## **Operating Instructions and Parts Manual**

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

# Wer 35 to 160mm Cylinder Bore Gage Manual

- Range: 35-160mm (Combination of 35-50mm and 50-160mm)
- Graduation: 0.01mm
- Accuracy

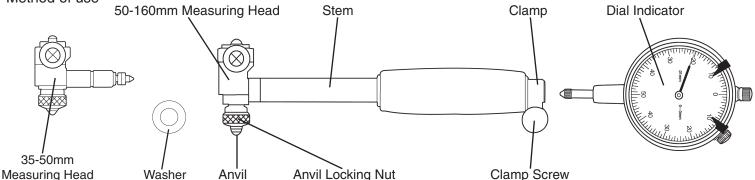
Total error	Repeatability	Self-centering error				
0.02mm	0.01mm	0.005mm				

Accessory specifications

I Rande I	Anvil Quantity	Anvil Range											Extension		Washer	Washer size				
		No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	No.11	No. 12	Quantity		Quantity	No.1	No.2	No.3	No.4
35-50mm	4	35	40	45	50															
50-105mm	12	50	55	60	65	70	75	80	85	90	95	100	105	1	55	4	0.5	1.0	2.0	3.0
105-160mm	With 55mm Extension	105	110	115	120	125	130	135	140	145	150	155	160							

### \*No.1 anvil is already installed in each measuring head.

Method of use



#### 1. Selecting the range

• When range equals 35-50mm, use the 35-50mm measuring head & anvil set; and when range equals 50-160mm, use the 50-160mm measuring head & anvil set. (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 (1.0mm).
- Lock the indicator with the clamp screw.

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

- Remove the anvil locking nut and the anvil or washers not used.
- Install the correct accessory or combination of accessories to match the bore size to be measured.
- Install the knurled locking nut tightly.

#### 4. Dimension setting

- Set an outside micrometer to the exact dimension to be measured. Ring gages of gage blocks may also be used.
- Place the cylinder bore gage's measuring contacts between the micrometer faces and adjust the measuring contacts to position the
- long hand of the dial indicator at the Max. travel, tighten the locking nut. Turn the indicator's bezel to make the hand point exactly to zero.

#### 5. Measuring and reading methods

• Place the gage in the cylinder and gently rock it to get the lowest dial reading (reversal point). In order to get the exact measurements, one must generally measure several positions.

