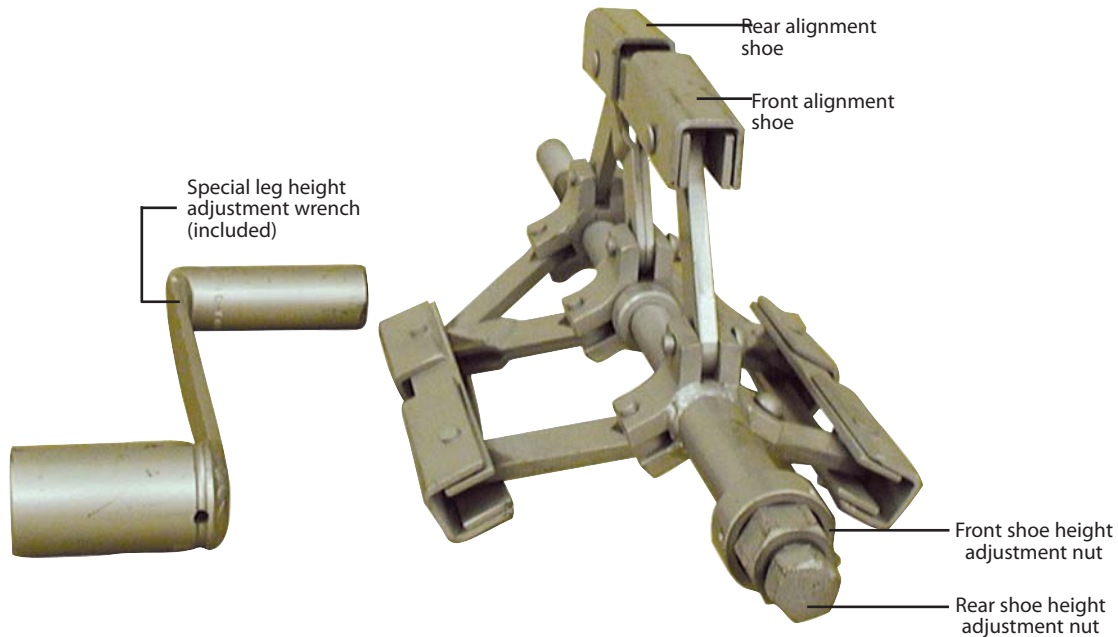


Internal Flange Alignment Tool



The Internal Flange Alignment Tool quickly and accurately aligns the ID of the flange to the ID of the pipe. The ID of the flange can vary $\pm 1/8"$ (3mm) to the ID of the pipe and still give perfect alignment.

- **ACCURATE**—Eliminates guess work when internally aligning flange.
- **RAPID ALIGNMENT**—Flanges can be aligned and squared in two minutes.
- **SAVES TIME AND MONEY**—Alignment can be done by one person regardless of flange size.

Part Number	Pipe Size (in / mm)
Carbon Steel	
D325	4 - 6 / 102 - 152
D326	6 - 8 / 152 - 203
D327	8 - 14 / 203 - 356
D328	16 - 24 / 406 - 610
Stainless Steel	
D325SS	4 - 6 / 102 - 152
D326SS	6 - 8 / 152 - 203
D327SS	8 - 14 / 203 - 356
D328SS	16 - 24 / 406 - 610

The Internal Flange Alignment Tool is designed to align 150 and 300 pound flanges. The tool is used for the alignment of the flange and should never be used as the sole support of the flange.



