Tips & Tricks of the Trade

Presented by
JCM Industries, Inc.

Installation of Bolted Couplings

Installation of Fittings

Simple Tricks of the Trade

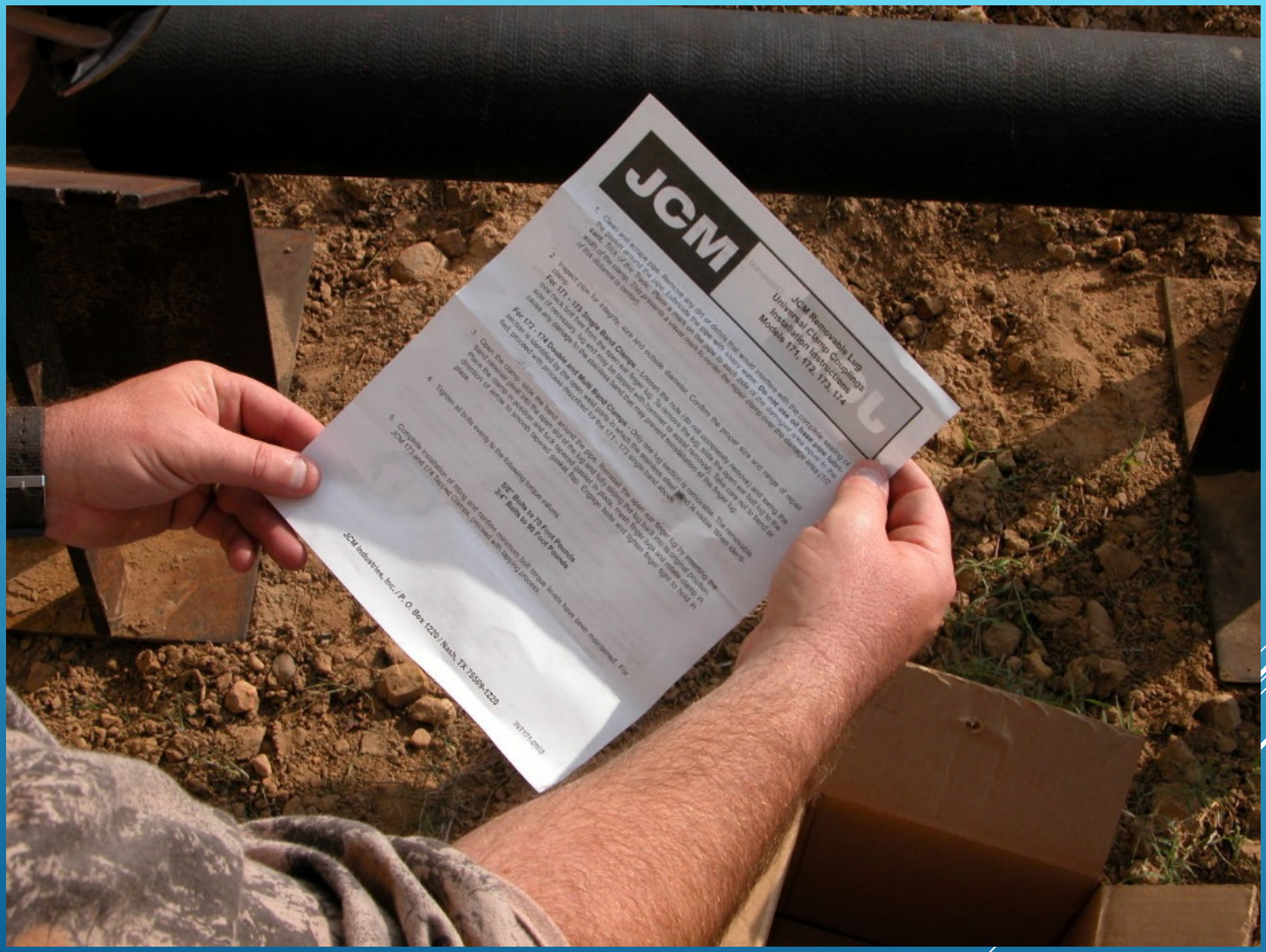
Clean and scrape the pipe – *remove excess dirt, scale and foreign matter that interferes with the gasket seal on the pipe. One small clump of dirt or debris can prevent a watertight repair.*

