

Thank you for purchasing the S-Line 3-Point Internal Micrometer.

Please read this manual thoroughly before use for proper operation. Ring gauge calibration standard is not included; for zero-setting, please prepare appropriate ring gauge as required by the instrument's measurement range.

FEATURES

3 Point ID measurement for most accurate ID measurements possible.

SPECIFICATIONS

Resolution : 0.005mm

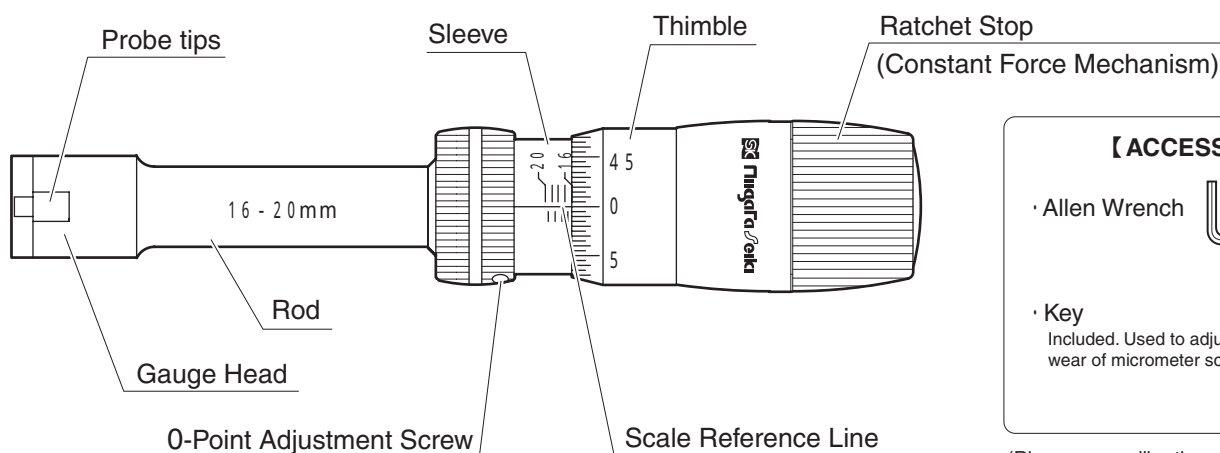
Accuracy : 4μm

Operating Temperature range : 15 ~ 40

Storage Temperature range : 0 ~ 50

	Measurement Range (mm)	Measuring Part Material
MC-0608IPS	6 ~ 8	Alloy Steel Tip
MC-0810IPS	8 ~ 10	
MC-10125IPS	10 ~ 12.5	
MC-12516IPS	12.5 ~ 16	Carbide Tip
MC-1620IPS	16 ~ 20	
MC-2025IPS	20 ~ 25	
MC-2535IPS	25 ~ 35	
MC-3550IPS	35 ~ 50	

PART IDENTIFICATION



【ACCESSORIES】

· Allen Wrench

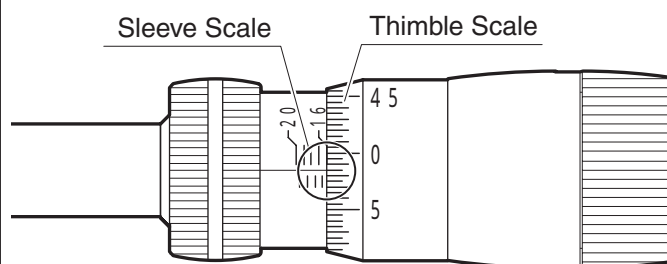
· Key
Included. Used to adjust for wear of micrometer screw.

(Ring gauge calibration standard is not included.)

READING THE SCALE

Resolution = 0.005mm

Example -- MC-1620IPS



Sleeve Scale Reading : 16 .0

Thimble Scale Reading : .015

Reading : 16 .015 (mm)

⚠ CAUTION

Always remove dirt from measuring surfaces with a cloth before use.

Do not turn spindle more than 0.5mm above upper measurement range.

If Probe tips do not return after thimble is loosened, please use hand in dust free glove to push in.

This is a precision instrument, handle with care. Do not drop or subject to excessive forces.

Please do not disassemble or modify.

Keep instrument away from direct sunlight or high temperatures such as in a car, or near a stove or heat source. Remove dust and cutting chips after use and apply rust preventative oil to metallic surfaces. Please keep out of reach of children.

Please do not use organic solvents to clean the body of the instrument.

Keep instrument away from water and oil.