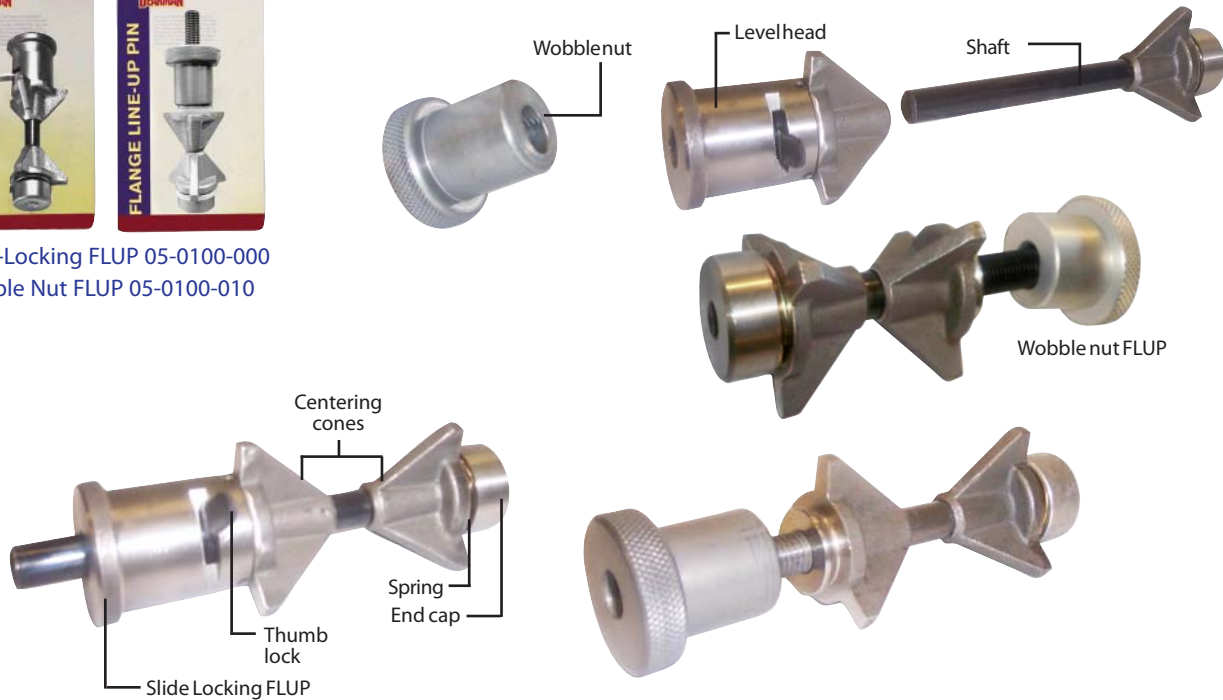
The 8" (203mm) Internal Flange Alignment centers the ID of the 8" (203mm) pipe to the ID of the flange for tack welding.

Flange Alignment Tools

Flange Line Up Pins – “FLUPs”



Slide-Locking FLUP 05-0100-000
Wobble Nut FLUP 05-0100-010



Stainless Steel Flange Line Up Pins

FLUPs aid the welder in checking or obtaining critical alignment of flange to the pipe. The Mathey Dearman Aligning Pins are multi-purpose to rapidly align carbon steel and stainless steel. Additionally, the spring and end cap allow for expansion during welding.

A simple push of the “Thumb-Lock” allows the flange pin to quickly release itself from the flange.

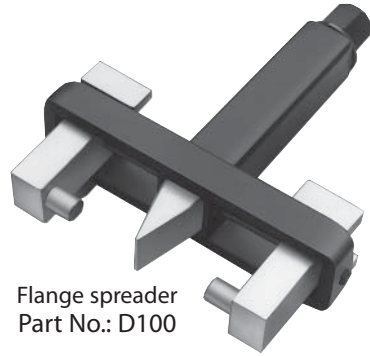
In the Wobble Nut FLUP variation, the FLUP is unscrewed 3/4 turn, tilted and released from the flange in seconds.

Part Number	Model / Assembly Description	Flange Hole Diameter Range
05.0100.000	Slide-Lock Locking	5/8 - 1 7/8 / 16 - 47
05.0100.010	Wobble-Nut Flup	5/8 - 1 7/8 / 16 - 47



Quick precise flange to pipe alignment can be obtained with the stainless steel Flange Line Up Pins, which saves valuable fit-up time, eliminating costly rework due to improper alignment.

Flange Spreader



Flange spreader
Part No.: D100



Hydraulic
flange spreader
Part No.: D103



Hydraulic flange spreader
kit available.

A pair of Flange Spreaders are used to gently separate flanges for the replacement of the flange gasket or to reapply sealant on the flange face.

The spreader, which attaches to the flange bolt hole, spreads the flange faces without the risk of damage to the flange sealing surfaces. The wedge action spreads the gap between flanges up to 1 1/4" (32mm) and 100 ft-pounds of torque applied to the Flange Spreader yield up to 12,000 lbs of spreading force.

Hydraulic Flange Spreaders are available for 2"-36" (51-914mm) 150-600 pound (68-272 kg) flanges. The Hydraulic Kit, attached to the Hydraulic Flange Spreader, effortlessly separates the flanges.