A piece of chalk or can of marking paint – *put a mark on the pipe a specific, measured distance from the joint/damage area for a reference point to center the fitting. Repair and connection fittings perform at their maximum when centered over damaged or joint area.*

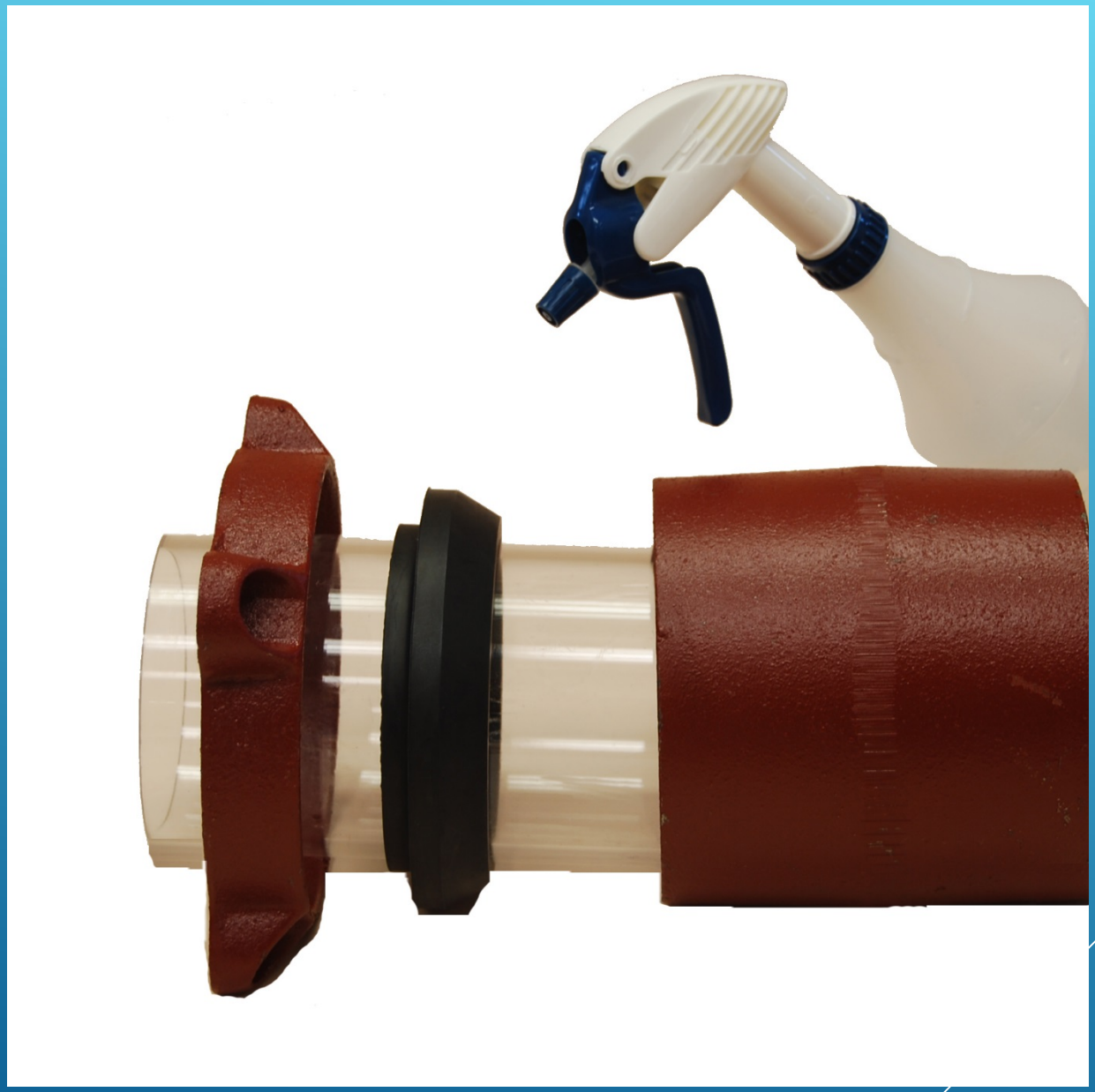
A Mirror – *more easily inspect the backside of the pipe in tight spaces or where excavation is limited. Tape the mirror to the end of a stick or rod to get to the back/underside of the pipe.*

