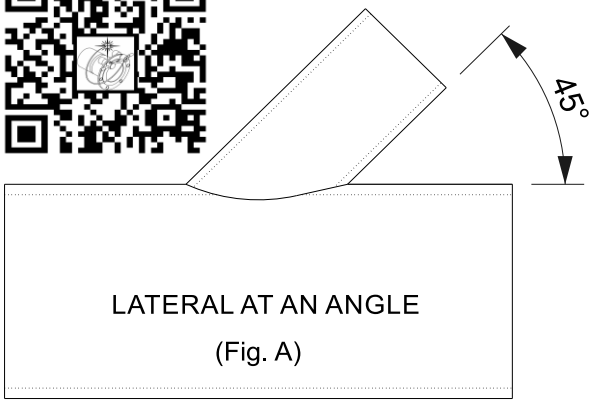
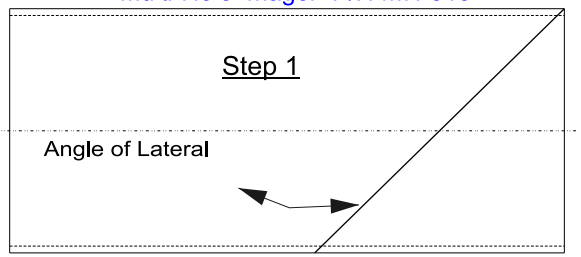
Scan QR-Code to watch instructional Video

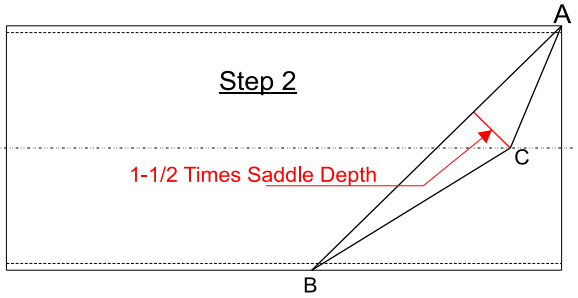


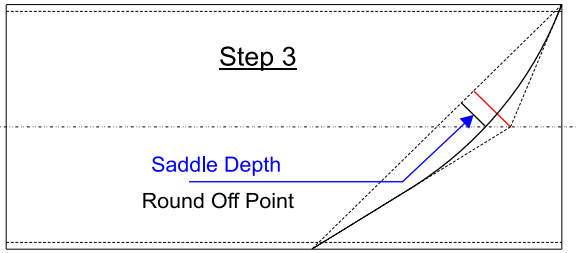
To layout a Lateral at an angle (Fig. A),

Set the Miter Marker to the angle of the lateral and mark a line around the pipe as shown in step 1. At a right angle to this line, scribe a line equal to 1-1/2 times the saddle depth. This point must be on the pipe centerline as shown in step 2. Mark the lines A-C and B-C. Lay off the saddle depth and round off the point as shown in step 3.

To mark the opening in the larger pipe use our Multi-Hole Imager P/N MHI515







REV 07/2025

LATERAL PIPE SIZE (Small Pipe)

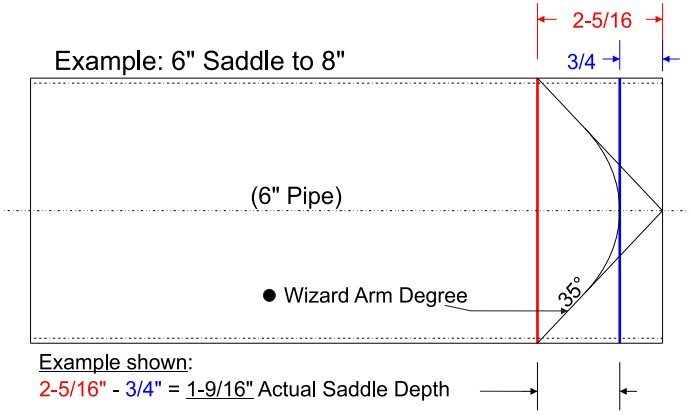
MAIN TRUNK LINE (Large Pipe)

