

## JCM 114 Fabricated Mechanical Joint Repair Sleeve

Repair cast iron bells, split or leaking coupling and weld joints, or straight runs of pipe without costly shutdown or disruption to critical service.

**No Shutdown or Interruption of Critical Service** - by implementing a split fabricated mechanical joint design, the JCM 114 prevents costly down time and service disruption.

**True Mechanical Joint Design** - Heavy fabricated steel body and pusher gland construction prevents the warpage and distortion experienced by repair sleeves using the split steel coupling designs.

**Custom Built For Specific Application** - this versatile mechanical joint fitting is built to meet the specific requirements of special applications. Eliminates lost time due to field or factory modifications.

**Strong and Lightweight** - the 114 sleeves are ideal for installations where strength, weight and continued service are critical. The reduced weight of high strength steel aids in installation and handling as well as minimizing weight load on the pipe.

**Available in Two Styles** - the 114 MJ Split Repair Sleeve for use on straight runs of pipe and the 114 MJ Bell Repair Sleeve which is fabricated to accommodate the specific dimensions of the bell, collar or coupling to be repaired.

**Optional Materials** - the fabrication process of the 114 construction allows for various material options for the finished product. The 114 is available in carbon steel with special coatings and fasteners, or is available fabricated of stainless steel.



### HOW TO ORDER

For pricing and engineering, the following information must be furnished:

#### JCM 114 Mechanical Joint Split Repair Sleeve

The following information must be furnished.

Type of Pipe  
Pipe Outside Diameter  
Length Requirements  
Line Content  
Line Pressure  
Finish or Coating Requirements

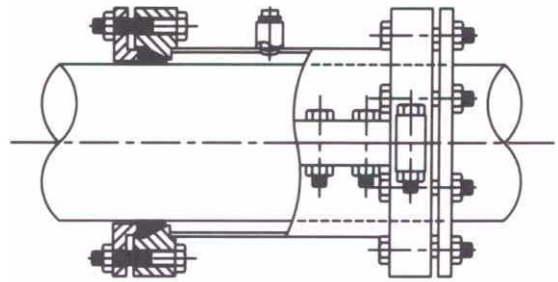
#### JCM 114 Mechanical Joint Bell Repair Sleeve

The following information must be furnished.

Type of Pipe  
Spigot or Pipe Outside Diameter  
Largest Bell or Coupling Dimension  
Length Requirements  
Line Content  
Line Pressure  
Finish or Coating Requirements

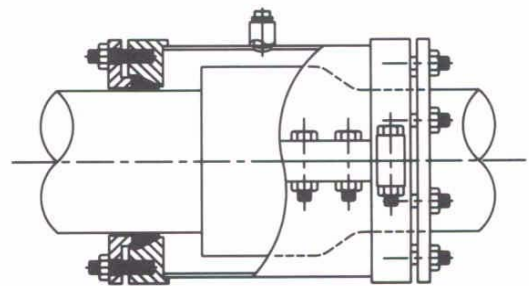
## JCM 114 Mechanical Joint Split Repair Sleeve

The **JCM 114 MJ Split Repair Sleeve** represents an unusually simple method of coupling or repairing straight runs of cracked or split cast iron pipe and severe longitudinal and circumferential breaks on critical service lines which can not be shut down. This product is made to order for all types and sizes of pipe.



## JCM 114 Mechanical Joint Bell Repair Sleeve

The **JCM 114 MJ Bell Repair Sleeve** is designed to permanently repair cracked cast iron bells, split or leaking couplings and leaking joints. By utilizing a split mechanical joint design, repairs to joints can be completed without down time or disruption to service. The JCM 114 is built to the application dimensions, ensuring a custom fit over the damaged area. These sleeves are ideal for installation where strength, weight and continued service are critical.