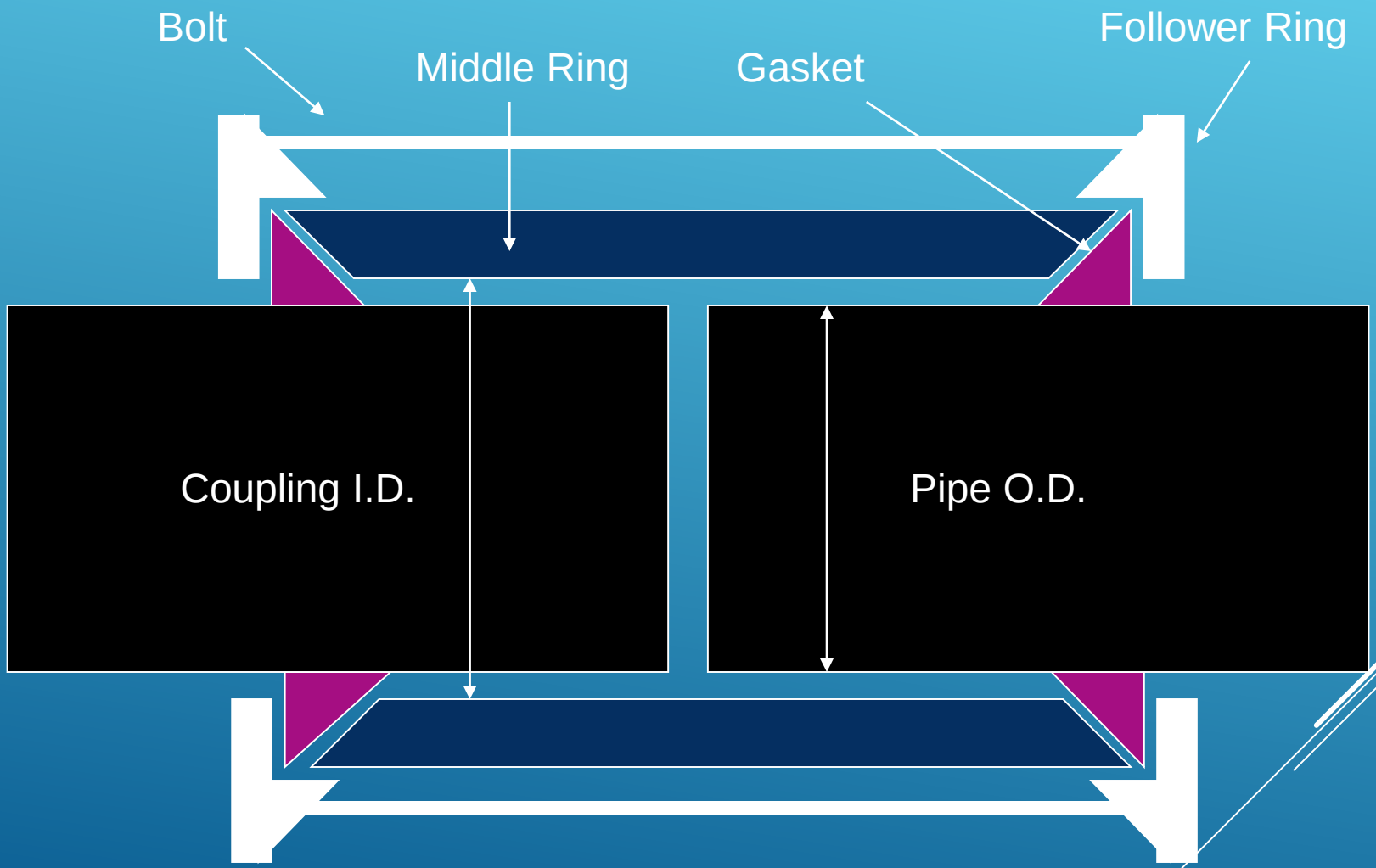
Inspect the pipe ends for integrity and suitability for repair where fittings are to be install.

