TOOLS MADE TO HELP YOU WORK WITH PRECISION

Curv-O-Mark® layout systems have earned a reputation for quality and consistency over a wide range of industries. Easy to use, made to use longer, there are Curv-O-Mark tools to help bring precision to most any layout task.

CONTOUR MARKER®

The Curv-O-Mark® Contour Marker is a compact, timesaving tool used to lay out pipe and structural steel joints. Laterals at any angle, tees, wyes, crosses, elbows - any type or size of joint can be quickly and precisely laid out. No more complicated mathematical formulas. No more cut and try. No more needless material waste.

The Contour Marker can be used to lay out pipe from 1-1/2 to 18 inches diameter, or structural steel members up to 18 inches.

The Contour Marker consists of an X-shaped frame, calibrated protractor, and a triple-jointed marking arm and holder. The holder accepts a soapstone crayon (included), felt pen or pencil. The frame easily folds into a compact tool that fits into a pocket or carrying case. It can be used right side up or upside down, depending on the direction of the line to be scribed. The protractor is calibrated on both sides - one in degrees, the other in rise-inches-per foot - to service any type of measurement need.

The unit comes with a Structural Adaptor designed to simplify the layout of structural joints, including I-beams, angles, channels, square tubing and similar shapes. The optional Combination Adaptor Accessory allows the Contour Marker to lay out joints on larger size pipe, as well as scribe compound angles with just one setting.

The Contour Marker is made from durable, lightweight aluminum. It requires minimal maintenance, only occasional oiling of the joints, to provide long service life.
A larger version of the Contour Marker, The Jumbo Contour Marker (JCM) has been developed for use in the layout of large diameter pipe, from 8 to 48 in. With its Structural Adaptor, the JCM can be used in the layout of extremely large structural steel members up to 48 in. wide.

The JCM comes complete with a durable web strap that helps hold the unit in place during layout. A built-in adjustable dial bubble protractor ensures accurate centre-line location. A soapstone crayon is included.

Like the standard model, the JCM’s capability can be increased with the Combination Adaptor Accessory.

**JUMBO CONTOUR MARKER™**

**STANDARD COMBINATION ADAPTOR**
C-0721-0001 .................. CM-2

**JUMBO COMBINATION ADAPTOR**
C-0721-0004 .................. CM-5

**COMBINATION ADAPTOR ACCESSORY**

Designed for use with the Standard and Jumbo Contour Markers, the Adaptor simplifies handling and increases layout capacity.

The Adaptor permits use of all four sides of the Contour Marker and permits marking on small diameter pipe, over nipples, old welds or on wrapped pipe.

The Adaptor can also provide layouts with compound angles using a single setting, or any degree of takeoff on elbows and turns up to 90 degrees.
FLANGE ALIGNER BASE

Remove the difficulty of flange aligning and squaring with a simple tool that holds a square in the needed position without tying up one’s hands.

The Curv-O-Mark® Aligner Base is notched at either end for ease in aligning on the centre line of the pipe and has two 25-pound pull, cast-in magnets for holding either a flat horizontal or vertical position. The Base will accept either leg of a standard or combination square and will work on pipe diameters from 1 in. on up, requiring only the extension of the legs of the square being used to accommodate larger diameters.

The Flange Aligner Base is made from lightweight, durable aluminum.
CIRCLE-ELLIPSE PROJECTOR

Perfect circles, ellipses or oblong circles can now be easily made on any irregular flat or round surface.

The Projector features a protractor with sliding rods and an adjustable lever to lock in the specified layout. A strong, 20-pound pull magnetic base holds the Projector in position during layout. A durable web strap (included) holds the unit secure on nonmagnetic surfaces and can be used on either side of the vertical column.

The Projector can also be used to lay out lateral intersections of different diameter pipes, or to project circles from 1-1/2 to 18 in. diameter on flat surfaces intersecting at angles from 0 to 70 degrees from vertical. Attachments to develop larger diameter circles are available.

The Projector is equipped with a soapstone crayon and also works with chalk, pencil or steel scribe.

PIPE FLANGE ALIGNERS

Fast, accurate pipe construction is possible with this self-determining flange aligning tool. The Aligner inserts easily into pipe, centres snugly against the inside pipe diameter and automatically aligns with the pipe axis.