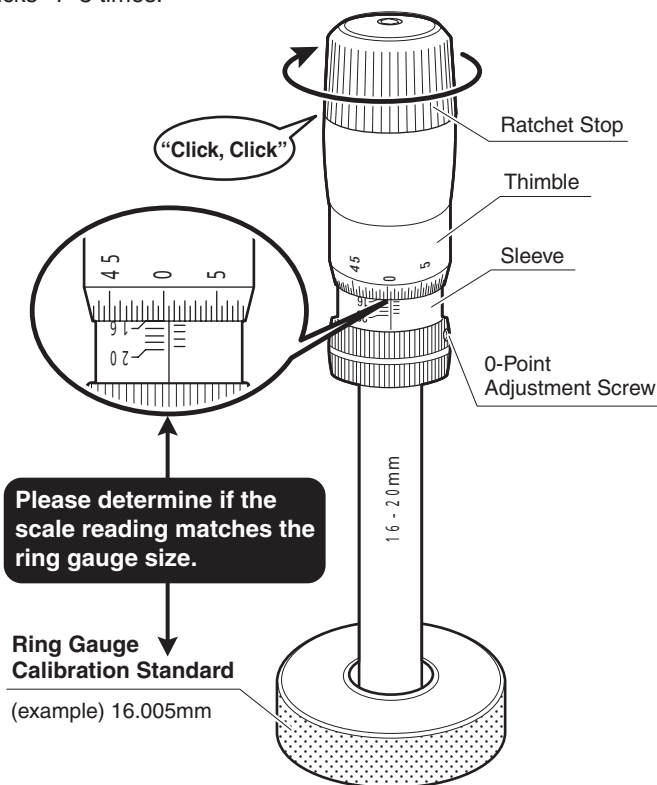
Only use as directed. Improper use may cause accident or injury.

ZERO-POINT SETTING

Use ring gauge appropriate for instrument measuring range.

Prepare instrument and ring gauge for calibration by cleaning measurement head and ring gauge inner diameter with appropriate cleaner.

Insert the measurement head into the ring gauge and turn spindle until the measuring surfaces make contact with the inside of the ring gauge. Continue turning until ratchet stop "clicks" 1~3 times.

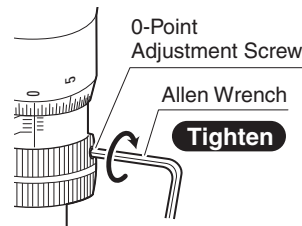


Determine if the micrometer reading from the spindle scale and thimble matches the size of the ring gauge calibration standard.

If they do not match, without moving thimble from position set in step above, perform the following procedure.

- 1) Tighten the 0-point adjustment screw using the supplied Allen Wrench to prevent the thimble from turning.

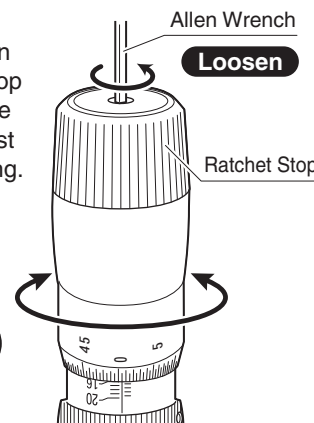
Locking the Thimble



- 2) Using the Allen Wrench, loosen the screw above the ratchet stop until the thimble is able to move again. Turn the thimble to adjust the reading to the proper setting.

Thimble Moves Again

Adjust thimble to match value of ring gauge



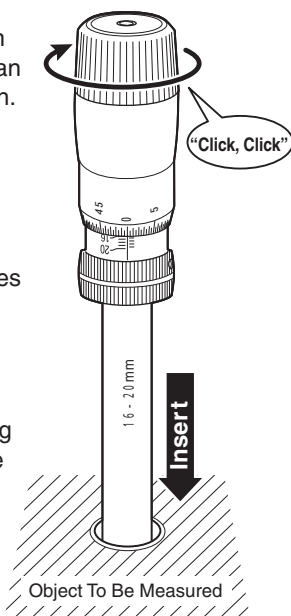
- 3) Tighten the screw above the ratchet stop, then loosen the 0-point adjustment screw. Zero-point setting is now complete.

OPERATION

Remove any grease and dust from the measuring surfaces with a clean cloth, such as a lens cleaning cloth. Make sure no foreign objects are adhered to the surfaces.

Insert the Gauge head into object to be measured and turn spindle until the measuring surfaces make contact with the inside diameter. Continue turning until ratchet stop "clicks" 1~3 times.

Read the measured value following the "Reading the Scale" procedure above.

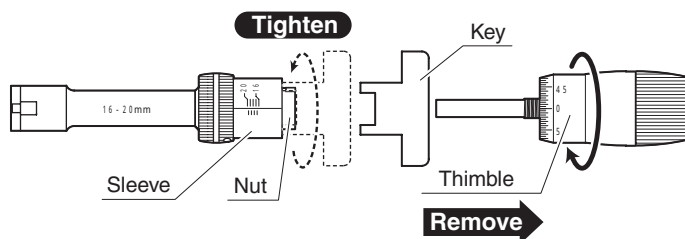


MICROMETER SCREW WEAR ADJUSTMENT

Wear on the micrometer screw in the sleeve will affect accuracy of the measurement. Please adjust using the key provide as required.

Remove the thimble by rotating as shown.

Insert the key into the notches in the exposed brass nut. Rotate the key in the clockwise direction a little at a time. (Over-tightening will make the thimble hard to turn)



Replace thimble and then perform the zero-point setting procedure described above.

TROUBLESHOOTING

ERROR CONDITION	CORRECTIVE ACTION
Measured value is wrong	Clean measuring surfaces with cloth. Check to insure zero-point is correct. Please reset zero-point. If micrometer nut seems worn, please adjust using the above procedure.
Probe tips do not return	Please use hand in dust free glove to push in.

If issue does not resolve, or if you have any questions, please contact distributor or place of purchase. Please note, manufacturer is unable to respond to inquiries or provide service directly. Please contact distributor or place of purchase.

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