- **NO RISK**—The Flange Spreader greatly reduces the risk of damage to the flange face.
- **SAFETY**—Eliminates the need for wedges or hammers.

Part Number	Style	Flange Size (in / mm)	Flange Rating (PSI)
D100	Mechanical	2-12 / 51-305	Up to 300
D103	Hydraulic	2-12 / 51-305	Up to 300
D101	Hydraulic	12-24 / 305-610	150 - 600
D102	Hydraulic	26-36 / 660-914	150 - 600
D104-KIT	Hydraulic Kit includes pump with reservoir, hoses and quick disconnects.		

NOTE: Flange Spreaders are sold individually. Most application require two (2) spreaders.



A pair of Flange Spreaders swiftly separates the flanges up to 1 1/4" (32mm) apart without damage to the flange face.

Quality Control (Q.C.) Welder's Gauge



Part Nos.: D253E
D253M



Q.C. Welder's Gauge in
Metric and English
Part Nos.: D253E
D253M

The Q.C. Welder's Gauge rapidly and accurately measures pipe "Hi-Lo" and plate mismatch before and after welding to minimize weld rejections.

The gauge is available in both English and Metric models.

Description	Part Number
English Q.C. Welder's Gauge	D253E
Metric Q.C. Welder's Gauge	D253M
BOX	
BOX - English	D253E-BOX
BOX - Metric	D253M-BOX
Packaged - ten (10) per box	



Purchase singly, or in boxes of ten (10) each.



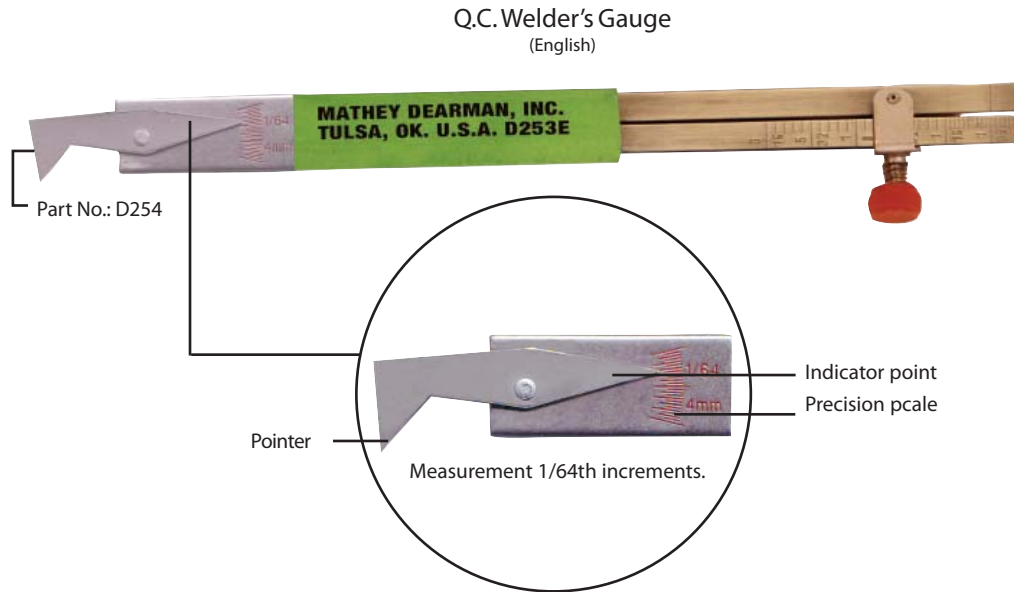
Pipe to pipe, pipe to flange or pipe to elbow "Hi-Lo" and weld gap can be accurately checked and adjusted to avoid rejection of the weld joint.

Pit Depth Gauge

For use with the Quality Control (Q.C.) Welder's Gauge



Part No.: D254



The Pit Depth Gauge measures depth of pitting, weld undercut, pipe outside diameter "Hi-Lo", weld height.

The stainless steel pit depth gauge mounts on the end of the Q.C. Welder's Gauge housing and reads in both English and Metric dimensions. The Pit Depth Gauge is sold separately from the Quality Control (Q.C.) Welder's Gauge.

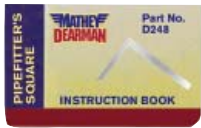
- **PRECISE**—Measurement as small as 1/64" (.4mm) can be taken with gauge.
- **EASY TO USE**—Simply slide the Pit Depth Gauge over the Q.C. Gauge and take a reading.



