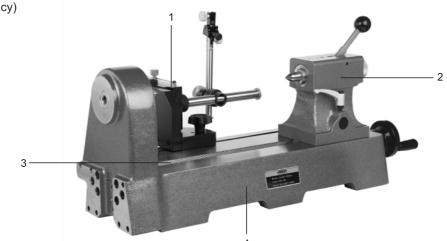


OPERATION INSTRUCTION Bench Center

Accuracy: 0.01mm (Parallelism of the line between two centers to the guide surface) 0.002mm (Runout accuracy)



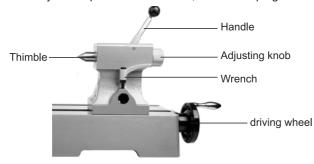
- 1. Bench center is mainly used to measure cylindrical workpiece's circular runout, roundness, concentricity and deflective difference.
- 2. Description of each part:

1-movable column2-Right tailstock3-Guide surface

4-Base

Right tailstock: Rotate driving wheel to move right tailstock, rotate wrench clockwise to fix it (Lift the wrench, rotate the wrench counterclockwise, put down the wrench, and then rotate wrench clockwise. Do these steps until tailstock is fixed.). Handle: Press the handle to install the workpiece.

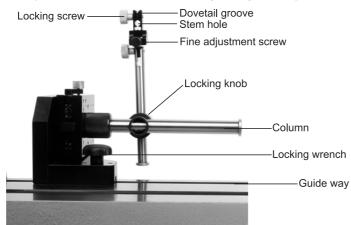
Adjusting knob: Rotate the adjusting knob to adjust the pressure of thimble, avoid clamping excessively.



Movable column: Clamp the indicator by dovetail groove or stem hole, fix it with the locking screw. Adjust the indicator with the fine adjustment screw. Loosen the locking knob, arm can be moved through column and rotated freely, adjust appropriately and tighten the locking knob.

Loosen locking wrench, movable column can be moved through guide way.

Notice: Do not loosen locking wrench completely, avoid movable column dropping from guide way.

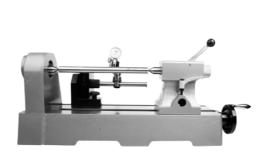


Fast positioning device: Benefit for batch measurement. After adjust the position of indicator for the first workpiece, lock the positioning locking screw. Loose top locking screw and move fast positioning device backward to change next workpiece. Move the device forward to previous position after change, indicator will be fast positioning.



3. Measurement:

- --- It is necessary to clean faces of guide surface, guide way, thimble, workpiece before measurement
- --- According the size of workpiece, move right tailstock to set the distance, and fix it
- --- Press handle to install the workpiece and release it, rotate adjusting knob to adjust pressure appropriately
- --- Install indicator, adjust fast positioning device to appropriate position, rotate the workpiece to measure, get result from indicator
- --- Bench center can also be used vertically

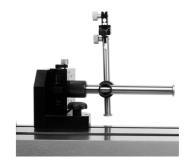




horizontal use

vertical use

Notice: Open the package, take out product, it is necessary to install movable column: unscrew the locking wrench, lift up movable column, rotate 180°, put it back in the guide way, screw on the locking wrench, movable column with the right position as following picture.



4. Notice:

- --- Be careful to control the force applied on the wrench to avoid damaging internal locking device
- --- Tailstocks should be moved carefully, avoid thimbles' collision
- --- Take workpieces down carefully and forbid to drop workpieces on the guide suiface to avoid damaging.
- --- Avoid placing the product in the air with moisture to prevent rustiness, oil it after use
- 5. Optional accessory: Dial test indicator(code: 2880-02, 2897-02)

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