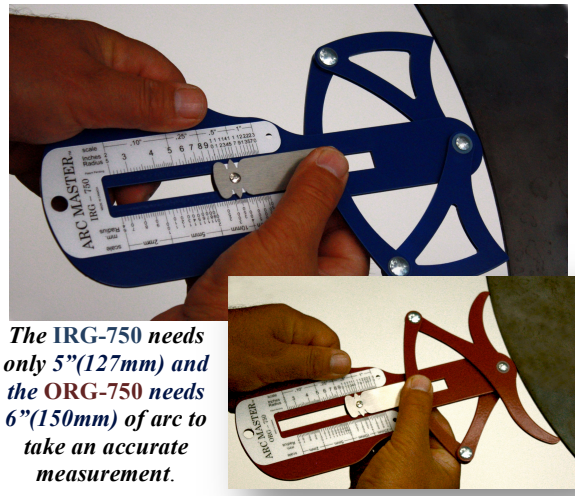
Also by

ARC MASTER

The IRG-750 which measures the INSIDE radius while the ORG-750 measures the OUTSIDE, ranging from 2.5”(64mm) to 30”(750mm) in Metric & Imperial.



The IRG-750 needs only 5”(127mm) and the ORG-750 needs 6”(150mm) of arc to take an accurate measurement.

It works the same way as the RG-3600, but on a smaller scale.

There are no arms to unfurl to take your measurement. The IRG-750 stores as you see it above, ready to use.

Also, there is no locking knob. In designing the RG 750 gauges we incorporated what we call “Sliding Tension” in to the radius gauges. The gauges’ smooth action makes it easy to take a quick measurement, but will more readily hold its reading afterwards.

The 750’s Best feature is its price. As opposed to pricey digital radius gauges, Arc Master Radius Gauges are inexpensive enough and so useful, you’ll wonder how you ever managed without them.

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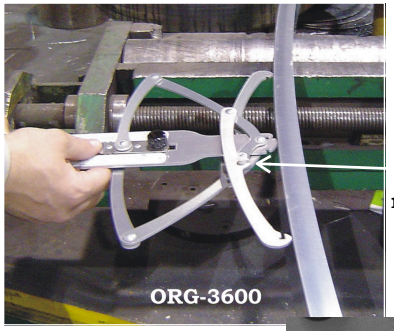
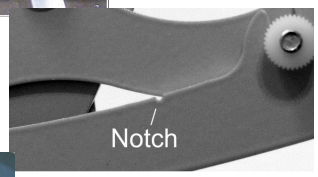
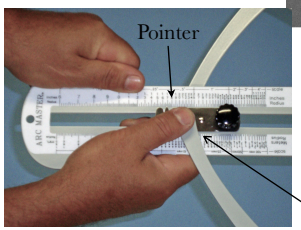
The ORG-3600 measures the OUTSIDE RADIUS from 6”(150mm) to 144”(3600mm) in Metric and Imperial.



The ORG-3600 folds for easy storage.To unfold, loosen white thumb nuts, swing each arm to its limit, then re-tighten.

Correct position is confirmed when a notch located on the arm is bisected. →





To measure a curve, loosen Brake *(large black knob)*, **place your thumb and index finger on the main pointer rivet.** *(as shown at left)*

Now, with the pointer near the *large* end of the scale, place the centre contact point on the curve.

Using light pressure, slide the pointer until the 2 outer contact points touch the curve.

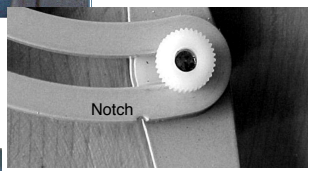
For an accurate measurement, all 3 contact points must touch the curve.

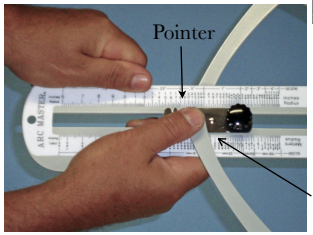
To learn how to work with arcs, go to Working With Arcs on our website www.arcmaster.ca or go to www.handymath.com to get instant dimensions.

The IRG-3600 measures the INSIDE RADIUS from 6”(150mm) to 144”(3600mm) in Metric and Imperial.

The IRG-3600 folds for easy storage. To unfold, loosen white thumb nuts, swing each arm to its limit, then re-tighten.

Correct position is correct when a notch located on the arm is bisected. →





To measure a curve, loosen Brake *(large black knob)*, **place your thumb and index finger on the main pointer rivet.** *(as shown at left)*

Now, with the pointer near the *small* end of the scale, place the centre contact point on the curve.

Using light pressure, slide the pointer until the 2 outer contact points touch the curve.

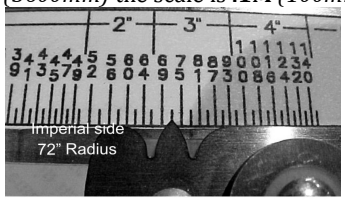
For an accurate measurement, all 3 contact points must touch the curve.