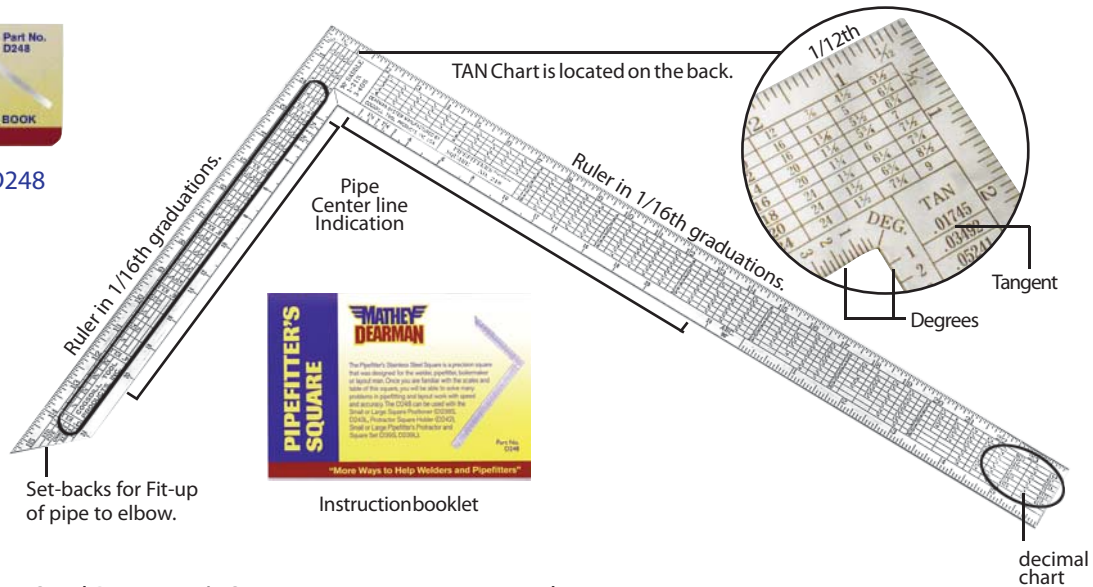
The Pit Depth Gauge can be used to check weld undercut and misalignment of plate to plate or pipe to pipe.

Part Number	Description
D254	Pit Depth Gauge

Pipe Fitter's Square



Part No.: D248

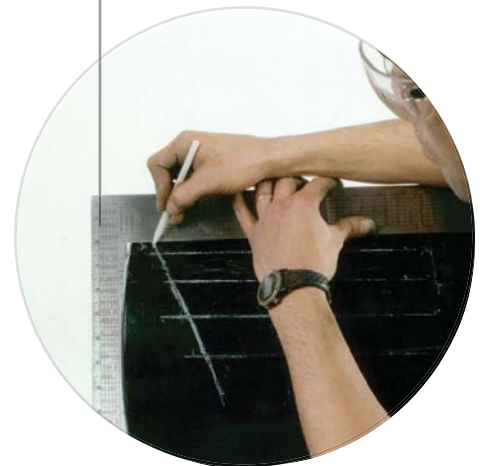
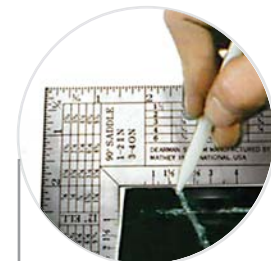


The Stainless Steel Pipe Fitter's Square is a precision square that is designed specifically for the pipe fitter, boilermaker, welder or layout person. Once you are familiar with the scales and tables of this square, you will be able to solve many of the complex problems encountered during pipe fit-up and layout work with speed and accuracy.

Description	Part Number	Blade Length (St / Lg) (in / mm)
Pipefitter's Square	D248	15 1/2-24 / 394-610mm x 1/8 Thick / 3mm Thick

Pipe Fitter's Square may be used to:

- Check the squareness of one surface to another.
- Find pipe center line.
- Determine the flange bolt length and diameter.
- Find the number of bolt holes in a flange.
- Measure center to end dimensions of pipe elbows and tees.
- Find the through hub length of a flange.
- Determine the outside diameter of a weld neck flange.
- Determine arc length for a given radius.
- Measure angles off horizontal or vertical plane with level.
- Measure in 12ths or 16ths of an inch.
- Solve triangles or offsets.
- Find decimal equivalent.
- Layout a variety of weld joint configurations.



