JCM 474 Fabricated Mechanical Joint Tapping Sleeve for Industrial Service

The mechanical joint design was developed for use in the gas industry in the late 1920’s and continues to be used extensively in other industry applications for isolating a branch area. This joint has standardized dimensions and uses the basic principle of the stuffing box and gland, with a rubber gasket being compressed by the gland.

The JCM 474 Fabricated Mechanical Joint 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.

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 474 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.
JCM 474 MECHANICAL JOINT TAPPING SLEEVE

MATERIAL SPECIFICATIONS - JCM 474 MECHANICAL JOINT TAPPING SLEEVE

**Body:** ASTM 283, ASTM 285 Grade C, ASTM A516 Grade 70 Steel or equal.
Optional 304 or 316 Stainless Steel.

**Glands:** ASTM A-36 Steel. Optional 304 or 316 Stainless Steel.

**Bolts:** Corrosion resistant, high strength low alloy ASTM A242, A193 B5, B7.
Optional A193 B8 304 stainless steel or 316 stainless steel.

**Gasket:** Virgin Styrene-Butadiene Rubber (SBR) or equal - Compounded for use with water, salt solutions, mild acids and bases. Per ASTM D-2000 M4AA 607. Standard temperature range from -40°F to 150°F (-40°C to 65°C) constant, maximum intermittent 180°F (82°C). For applications on high temperatures or chemical pipelines, contact JCM Industries Technical Services.

**Finish:** Heavy coat of corrosion resistant metal primer.
Optional Fusion Epoxy Coating available.

**Standard Flange:** ASME/ANSI B16.5 Class 150, 300, ASTM A105

**Optional Flanges - Available Upon Request**
- ASME/ANSI B16.1 Class 125, 250
- ASME/ANSI B16.47 Series A & B, Class 150, 300
- Weld Neck, Blind, Slip-on, Reducing, Threaded, Socket Weld, Lap Joint, Angle Face, Van Stone
- Concentric and Eccentric Flanges

**Other Flanges available upon request**

Design code and NDE specifications upon request. JCM Fabricated Tapping Sleeves can be manufactured in a variety of styles and configurations including offset outlets, tapping crosses and other designs to best fit your needs. Submit application information to JCM Engineered and Technical Sales at 800-527-8482 or 903-832-2581.

For detailed application information, provide the following:
- Type of Pipe
- Outside Diameter of Pipe
- Line Content, Pressure and Temperature
- Outlet Size
- Coating or Material Requirements
- Irregular or Non-standard pipe characteristics