THE SCALE

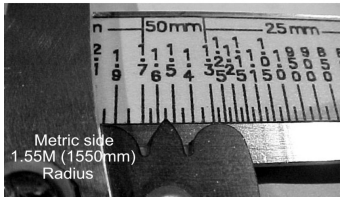
The measuring increments on the IRG 3600 & ORG 3600 are **not** the same as those on a standard ruler or tape measure. The difference being, the values increase dramatically as you go up the scale.

For instance, on the **Imperial** side, the scale between the **6"** & **10"** marks is **1/10"** for **every line**, while for the section between **96"** & **144"**, the scale is **4"** for **every line**.

The same applies for the **Metric** side where the scale between **150mm** & **260mm** is **2mm** for **every line**, while between **1.7M** *(1700mm)* and **3.6M** *(3600mm)* the scale is **.1M** *(100mm)*.



The **Imperial** side indicates a radius of **72"** with every line in this section in **3"** increments.



The **Metric** side reads **1.55M** (1550mm) with every line in this section in **50mm** increments.

Accuracy & Calibration

(Read before using your gauge for the first time.)

Your **Arc Master Radius Gauges** are accurate to +/- .5% for all measurements when they leave the shop. They are **NOT** adjustable. Measurement accuracy will only change if the gauges are damaged or altered in any way.

Arc Master Radius Gauges should be used for **REFERENCE** only. They are **NOT** registered with any **Industry Standards Organization.**

To ensure the gauges are accurate, we recommend that at first use, check the gauges on a sample arc and record the measurement. This sample arc should have a radius of between 120" & 144", the larger radius the more accurate the check. Make a note of the radius measurement on the sample arc and refer to this sample arc on all your regular radius checks.

(If your check on this large radius is accurate, all smaller radii will also be accurate.)

If the gauge is out, do not send your gauge to any of the various private or government Calibration agencies. They generally are not equipped to check radius gauges.

Email us at arcmaster@shaw.ca ***and we will work out an adjustment procedure for your gauge.***

THE VARIABLE ARC

The **VARIABLE ARC** is a unique device that, when mounted on the **IRG 3600** or the **ORG 3600**, will form whatever radius you set on the radius gauge. The **VARIABLE ARC** is made of a super-tough material that, due to its design, the will form an arc matching the radius indicated on the scale.

Using the VARIABLE ARC.

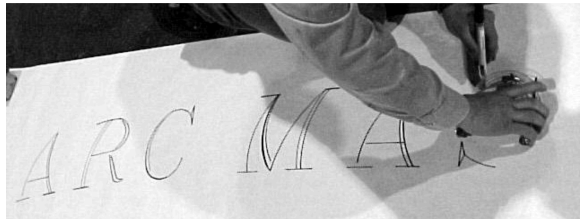
1) Measure arcs drawn on a flat surface, or physical arcs that are impossible to measure using the three-point contact method.
NOTE: (When used on the **IRG 3600**, the flat sections on both ends of the **VARIABLE ARC** prevent a full length measurement.)

2) Preset the **Arc Master** to a desired radius and then trace this arc onto a flat surface.
The lengths of these arcs can be measured using the Imperial and Metric increments located on the **VARIABLE ARC.**

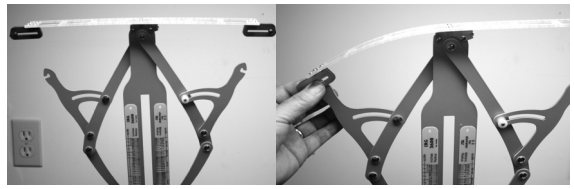
3) The **VARIABLE ARC** is perfect for making scale models of arcs by using the scale on the **Arc Master**. This is useful for drafting buildings, archways, millwork, furniture, etc..
For instance, if the full-scale radius is 120", and you are drawing a 1/10th scale model, you simply do the following division, *(120"/10 =* ***12".)*** Now set the **Arc Master** to 12" and you'll have the proper radius for your drawing.

4) *The* **VARIABLE ARC** *can also be used* ***without*** *the* ***ARC MASTER*** *Radius Gauge.*

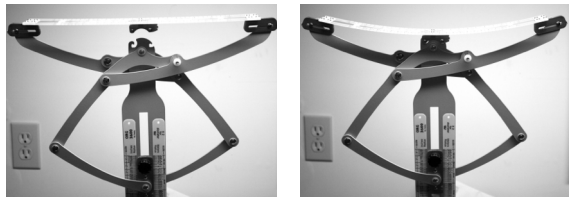
Gripping the ends of the **VARIABLE ARC** with one hand can produce tighter radii for drawing curves for art projects.



To use the **VARIABLE ARC** with the **IRG 3600**, mount the **VARIABLE ARC** into the slots located near the contact points. To do this, slide the pointer toward the **12"*(300mm)*** mark, attach the Variable Arc's center bracket, its 2 pins fitting into the 2 slots on the gauge. Then, grab one of the Variable Arc's outer pins and bend the Variable Arc until you are able to insert the pin into the slot provided near the outer contact points. Repeat with the other bracket. The Variable Arc is now attached and locked in place.



To mount the Variable Arc onto the **ORG 3600**, set the pointer to around the **24"*(600mm)***, insert the pins into both of the outer slots *(shown below left)*, then insert the 2 center pins*(Below right)*.



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