The Pipe Flange Aligner is quickly adjustable for all types of flanges or pipe sizes ranging from 3 to 12 in. diameter.
**CENTERING HEADS**

Curv-O-Mark® Centering Heads aid in the setting of centre lines, establishing angles and marks for butt-ins, locating points inside pipes and tanks, laying out keyways and measuring declivity.

The Standard Model (shown below) is used on pipe 1/2-in. diameter and larger. It has a 4-in. Y-type head and is fitted with an adjustable dial bubble protractor (DSL) and a manually operated hardened centering pin.

The Jumbo Centering Head (shown above) is for pipe 1-in. diameter and up. It has an 8-in. Y-type head, and a DSL. A spring-loaded hardened centering pin eliminates the need for a hammer. Just make the alignment and press the trigger.

**VERSİ-MAG & HOLDER**

Here are two versatile magnetic aids that free up hands for other work.

The Versi-Mag is a single 25-pound magnet cast in a square end body that can be used for the line up of steel parts for welding or machining.

The Versi-Mag Holder works as a jig or line-up fixture, and can hold leads, hoses, torches or other devices. It consists of two 25-pound pull magnets, each cast in an aluminum body and machined with square ends. These are then hinged to swing through a 90-degree angle. The bodies are fitted with either a holding pin or clamp to receive various tools.

**STANDARD CENTERING HEAD**
C-0721-0005 ................. CM-6
**JUMBO CENTERING HEAD**
C-0721-0006 ................. CM-7

**VERSİ-MAG**
C-0721-0018 ................. CM-21A
**VERSİ-MAG HOLDER**
C-0721-0019 ................. CM-21
MULTI-TRAMMEL HEADS

For reliable marking using standard 1/2-in. pipe, heads feature radius set points cast in alignment with marking pointers for easy setting. Each is equipped with 1/4-in. screws and squared on the back side for perpendicular alignment. The stationary head holds a 1/4-in. case hardened centre point. The moveable head has a 1/8-in. steel scribe hardened to 59 rockwell. The chalk holder will accept round, square or flat soapstone crayon, pencil or steel point scribe. Marks from 1-1/2-in. circle to any diameter needed, depending on length of pipe used as a trammel bar.

Heads are made from durable aluminum. Each set weighs approximately 8 oz. An Allen wrench, soapstone, scribe and pointer are included.

MULTI-TRAMMEL HEADS
C-0721-0016 ............... CM-19

RADIUS MARKERS

Models are available in four sizes for scribing circles up to 80-in. diameter. All are a folding type design—the three smaller models will fit conveniently into a shirt pocket. All have sturdy friction joints to maintain rigidity and accuracy, and are made from lightweight, rustproof aluminum for long wear. A soapstone crayon is already installed in each radius marker.

The scribe holder will accept round, square or flat soapstone crayon, pencil or steel point scribe.

MINI - up to 8 in. radius
C-0721-0010 ............... CM-1208
SMALL - up to 20 in. radius
C-0721-0011 ............... CM-1220
STANDARD - up to 24 in. radius
C-0721-0012 ............... CM-1224
JUMBO - up to 40 in. radius
C-0721-0013 ............... CM-1340
Two-holing is simplified with the Universal Level. Self-aligning spacer bolts are attached in the two adjacent bolt holes at the top or bottom of the flange. With the DSL dial set at 0 degrees, the flange is rotated until the bubble is centred.

If adjacent top or bottom holes cannot be used, two-holing can be achieved using side bolt holes. In this instance, the DSL dial is set at 90 degrees and the flange is rotated until the bubble is centred.

Bolt holes that are offset can be matched by setting the DSL at the desired offset angle prior to rotating the flange.

A built-in adjustable dial bubble protractor (1) ensures accurate centre line location. A cast-in table (2) indicates rise per foot in both inches and meters. A cast-in groove (3) makes the level self-centering on the contour of pipe.

**UNIVERSAL LEVEL**

The Curv-O-Mark® Universal Level is a multipurpose tool. The unit features a 360-degree adjustable protractor dial bubble (DSL) that ensures accurate levelling and permits the following additional uses:

- Setting a predetermined pitch of a string of pipe
- Setting the angle of laterals to a precise degree
- Trueing vertical runs
- Two-holing flanges

The Level has two cast-in 25-pound magnets (exerting a 50-pound pull) to securely hold the unit in place on any steel surface, including the underside of a pipe or beam. This permits hands-free levelling, a welcome aid in tight spots. And, since the bubble is mounted on a protractor dial, the Level may be used in any position and still read accurately.