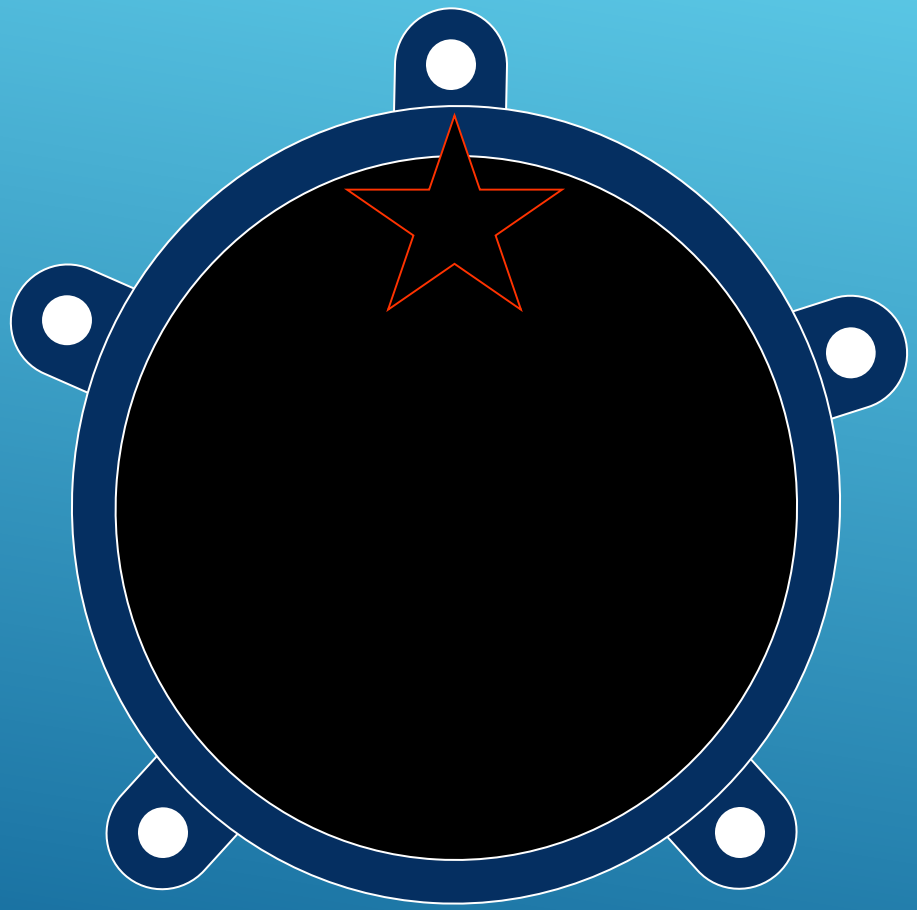
Use liquid soap or soapy water to lubricate gaskets for installation. *This mixture is will dissipate with water, allowing the gasket to "vulcanize" to the pipe creating a strong watertight seal. Avoid "pipe lube" that is oil or grease based. It's like petroleum jelly on a doorknob - it will prevent the gasket from getting a grip on the pipe….*


JCM
JCM Removable Lug
Universal Clamp Couplings
Installation Instructions
Models 171, 172, 173, 174
JCM Industries, Inc. / P. O. Box 1220 / Nash, TX 75569-1220