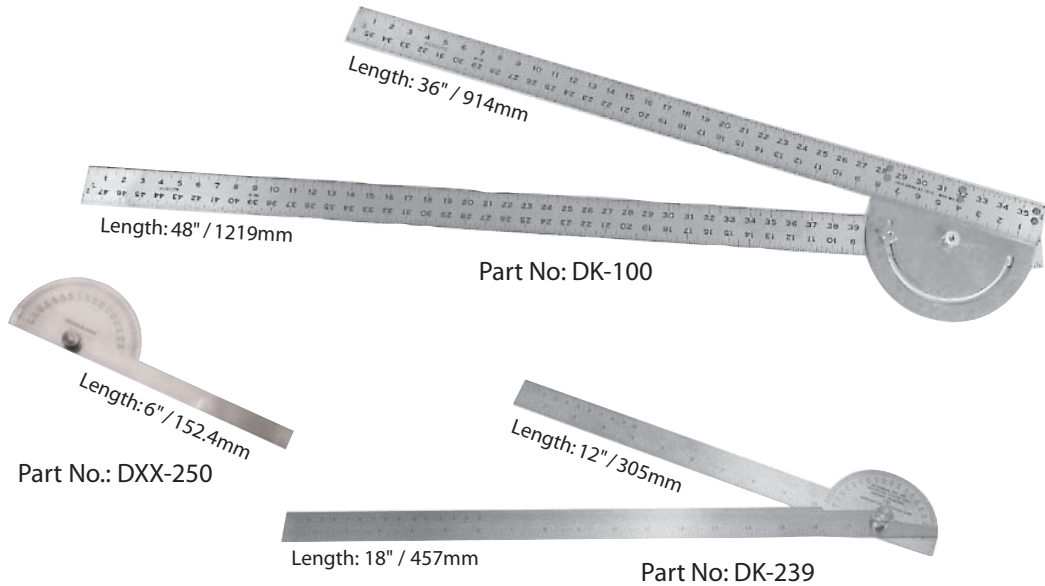
The Pipe Fitter's Square can be used to make a variety of joint configurations, such as miters, tees and diagonal joints.

Protractors



Small DK-239

Mini DXX-250



Mathey Dearman Protractors are used to determine or set bevels, transfer angles, and measure the squareness of one surface to another.

The Mini (DXX-250) and Small (DK-239) Protractors are made from stainless steel and the Large Protractor (DK-100) is made from aluminum. The blade of the Protractor can be locked in place at a particular angle. The Protractor head has a double graduation from 0° - 180° in opposite directions.

Accuracy: $\pm 1^\circ$

Part Number	Description
DXX-250	Mini Stainless Steel Protractor
DK-239	Small Stainless Steel Protractor
DK-100	Large Aluminum Protractor



The Mini Protractor can be used for a variety of applications including measuring the torch bevel angle and measuring degree of bevel (as shown).



The Small Protractor is an excellent tool for sheet metal layout, checking squareness of pipe ends up to 17" (432mm) diameter and can be used to check smaller pipe miter angles 0° to 90°.

