



# JCM Industries, Inc.

**Fittings & Fabrications  
for Repair - Connection - Branching  
All Types and Sizes of Pipe**

JCM Industries, Inc.  
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## JCM 414 Fabricated Mechanical Joint Tapping Sleeve

This tapping sleeve combines the high strength and versatility of fabricated steel with the traditional side and end gasketed mechanical joint design. These sleeves are ideal for potential problem installations where strength, weight and beam load considerations are critical.

**High Strength Steel** - eliminates stress cracked casting or flange possibility.

**True Mechanical Joint Design** - industrial grade, fabricated steel body and heavyweight pusher glands prevent the warpage and distortion experienced by tapping sleeves using the split steel coupling design. JCM 114 meets design criteria in AWWA C110/111, ANSI 21.10/21.11 for tolerances, dimensions and configuration of the time proven mechanical joint seal.

**Side And End Gaskets** - provide complete seal around the pipe.

**Fabricated Sleeves** - provide more strength with significantly reduced weight than a cast sleeve. The lighter sleeve reduces the load on the pipe and aids in installation and handling.

**Accommodates Non-Standard Pipe Characteristics** - oversize, undersize or irregularities in the pipe O.D. can be accommodated within the fitting increasing performance and safety factor. The JCM 414 is available in larger sizes, non-standard sizes and with many special options (special flanges, special laying lengths, etc.)

**Improved Availability** - fabricated sleeves with non-standard sizes have a delivery schedule of three to five weeks, significantly less than a cast sleeve's six to nine months.



### HOW TO ORDER

JCM 414 is available fabricated of 304 stainless steel or 316 stainless steel

Type of pipe  
Outside diameter of pipe  
Irregular or non-standard pipe characteristics  
Line contents and pressure  
Outlet Size (14" and larger, furnish manufacturer of valve and cutter size)  
Coating  
Special requirements



**Typical Application:**  
Branching  
Permanent

Valves  
Line Branches  
Internal Line Access  
Large diameter, size on size taps  
Taps on Pipe Susceptible to  
Breakage

For application parameters, contact  
JCM Engineered and Technical  
Sales  
800-527-8482 or 903-832-2581

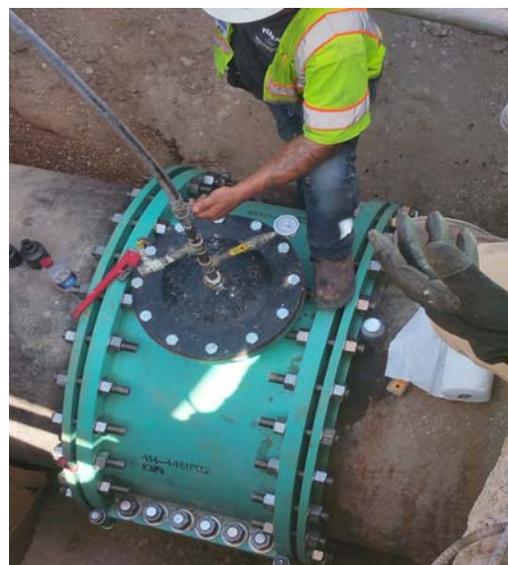
The JCM 414 Fabricated Mechanical Joint Tapping Sleeve is recommended for taps on pipe that will not accommodate a direct top seal tapping sleeve. The 414 utilizes a true mechanical joint sleeve design that completely encompasses the tap area, eliminating any potential leaks due to pipe cracks or breaks. Side gaskets are internally and externally trapped in a recessed groove machined into the bolting lug bars that completely compress the gaskets creating the watertight seal on the sides of the sleeve. The end gaskets are compressed into the sleeve housing with mechanical joint end glands, providing the water tight seal on the ends of the sleeve and completing the full encapsulation of the tap area.



Above: 6414-24x16 All 316 Stainless Steel



Above: 414-16x16 Epoxy Coated/Stainless Hardware



Above: 414-4450x12 Epoxy Coated/Stainless Hardware

Below: 414-5080x36 Epoxy Coated/Stainless Hardware

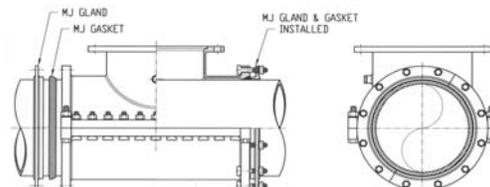


Below: 414 All Stainless Steel



### JCM 414 Fabricated Mechanical Joint Tapping Sleeve - Material Specification

- BODY:** ASTM A285 Grade C, ASTM A-36 Steel or equal. Optional 304 or 316 Stainless Steel.
- FLANGE:** AWWA C207 Class D, ANSI 150 lb. Drilling, recessed for tapping valve MSS-SP60  
Optional flanges available upon request.
- GLAND:** ASTM A-36 or Ductile Iron. Optional 304 or 316 Stainless Steel.
- BOLTS:** Corrosion Resistant, high strength low alloy A242.  
Optional Hardware: Stainless Steel 18-8 Type 304, Stainless Steel 316, Epoxy Coated.
- STUDS:** B7 Material
- GASKET:** Nitrile rubber compounded for use with water, salt solutions, mild acids and bases.  
Optional EPDM gaskets available.
- COATING:** Heavy coat of corrosion resistant shop coat primer, an excellent base for bitumastic coal tar or similar field coatings.  
Optional Fusion Epoxy Coating (per ANSI/AWWA C-213) available.



JCM Industries Tapping Sleeves meet or exceed the ANSI/AWWA C-223 and MSS-SP 124 Standards as applicable  
JCM 400 Series Tapping Sleeves are ANSI/NSF Standard 61, Annex G and ANSI/NSF Standard 372 Certified.