60mm	0-15mm	with handwheel
4733-300B	2µm	90mm	300mm	Ø8-60mm	0-15mm	without handwheel

## BENCH CENTERS



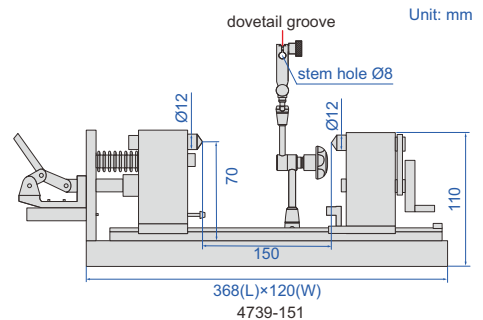
4739-150



4739-151



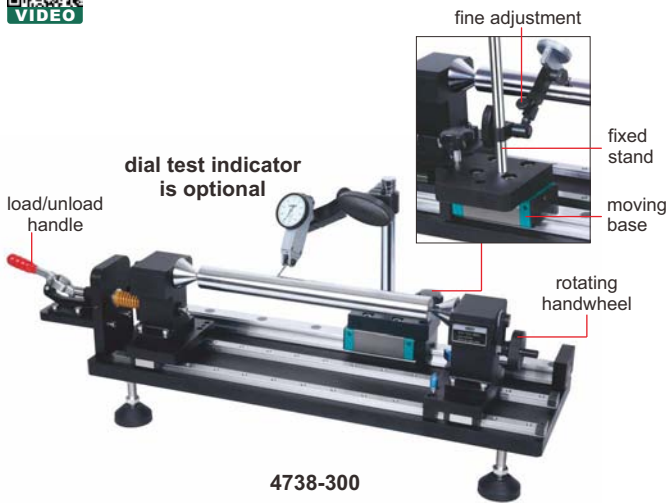
**POPULAR MODEL**



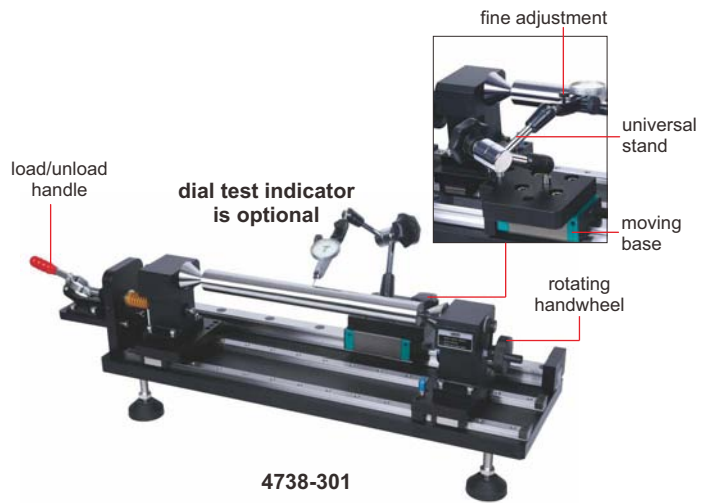
- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-140mm or inside diameter Ø1-12mm
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators

Code	Center height	Distance between two centers	Runout accuracy	Weight	Load	Remark
4739-150	70mm	150mm	2µm	6.5kg	15kg	fixed stand, high accuracy, inconvenient operation
4739-151	70mm	150mm	2µm	6.5kg	15kg	universal stand, low accuracy, convenient operation

BENCH CENTERS



4738-300

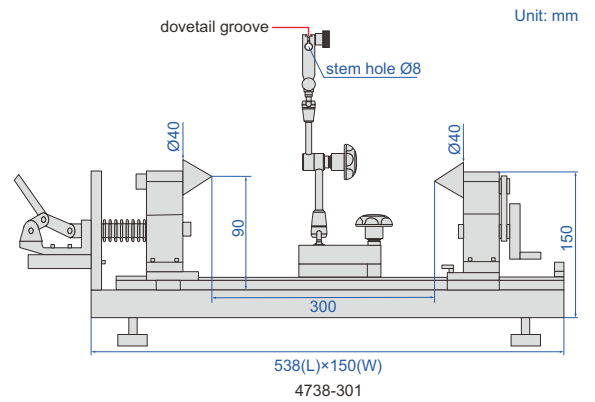


4738-301

dual base (optional)



standard rod (included)