DIA. INCHES TO MOTHS



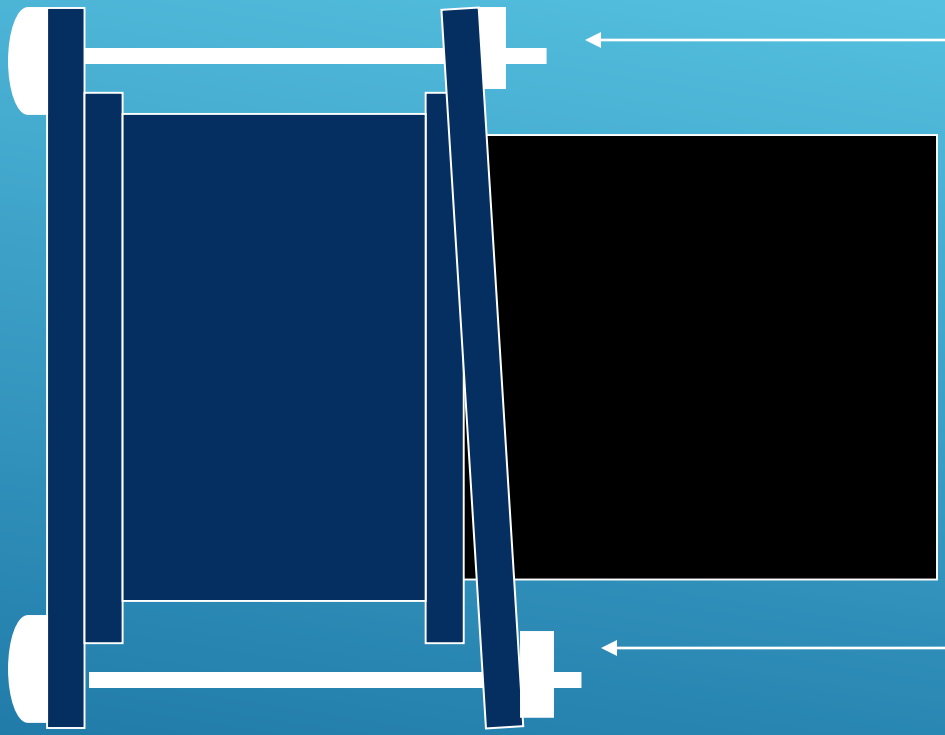

Bolt
Middle Ring
Gasket
Follower Ring
Coupling I.D.
Pipe O.D.



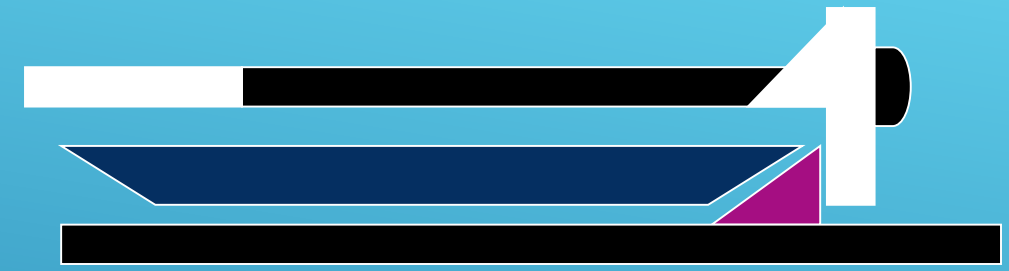
Bolted Couplings

To evenly compress the gasket into the middle ring and insure a complete gasket seal, the bolt tighten sequence should be in a “star” pattern, moving to opposite bolt positions.

This pattern will eliminate any gasket misalignment or leak channels caused by irregular gasket compression.



During installation, if a rotational, “star” pattern is not used, excessive take up on one side will lead to a leak channel created by irregular gasket compression.