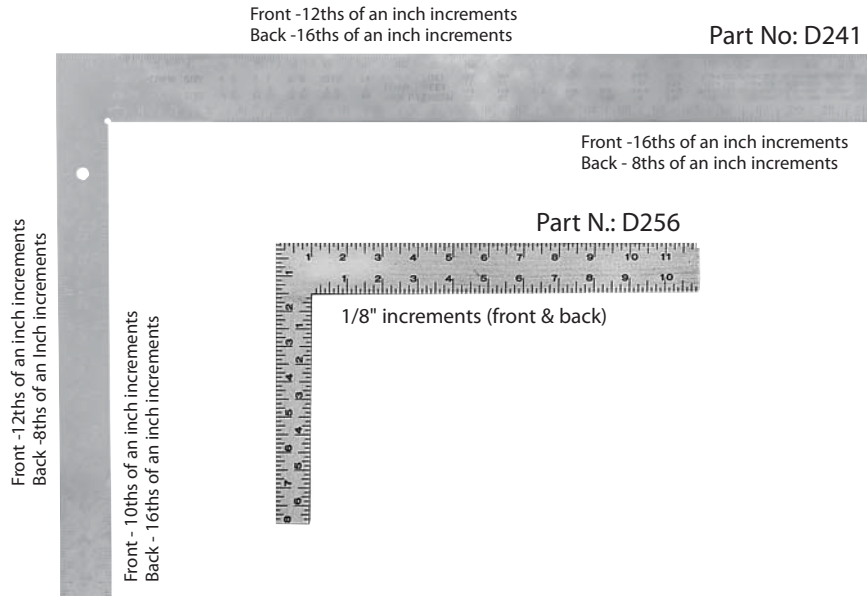


The Large Protractor will measure squareness of pipe ends up to 40" (1016mm) diameter or can be used to check large pipe miter angles up to 180°.

Framing Square



D256 (Small)
Stainless Steel



The Small Stainless Steel and Large Aluminum Framing Squares are used to measure angles or squareness of one point to another, and to find pipe center line. When used with a level, the squares will measure drops in inches per foot to determine degrees of slope. The Small Framing Square is in 1/8" increments and the Large Framing Square is in 1/8", 1/10", 1/12" and 1/16" increments.

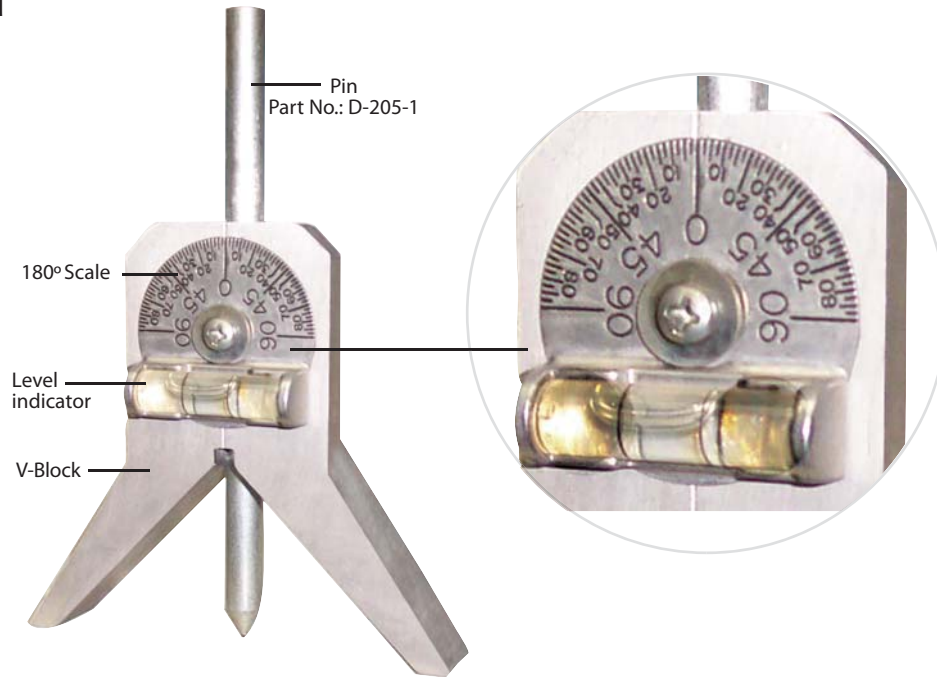
The Small Framing Square (D256) and Large Framing Square (D241) can be used with the Small Square Positioner (D2385).



The D241 Large Framing Square and D256 Small Framing Square can be used to check squareness of pipes, flanges, and fittings.

Part Number	Description	Blade Length (St/Lg) (in / mm)
D256	Small Stainless Steel Frame Square	8-12 x 1/16 Thick / 203-305mm x 1.6mm Thick
D241	Large Aluminum Frame Square	16-24 x 1/8 Thick / 406-610mm x 3mm Thick

Centering Head



The Centering Head provides a quick and accurate means of establishing pipe center line, locating points on tanks or pipes, measuring slope, establishing angles, and laying keyways. The dial face is stamped in 2 1/2° increments.

The Centering Head tool can be used to measure and mark different points around the pipe, flange or fitting.

- TRUE—center line can be marked on both ends of the pipe.
- REFERENCE—points can be marked at various degrees around the pipe.
- DECLIVITY or INCLINATION—Can be used to measure degrees of upward or downward slope of pipe or plate.