### JCM 114 Fabricated Mechanical Joint Repair Sleeve - Typical Specifications

#### JCM 114 Mechanical Joint Split Repair Sleeve

Repair Sleeves shall be of split mechanical joint design with separate end and side gaskets. The fittings shall be constructed of high strength steel, ASTM 283 Grade C or ASTM A-36. The mechanical joint end dimensions shall conform to AWWA standard C-110 with modification to allow for the specific pipe repair. Sleeves shall have a 3/4" outlet for venting and test purposes. Repair Sleeves shall be JCM 114 Mechanical Joint Split Repair Sleeve or approved equal. Repair Sleeves shall be ANSI/NSF Standard 61 Certified.

#### JCM 114 Mechanical Joint Bell Repair Sleeve

Repair Sleeve shall be split mechanical joint, with separate end and side gaskets, designed to accommodate the pipe joint area. The fittings shall be constructed of high strength steel, ASTM 283 Grade C or ASTM A-36. The mechanical joint end dimensions shall conform to AWWA standard C-110 with modification to allow for the specific pipe repair. Sleeves shall have a 3/4" outlet for venting and test purposes. Repair Sleeves shall be JCM 114 Mechanical Joint Bell Repair Sleeve or approved equal. Repair Sleeves shall be ANSI/NSF Standard 61 Certified.

### JCM 114 Mechanical Joint Repair Sleeve - Material Specifications

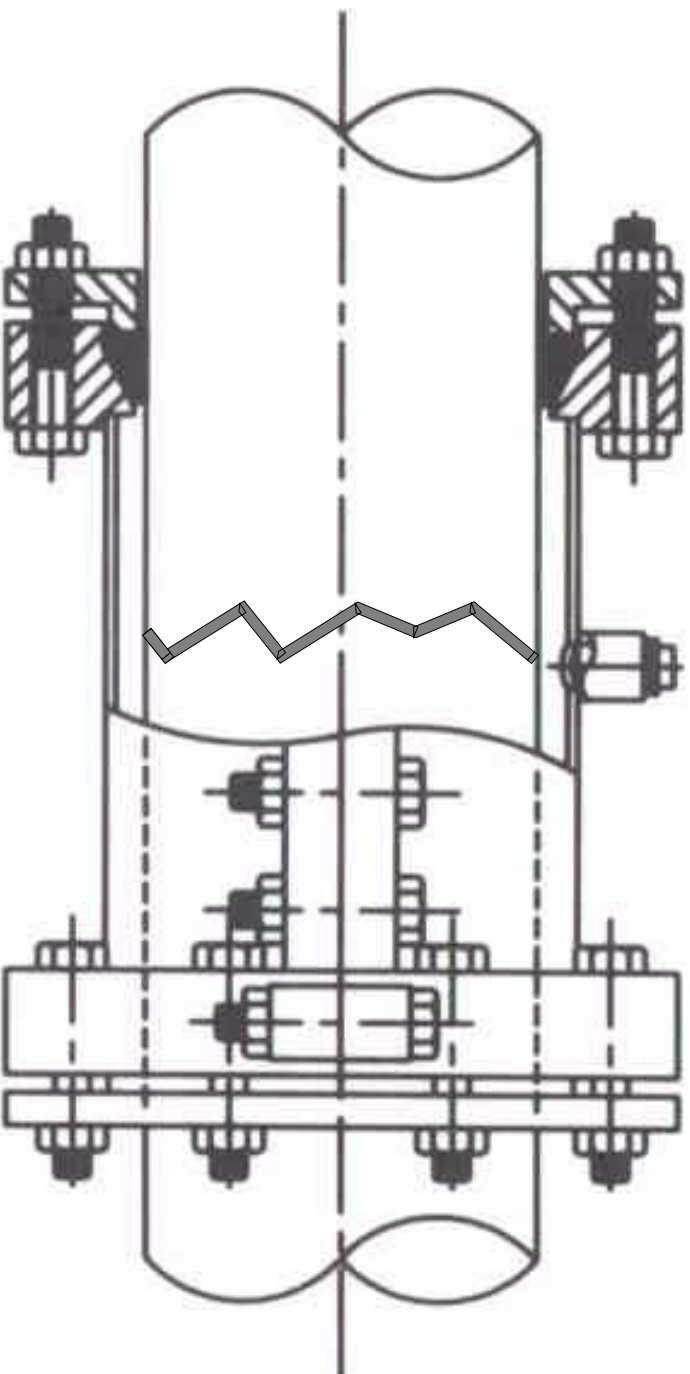
**BODY:** ASTM A-36 Steel, ASTM 283 Grade C Steel or equal.