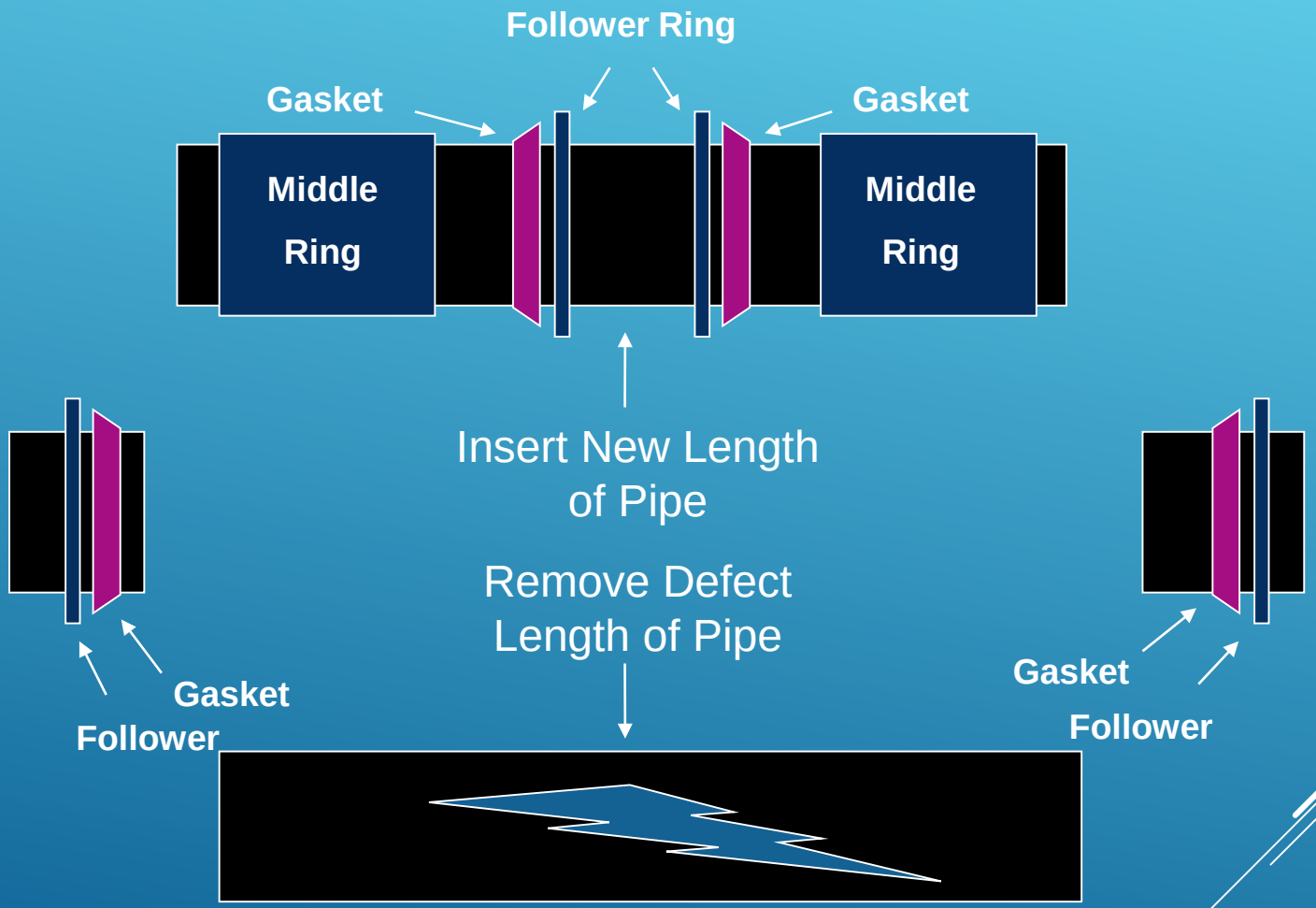


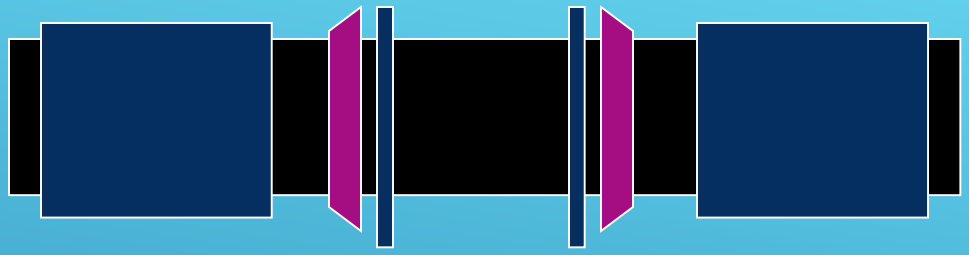
Pipe Inserted Straight

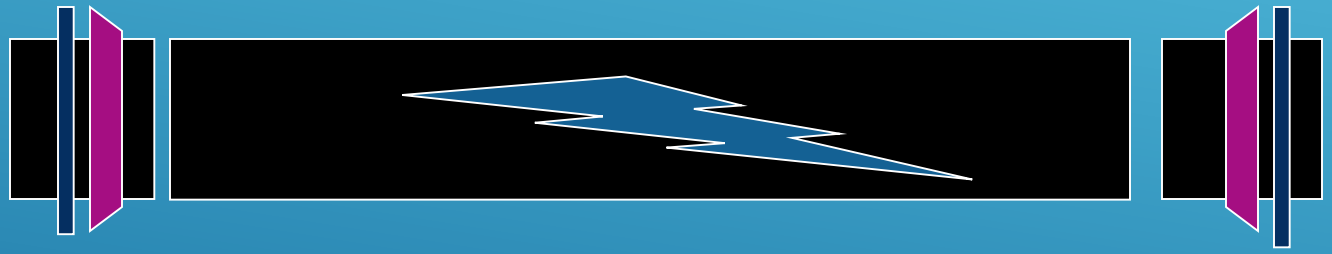
Pipe Inserted Deflected

Factors which determine the amount of deflection capable:
O.D. of the Pipe
I.D. of the Coupling
Length of Pipe Inserted into the Coupling
Length of the Coupling Body
Working Pressure of the Line

Emergency Fittings

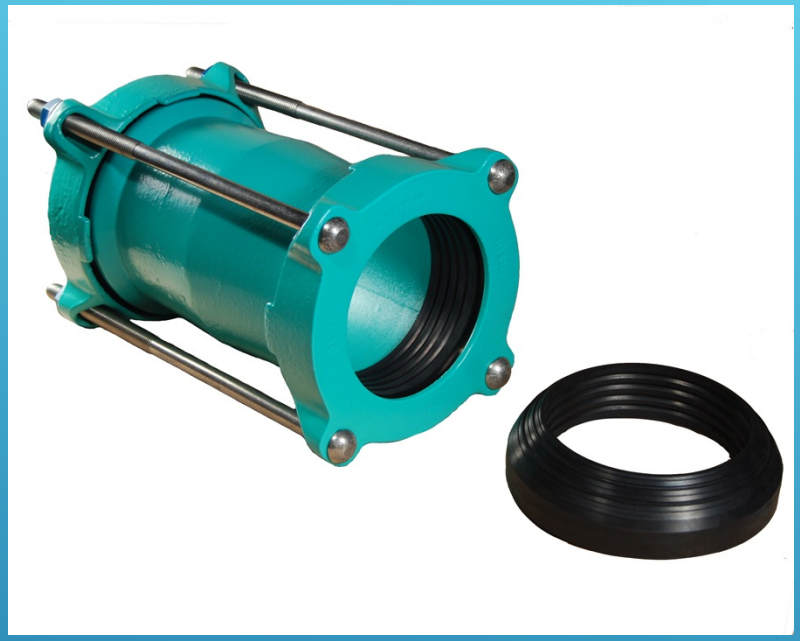






New design technology has produced the simplest fitting for replacement of damaged pipe. Various names in the industry for these types of couplings include “optimum,” “super range,” “quantum™,” etc.

These fittings are designed to fit all types of pipes and diameters within one nominal size. With ranges in excess of 1-1/4” these fittings eliminate excessive stock, system downtime and ease installation.