While one face of the Level is magnetic both faces have deep, cast-in grooves that make the Level self-centering on the contour of the pipe. Because the magnets are cast in, they do not interfere with the use of the Level on nonmagnetic materials, such as aluminum, copper, lumber, stone or other materials requiring levelling.

For aligning pipe flanges (two-holing), the Level comes with a two-threaded, self-aligning conical spacer and conical nut and bolt units. These are designed to fit any size bolt hole spaced between 2-1/4 in. to 8-in. centres on flanges. This permits the orientation of flange bolt holes for any size pipe.

Designed primarily for pipe fitting applications, the Universal Level is a valuable tool for any craft required to use a level or plumb bob:

- For structural ironworkers, the powerful holding magnets provide an extra hand
- Electricians will find the Level useful in laying out and lining up heavy conduit
- With the aid of a handy conversion chart, carpenters can use the Level for the layout of roof rafters

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**DIAL-ANGLE-FLANGE LEVEL**

A versatile tool that can be used as a dial degree utility level or, with attachments, for two-holing flange alignment.

The unit is made of cast aluminum with a protective housing containing an adjustable DSL. It is also fitted with a threaded, self-aligning conical spacer and conical nut and bolt units for fastening the Level to a pipe flange. One of the nut and bolt units is stationary, while the other slides up to 5-1/2 in. along a slot in the level to accommodate various flange bolt hole spacing from 2 to 5-1/2 inches.

The body of the tool is 1/2-in. thick with a machined surface. The level bubble is protected from weld splatter and breakage with a built-in housing around the DSL.

**PRO-MAG LEVEL**

A lightweight, easy to use tool for determining angles, the Pro-Mag Level has two cast-in 25-pound pull magnets that hold securely to any steel surface. The unit has a 360-degree adjustable DSL with two 90-degree quadrants graduated in 2-1/2-degree increments. Also cast in are tables used to convert degree-of-angle to rise-in-inches-per-foot or millimetres-per-meter. A groove on the bottom edge permits use on a small pipe.

The Pro-Mag Level is 9 in. long, 2 in. high and 3/4 in. thick. It is made from cast aluminum.

The unit is ideal for pipe fitter, welder, jig builder or anyone who has to determine angles or do setup work.

**PRO-MAG LEVEL**

C-0721-0007 ............... CM-8

**DIAL-ANGLE-FLANGE LEVEL**

C-0721-0017 ................. CM-20
WRAP-A ROUND

An inexpensive tool for marking straight lines around pipe, or for use as a straight edge. Made out of flexible gasket material, with good resistance to heat and cold.

All Wrap-A-Rounds are available in two colours. These designate material type and service temperature. GG (Gray) material is used for high temperature applications up to 550°F. B (Black) material has a service temperature of up to 350°F. Both material types are asbestos free.

Extra small and special order sizes are unmarked. All other sizes are printed with a scale in inches, pitch chart, tangent chart and other useful markings. Wrap-A-Rounds in 3.88" and 5.00" feature a metric scale and pitch chart.

FITTER WELDER PROTRACTOR

This 90-degree protractor has a matching locking lever to set and hold the tool at the desired angle. It is equipped with a 5/8 in. by 10 in. tapered arm to complete finding of angles or desired bends, or to determine any portions of elbows.

The tool is mounted in a 3/4-in. wide frame with a 3/8-in. by 6-in. cast-in rod. It comes with a 25-pound pull magnetic base for holding the protractor frame in position. The unit can be used manually or with a magnetic base, as shown below.