	2-3/8	3-1/2	4-1/2	6-5/8	8-5/8	10-3/4	12-3/4	14	16	18	20	24
2-3/8	45° 1-3/16 3/8											
3-1/2	30° 11/16 1/4	45° 1-3/4 9/16										
4-1/2	23° 1/2 3/16	35° 1-1/4 7/16	45° 2-1/4 3/4									
6-5/8	15° 5/16 3/32	23° 3/4 1/4	30° 1-5/16 7/16	45° 3-5/16 1-1/8								
8-5/8	12° 1/4 3/32	18° 9/16 3/16	22.5° 7/8 5/16	35° 2-5/16 3/4	45° 4-5/16 1-7/16							
10-3/4	10° 7/32 3/32	14° 7/16 1/8	18° 11/16 1/4	27° 1-11/16 9/16	37° 3-1/4 1-1/16	45° 5-3/8 1-13/16						
12-3/4	9° 3/16 1/16	12° 3/8 1/8	15° 9/16 3/16	23° 1-3/8 7/16	30° 2-1/2 13/16	40° 4-7/16 1-1/2	45° 6-3/8 2-1/8					
14		10° 5/16 1/16	14° 9/16 3/16	21° 1-1/4 7/16	28° 2-1/4 3/4	35° 3-3/4 1-1/4	44° 6-3/16 2-1/16	45° 7 2-3/8				
16			12° 7/16 3/16	18° 1-1/16 3/8	24° 1-7/8 5/8	30° 3-1/8 1-1/16	37° 4-3/4 1-9/16	41° 6-3/16 2-1/16	45° 8 2-11/16			
18			11° 7/16 3/16	16° 15/16 5/16	21° 1-11/16 9/16	27° 2-11/16 15/16	32° 4 1-3/8	35° 5 1-11/16	42.5° 7-5/16 2-7/16	45° 9 3		
20			9° 3/8 1/8	15° 7/8 5/16	19° 1-1/2 1/2	24° 2-3/8 13/16	28° 3-7/16 1-1/8	32° 4-5/16 1-7/16	37° 6 2	43° 8-7/16 2-13/16	45° 10 3-3/8	
24			8° 5/16 1/8	12° 11/16 1/4	15° 1-3/16 3/8	20° 1-15/16 11/16	23° 2-3/4 15/16	26° 3-3/8 1-1/8	30° 4-5/8 1-9/16	34° 6-1/8 2-1/16	40° 8-1/16 2-11/16	45° 12 4

flange wizard® Pipe Saddle Chart Reg. No 1,015,681

(Note: All figures rounded to the nearest 1/32")

● Wizard Arm Degree ● Saddle Depth x 1.5 ● Tip Round Off



Miter Marker

Reg. No. 1,015,681 MADE IN U.S.A.

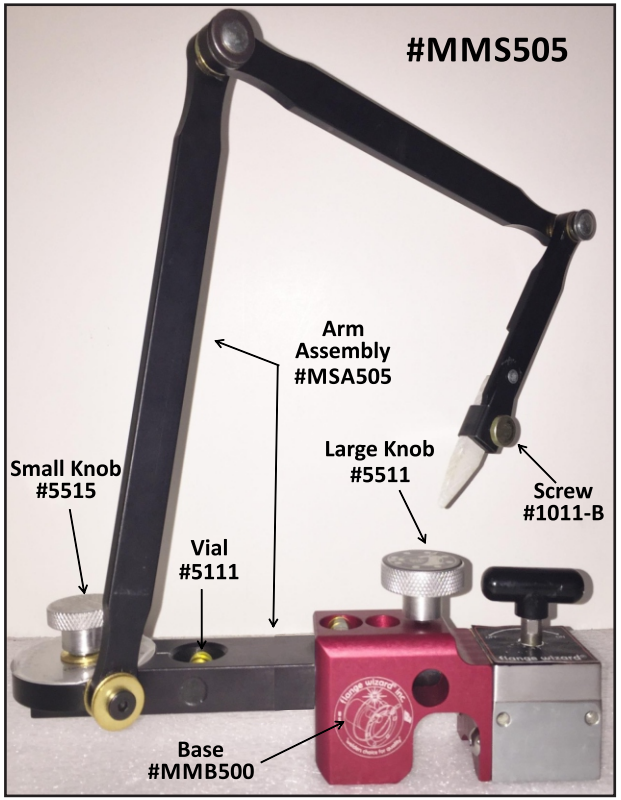
#MMS505

Instruction Guide

flange wizard® inc. USA "welders choice for quality"

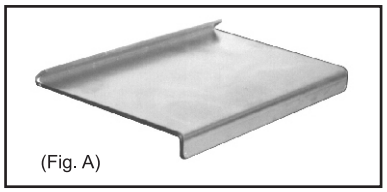
Welders Choice for Quality!

flange wizard® inc.



"Congratulations", you have just purchased the finest layout tool available for marking saddles and angles on pipe as well as structural steel.

- The leveling vial is built in the main body.
- The marking arm is completely separate on a telescoping round shaft allowing you to reach out over the welds on pipefittings and mark the angles you require. The marking arm is precisely aligned and held together with spring tension washers. This allows continuous accurate, smooth, and reliable operations with your Master Marker.
- The new ON/OFF magnet acts as a third hand while marking compound angles and various pipe saddles.
- The new magnet allows to discard debris when in the OFF position.
- A "Structural Adaptor" is included with your Master Marker. The Adaptor is not required when laying out pipe, but assists in marking more accurately when working with H-Beam, I-Beam, angle iron, and square tubing. Fig. A


(Fig. A)

***Note: Adapter must be parallel to magnet.**

MARKING YOUR PIPE

Mark 8" to 48" pipe with ONE tool!
For larger pipe or structural beams, mark as far as you can, re-locate magnetic main body (shown in Fig. B), re-level marking arm and continue your layout.