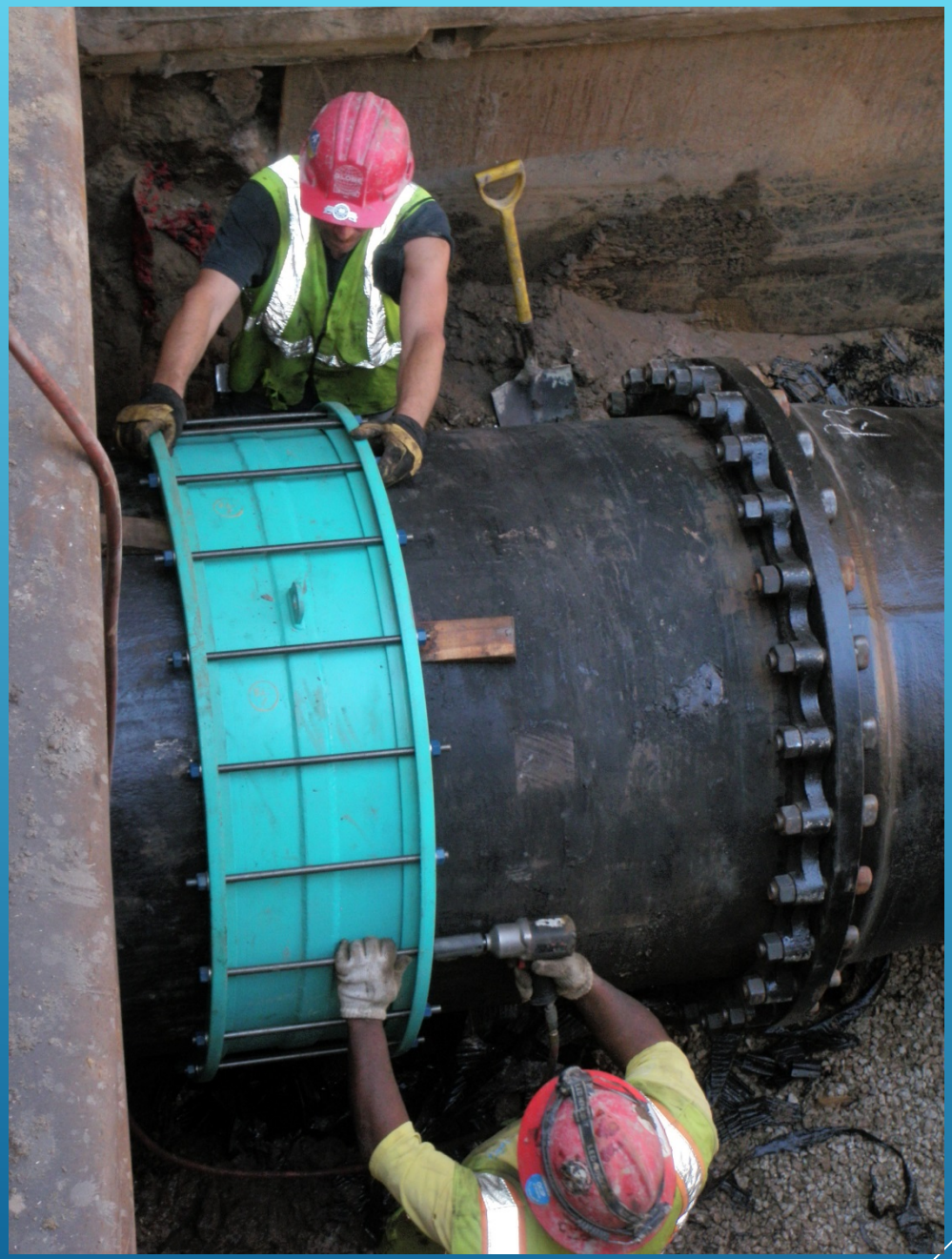
Wide Range Couplings are available with middle rings up to 10” and longer to accommodate installations that involve a large gap between pipe end. Simple to stock and easy to use, most of these fittings can be installed without complete disassembly of the coupling, better known as a “stab” installation.

Various couplings can be installed in the “stab” format. Simply loosen the bolts, gaskets and end rings. WITHOUT DISASSEMBLING the coupling.

Slide the assembled coupling onto one pipe end, “stab” the other pipe end into the coupling…

...and tighten nuts and bolts to recommended torque allowances.

General rule of thumb, there should be a minimum of 1” of pipe ends inserted into the coupling and pipe ends should not be inserted to “butt” up together. Commonly, couplings allow for approximately 3/8” expansion/contraction of pipe movement.




PRO JACK