Unit: mm

4738-301

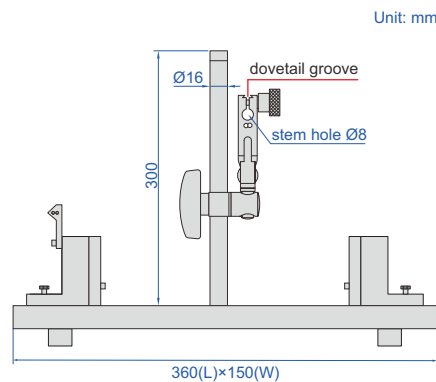
- Quick positioning, suitable for mass measurement
- Suitable for cylinders with outside diameter Ø3-180mm or inside diameter Ø1-40mm
- Supplied with standard rod to verify accuracy
- Optional accessory: dial test indicators

Code	Center height	Distance between two centers	Runout accuracy	Weight	Load	Remark
4738-300	90mm	300mm	2µm	15kg	20kg	fixed stand, high accuracy, inconvenient operation
4738-301	90mm	300mm	2µm	15kg	20kg	universal stand, low accuracy, convenient operation

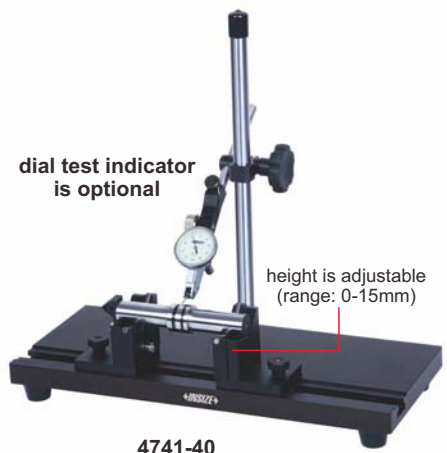


BENCH CENTER

- Quick positioning, suitable for mass measurement
- Optional accessory: dial test indicators



Unit: mm

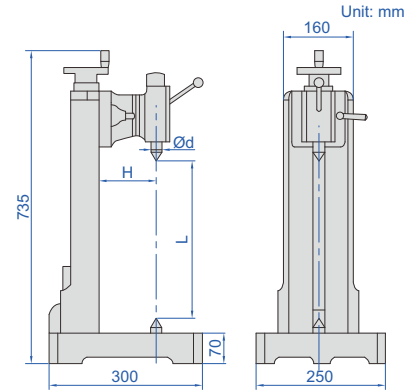
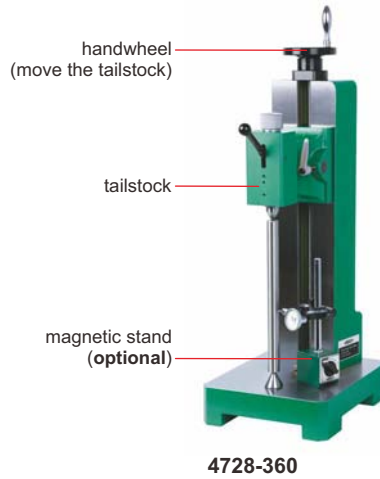


4741-40

Code	Diameter range	Workpiece length	Accuracy	Weight
4741-40	Ø3-40mm	15-300mm	2µm	3.8kg

## VERTICAL BENCH CENTER

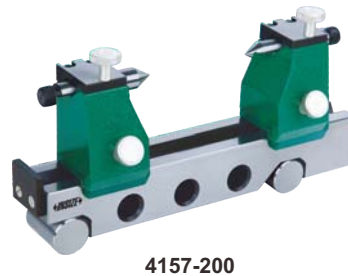
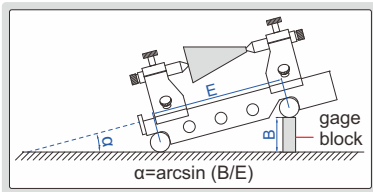
- Distance between two centers (L): 360mm
- Hardened cast-iron guide surface
- Use handwheel to move the tailstock
- Optional accessory: magnetic stands, dial test indicator



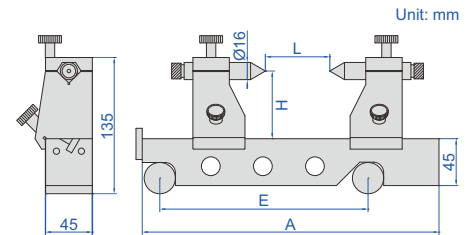
Code	Parallelism*	Runout accuracy	Center height (H)	Diameter of center (Ød)	Taper of center	Weight	Load
4728-360	0.01mm	2µm	130mm	24.1mm	MT3	85kg	80kg

\*Parallelism of two centers to the guide surface

## TAPER INSPECTION INSTRUMENTS



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

Code	Center height (H)	Center distance (L)	Sine bar accuracy (when α=30°)	E	A
4157-200	65mm	200mm	±5 seconds	200mm	285mm
4157-300	65mm	300mm	±8 seconds	300mm	385mm

## MAGNETIC SQUARE WITH V GROOVE

REFER TO PAGE 459 FOR DETAILS



6539-100