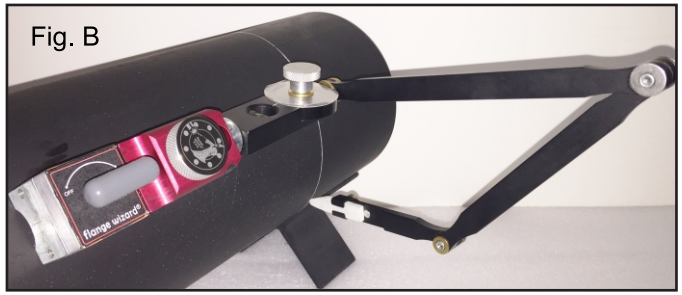


Fig. B

• When marking a saddle on pipe

First set your degree according to the **flange wizard** pipe saddle chart.

Example: 6" to 6" Pipe is a 45° .
Mark first half of your saddle. (Fig. C)
Rotate shaft 180° , re-level and mark opposite side. (Fig. D)

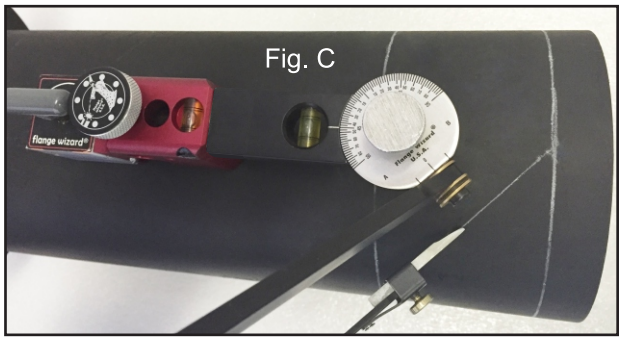


Fig. C

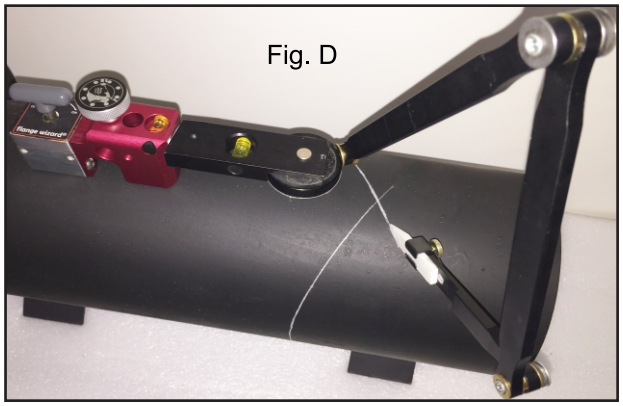


Fig. D

SADDLES

Layout of a Saddle that joins a smaller pipe onto a larger pipe requires a curved line at the joining intersection that can now be completely marked with your Master Marker.
The Master Marker will accurately provide all major markings and the remaining tip round off can easily be accomplished freehand.

EXAMPLE: 4" pipe to an 8" pipe...

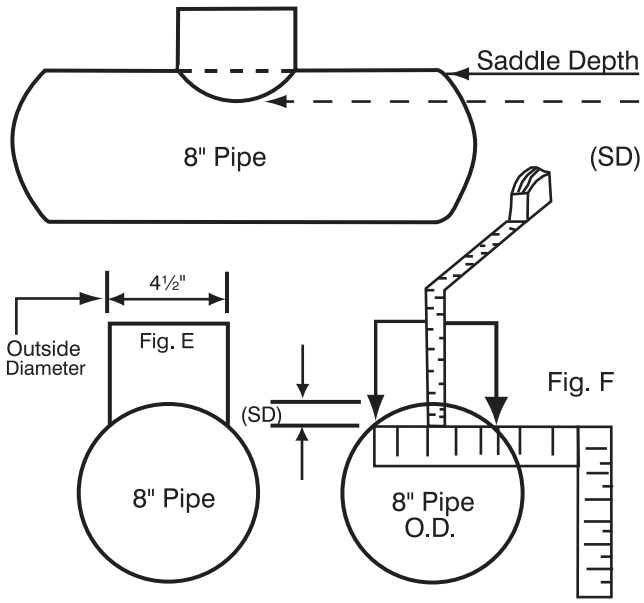
First measure the outside diameter of the smaller pipe (Fig. E is 4-1/2" O.D.)

Next, take your steel ruler to the larger pipe (Fig. F) and find the point where it is exactly 4-1/2" across from the outside edges of the larger 8" pipe (actual pipe outside diameter is 8-5/8").

The distance from the top edge of your ruler to the very top of the the pipe is your "saddle depth".

LAYOUT OF THE LARGER PIPE:

For the correct opening on the larger pipe, use the small pipe as your template. Should positioning the smaller pipe be a problem, use the FWI Multi-Hole Imager.



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