

Please read through this owners manual carefully before using your new tool. Use your tool properly and only for its intended use.



# 1.4" to 6" Cylinder Bore Gage Manual

- Range: 1.4 - 6" (Combination of 1.4 - 2" and 2 - 6")
- Grad: 0.0001"
- Accuracy

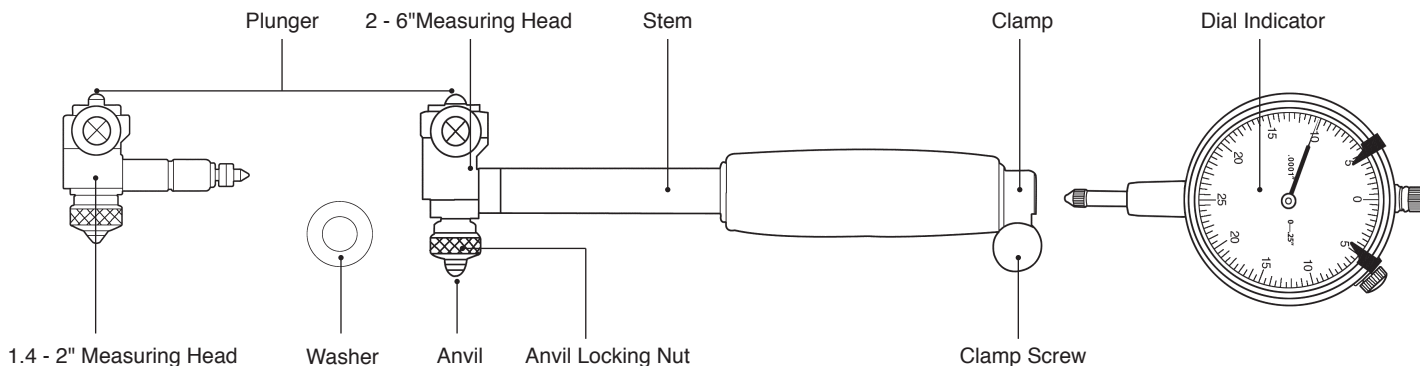
Total error	Repeatability	Self-centering error
0.0005"	0.00015"	0.00015"

• **Accessory specifications**

Range	Anvil Quantity	Anvil Range											Extension		Washer Quantity	Washer size							
		No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	No.11	Quantity	Size		No.1	No.2	No.3					
1.4-2"	4	1.4"	1.6"	1.8"	2.0"																		
2-4"	11	2.0"	2.2"	2.4"	2.6"	2.8"	3.0"	3.2"	3.4"	3.6"	3.8"	4.0"											
4-6"	With 2" Extension	4.0"	4.2"	4.4"	4.6"	4.8"	5.0"	5.2"	5.4"	5.6"	5.8"	6.0"	1	2"	3	0.02"	0.05"	0.1"					

\*No.1 anvil is already installed in each measuring head  
 \*In Inch Sets the largest anvil location is intentionally left empty

• **Parts Identification**



**1. Selecting the range**

- When range equals 1.4-2", use the 1.4-2" measuring head & anvils sets; and when range equals 2-6", use the 2-6" measuring head & anvils sets. (See the above figure)

**2. Attaching the indicator**

- Insert the indicator spindle into the stem
- The hand of the indicator should travel about 1 revolution (0.01")
- Lock the indicator with the clamp screw

**3. Selecting the accessory or combination of accessories**

- Remove the anvil locking nut and the anvils or washers not used
- Install the correct combination of accessories to match the bore size to be measured. This combination should allow the measuring plunger to travel half of its range in either direction.
- Install the knurled locking nut securely

**4. Dimension setting**

- Set a setting master to the exact dimension to be measured. Ring gages, micrometers, or gage blocks may also be used.
- Place the cylinder bore gage's measuring contacts between the setting master's surfaces. Find the lowest point by sweeping in between the setting master's surfaces to find the reversal point of the dial indicator's main hand. Once this reversal point is located, hold the bore gage steady and turn the indicator's bezel to make the hand point exactly to zero. You are now prepared to measure.

**5. Measuring and reading methods**

- Place the gage in the cylinder to be measured and gently rock it to obtain the lowest dial reading (reversal point). Any difference (+ or -) from zero setting will be the difference from the size used to set zero. In order to get the best results, one must generally measure several positions.