<table>
<thead>
<tr>
<th>Size</th>
<th>Dimensions Pipe Width/LengthDiameter</th>
<th>B (Black)</th>
<th></th>
<th>GG (Gray)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stock No.</td>
<td>Part No.</td>
<td>Stock No.</td>
<td>Part No.</td>
</tr>
<tr>
<td>Ex-Small</td>
<td>1.94' x 2' 1&quot; to 3&quot;</td>
<td>CM-150B</td>
<td>C-0720-0001</td>
<td>CM-150GG</td>
<td>C-0720-0027</td>
</tr>
<tr>
<td>Small</td>
<td>2.50' x 2' 1&quot; to 3&quot;</td>
<td>CM-152B</td>
<td>C-0720-0004</td>
<td>CM-152GG</td>
<td>C-0720-0028</td>
</tr>
<tr>
<td>Medium</td>
<td>3.88' x 4' 3&quot; to 6&quot;</td>
<td>CM-164B</td>
<td>C-0720-0007</td>
<td>CM-164GG</td>
<td>C-0720-0029</td>
</tr>
<tr>
<td>Large</td>
<td>3.88' x 6' 3&quot; to 10&quot;</td>
<td>CM-176B</td>
<td>C-0720-0010</td>
<td>CM-176GG</td>
<td>C-0720-0030</td>
</tr>
<tr>
<td>Ex-Large</td>
<td>5.00' x 7' 4&quot; to 12&quot;</td>
<td>CM-177B</td>
<td>C-0720-0013</td>
<td>CM-177GG</td>
<td>C-0720-0031</td>
</tr>
<tr>
<td>Ex-Large</td>
<td>5.00' x 9' 6&quot; to 16&quot;</td>
<td>CM-179B</td>
<td>C-0720-0016</td>
<td>CM-179GG</td>
<td>C-0720-0032</td>
</tr>
<tr>
<td>Special</td>
<td>3.88' x Length Desired**</td>
<td>CM-184B</td>
<td>C-0720-0019</td>
<td>CM-184GG</td>
<td>C-0720-0033</td>
</tr>
<tr>
<td>Special</td>
<td>5.00' x Length Desired*</td>
<td>CM-185B</td>
<td>C-0720-0022</td>
<td>CM-185GG</td>
<td>C-0720-0034</td>
</tr>
<tr>
<td>Special</td>
<td>7.00' x Length Desired*</td>
<td>CM-187B</td>
<td>C-0720-0025</td>
<td>CM-187GG</td>
<td>C-0720-0035</td>
</tr>
</tbody>
</table>

* Special lengths available up to a maximum of 375'.

Formula -
\[
3.5 \times \text{size of pipe} \times 2 \div \text{by 12} = \text{Length Required.}
\]

Order to the next even foot.
PRO-MAG BURNING SQUARE

The Curv-O-Mark® Pro-Mag Burning Square is a precise tool used in structural thermal cutting and layout. The tool base is a perfect square containing powerful cast-in magnets. This permits placement in any position. The tool surface is embossed with a protractor inscribed with two 90-degree quadrants graduated in 1-degree increments. The top of the tool carries an 18-in. ruler blade divided in 1/8-in. increments. The ruler can be locked in place at the desired angle setting by hand tightening of the adjustment knob.

The ruler blade is on a raised plane. This permits its use as a straight edge when flame cutting, without distortion or marring. The blade will also accept attachments or extensions that allow an overall length up to 72 in. The Burning Square is made of cast aluminum.

MAGNETIC BURNING GUIDE

Designed for use with a burning torch or as a straight edge, the Burning Guide is cast of strong, durable material to withstand heat and spatter. The tool’s base has three 30-pound pull cast-in magnets for use in any position. A 24-in. blade on a raised plane is standard.

ATTACHMENTS FOR PRO-MAG BURNING SQUARE & MAGNETIC BURNING GUIDE

72 INCH OVERALL LENGTH
C-0721-0028 ................. CM-31
48 INCH OVERALL LENGTH
C-0721-0027 ................. CM-30
34 INCH OVERALL LENGTH
C-0721-0026 ................. CM-29
(each is in two sections)
REPLACEMENT PARTS

CENTERING PIN
A hardened steel pin for use with the Curv-O-Mark® Standard Centering Head (Stock No. 6). Suitable for marking, but should not be used as a centre punch.
CENTERING PIN
C-0722-0001

CENTERING BUSHING SET
Dual Thread Bolt Spacer 5/16 in. x 16 threads
Knob Nut 1/4 in. x 20 Threads
REPLACEMENT PARTS FOR CM-20 AND CM-33
C-0722-0002

DIAL-SET-LEVEL (DSL)
The DSL is an adjustable bubble protractor used with a number of Curv-O-Mark® tools (Stock No. 4, 6, 7, 8, 20 and 33). The protractor covers 180 degrees through two 90-degree quadrants, reading in 2-1/2-degree increments. The bubble is cast in the aluminum dial.
DIAL SET LEVEL
C-0722-0000

CONTOUR WORKER KIT
The precision tool set that's easy to use. Includes:
• CM-1 Contour Marker
• CM-7 Centering Head
• CM-8 Pro-Mag Level
• CM-1224 Standard Radius Marker
• Square Soapstone and Holder
• Carrying Case
CONTOUR WORKER KIT
C-3014807