Centering Head

Part Number	Description
D205	Standard model, pipe 1/2in / 13mm and larger

Centering Head Parts

Part Number	Description
D205-1	Pin Standard Model,
D205-DIAL	Degree Indicator Dial



Can be used to measure top dead center.



Can be used to measure angles in relationship to top dead center.

Spacing Wedges



Part Nos.: D271 (Large)
D272 (Medium)
D273 (Pocket Wedge)

Small
Pocket Wedge

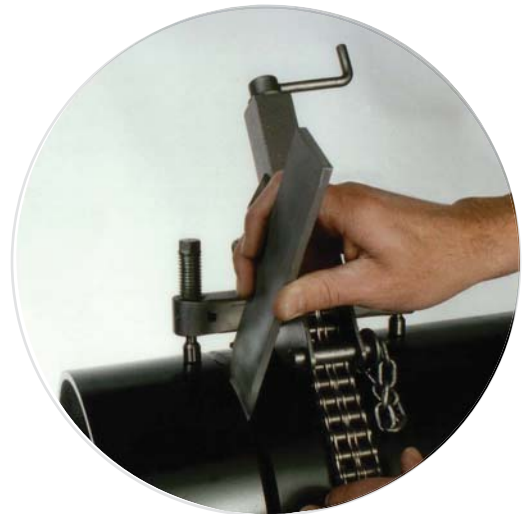
Purchase singly, or in boxes of ten (10) each.

The combination of Spacing Wedges and Mathey Dearman chain clamps or cage clamps enable better fit-up of pipe ends. The Wedges are used to give a precise weld gap. Move the pipe ends together, mount and tighten the chain clamp or cage lamp and spread the gap to the desired width using the Spacing Wedge.

The wedge portion of the Spacing Wedge is hardened so it will not bend or mushroom like home-made wedges. The upper part of the Wedge is soft so that it will not splinter.

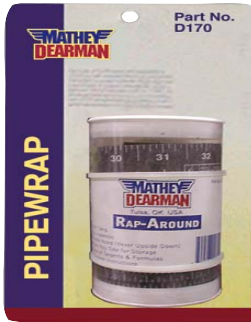
Case hardened to a depth of .010" (.25mm).

Part Number	Description
D271	Spacing Wedge, 8" x 1 1/2" x 1/4" (203mm x 38mm x 6.4mm)
D272	Spacing Wedge, 3 1/2" x 1 1/2" x 1/4" (89mm x 38mm x 6.4mm)
D273	Spacing Wedge, 2 2/3" x 1 1/2" x 1/4" (60mm x 29mm x 6.4mm)
BOX	
BOX - English	D253E-BOX
BOX - Metric	D253M-BOX
Packaged - ten (10) per box	



Weld gap can be quickly set using the Spacing Wedge.

Pipe Wrap



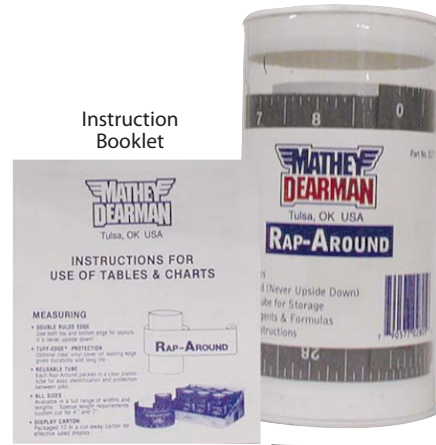
Part No.: D170 (Large)

The Mathey Dearman Pipe Wrap has a double-ruled edge so it is never upside down or backwards. The Wrap can be used as a straight edge to make straight lines around the pipe and to mark angles to create pipe elbows. The Pipe Wrap is made of a highly abrasive-resistant material to resist the wear and tear of everyday use.

The Wrap includes:

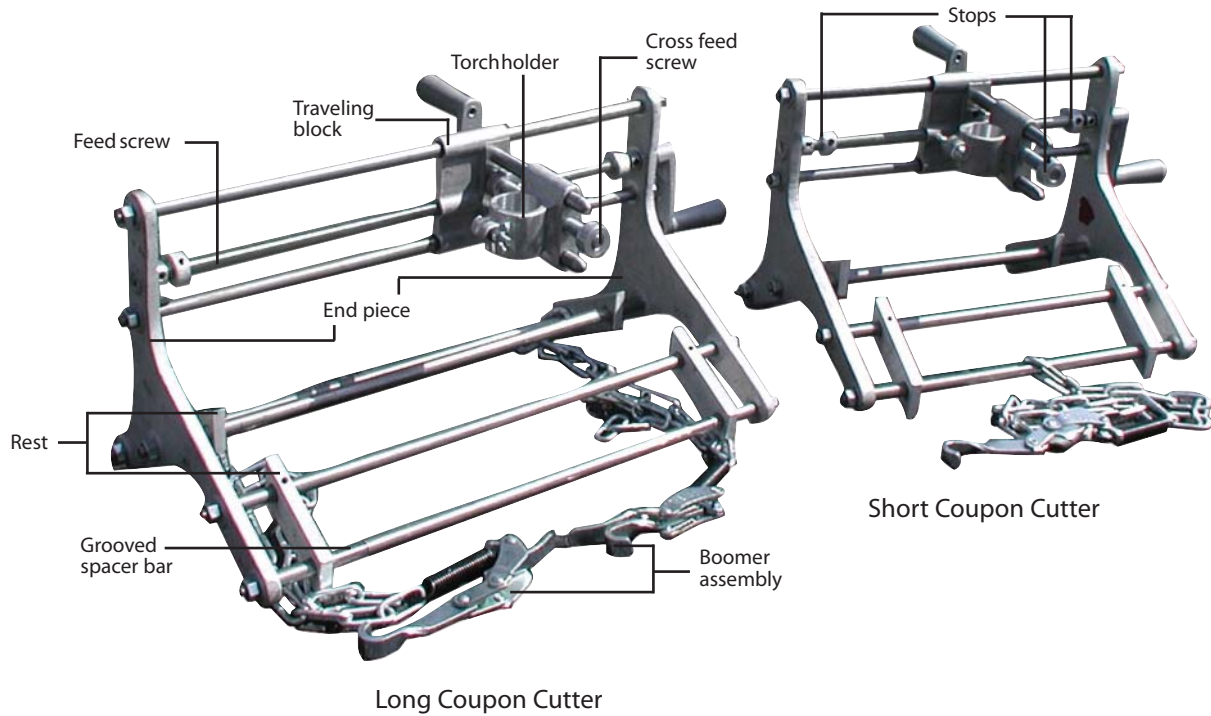
- Table of tangents and straight edge
- Instructions for cutting elbows
- Sides marked in 1/8" (3.2mm) Increments to 36" (914mm)
- Instruction for finding the length of an elbow.
- 45° angle chart
- Degree markings
- Available in 4", 5" and 7" widths

Pipe Size (in / mm)	Size	PartNumber	Description
3-15 / 76-381	Medium	D160	Wrap, Width 4" x 4' / 102mm x 1219mm
3-22 / 76-559	Large	D170	Wrap, Width 4" x 6' / 102mm x 1829mm
3-26 / 76-660	Extra Large	D177	Wrap, Width 4" x 7' / 102mm x 2134mm
Pipe Size (in / mm)		PartNumber	Description (by increments)
Pipe size to be specified		D184	4" / 102mm Width x Length Desired Sold in 1' / 305mm Increments
Pipe size to be specified		D185	5" / 127mm Width x Length Desired Sold in 1' / 305mm Increments
Pipe size to be specified		D187	7" / 178mm Width x Length Desired Sold in 1' / 305mm Increments



The Pipe Wrap is an excellent tool for aligning the MagnaCut XM and CGM Guide Strips on pipe diameter over 18" (457mm) to insure a square cut.

CouponCutter



The Coupon Cutter makes the cutting of weld test coupons quick and easy. This efficient tool can be used for any procedure requiring removal of a section of the pipe wall on pipe sizes 4" (102mm) and larger. A boomer assembly (included) for up to 12" pipe is used to rapidly fasten the machine to the pipe. A boomer is usually not needed on pipes above 12" (305mm).

- COUPONS—Can be used to cut test coupons for API, ASME and AWS welder certification.
- TESTING—Makes coupons to test filler hardness to parent material or for bend testing.
- PRECISE—By adjusting the stops the coupon cutter will cut the same size testing coupon time after time.



An excellent tool for making coupons for bend test, tensile test, and hardness tests.

Part Number	Item/ Assembly Description	Cuts Coupons (in / mm)
03.0300.S00	Coupon Cutter (short)	2 x 9 / 51 x 229
03.0300.L00	Coupon Cutter (long)	2 x 13 / 51 x 330