Radius Gauges User Guide

The IRG-3600 and ORG-3600 are radius gauges that can be used to measure the INSIDE RADIUS or OUTSIDE RADIUS from 6 inches (150 mm) to 144 inches (3600 mm). These gauges have both Standard (inches) and Metric in one.

Setting Up Your IRG-3600 & ORG-3600

The IRG-3600 and ORG-3600 come folded for easy storage. To use the gauge, you will need to unfold the arms by loosening the white thumb nuts, move each arm to its limit and then re-tighten the white thumb nuts. See pictures along the side for more information. Correct position of the arms is achieved when a notch, located on the arm, bisects with the gauge itself.

Using Your IRG-3600 & ORG-3600

To measure an arc, unscrew the black knob in the middle of the gauge. This item is referred to as the “brake” of the gauge.

Place your thumb and index finger on the main pointer rivet. With the pointer, starting at the lower end of the scale, place the center contact point on the curve that you wish to measure.

Gently slide the pointer until the two outer contact points touch the curve.

For an accurate measurement, all three contact points must touch the curve.
Reading Your Gauge Scale

Reading your gauge scale is really easy once you understand that they are not the same readings as those that can be found on a standard ruler.

The main difference is that the values INCREASE dramatically as you go UP the scale.

Standard Or Inches Scale ...

On the Standard (inches) side, the scale between the 6 inch and the 10 inch marks is 1/10 inch for every line. The section between the 96 inch and the 144 inch the scale is 4 inches for every line.

Metric Scale ...

The same applies for the Metric side where the scale between 150 mm and 260 mm is 2 mm for every line, while between 1.7 M (1700 mm) and 3.6 M (3600 mm) the scale is 0.1 M (100 mm).
The Variable Arc

The Variable Arc is a unique device that, when mounted on the IRG-3600 or ORG-3600, will form whatever radius you set for the gauge itself. The Arc is made of a durable material and can withstand numerous uses.

With the IRG-3600: Mount the Arc into the notches located on the three contact points. The two outer arms will have 2 pins attached to a roller, which slides back and forth inside a slot. Attach the center contact point first to the Arc by sliding the 2 pins into the notches. Next, bend the arc so that one side touches the arm of the gauge. The 2 pins will slide into the notches. Repeat this step for the other arm and other side of the arc. Arc is now attached, locked in place.

With the ORG-3600: Set the gauge to around 24” or 600 mm. Insert the pins into both outer slots of the arms and then insert the 2 pins into the center notches of the gauge.

IRG-750 And The ORG-750

The IRG-750 and the ORG-750 are radius gauges which can be used to measure the INSIDE and OUTSIDE ranging from 2.5 inches (64 mm) to 30 inches (750 mm). Both Standard (inches) and Metric are featured on one gauge.

Unlike the IRG-3600 or ORG-3600, these gauges come ready to use. There are no arms to unfold or locking mechanisms. These gauges come with sliding tension, once a measurement is obtained, the mechanism will remain in place until moved back.