**GLANDS:** ASTM A-36 Steel

**BOLTS:** Corrosion resistant, high strength low alloy AWWA C-111, ANSI A21.11. Optional Stainless Steel, 18-8 Type 304.

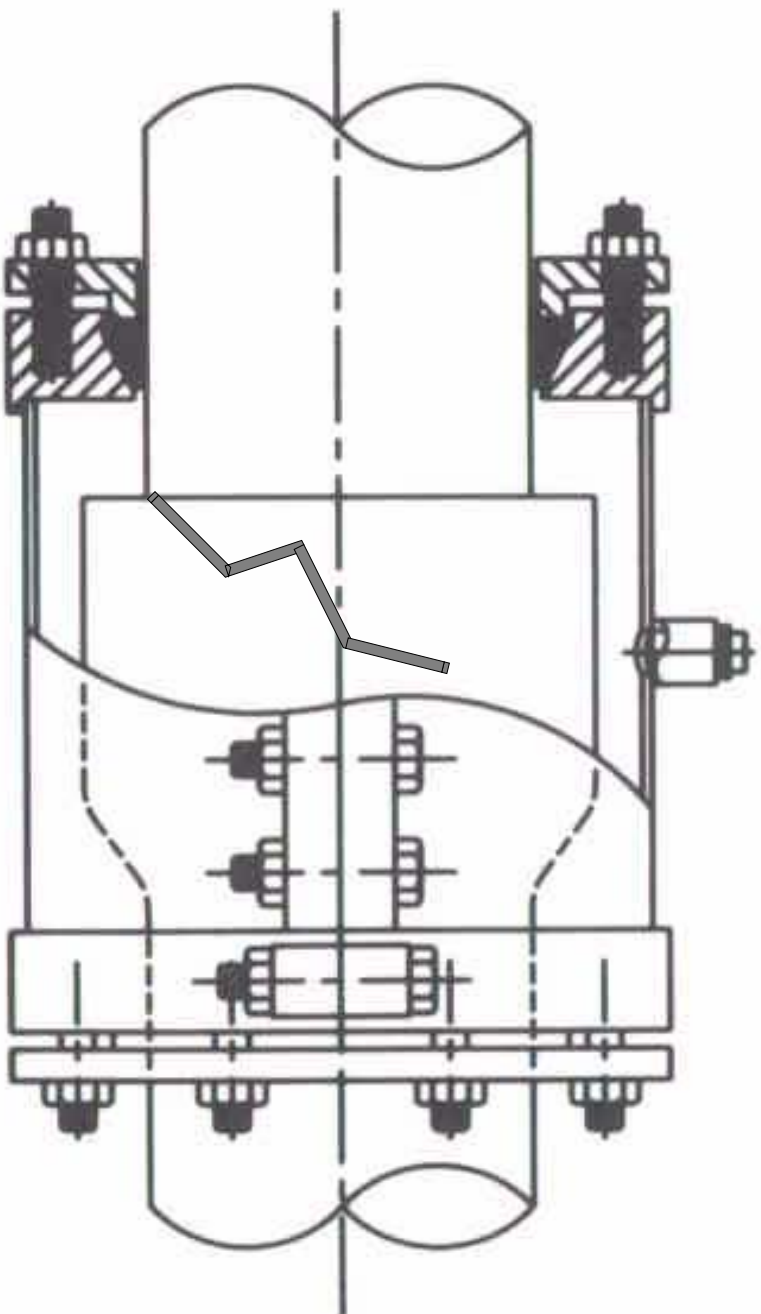
**GASKET:** Compounded for use with water, salt solutions, mild acids and bases.

**FINISH:** Heavy coat of corrosion resistant shop coat primer. Optional Fusion Epoxy Coating available.



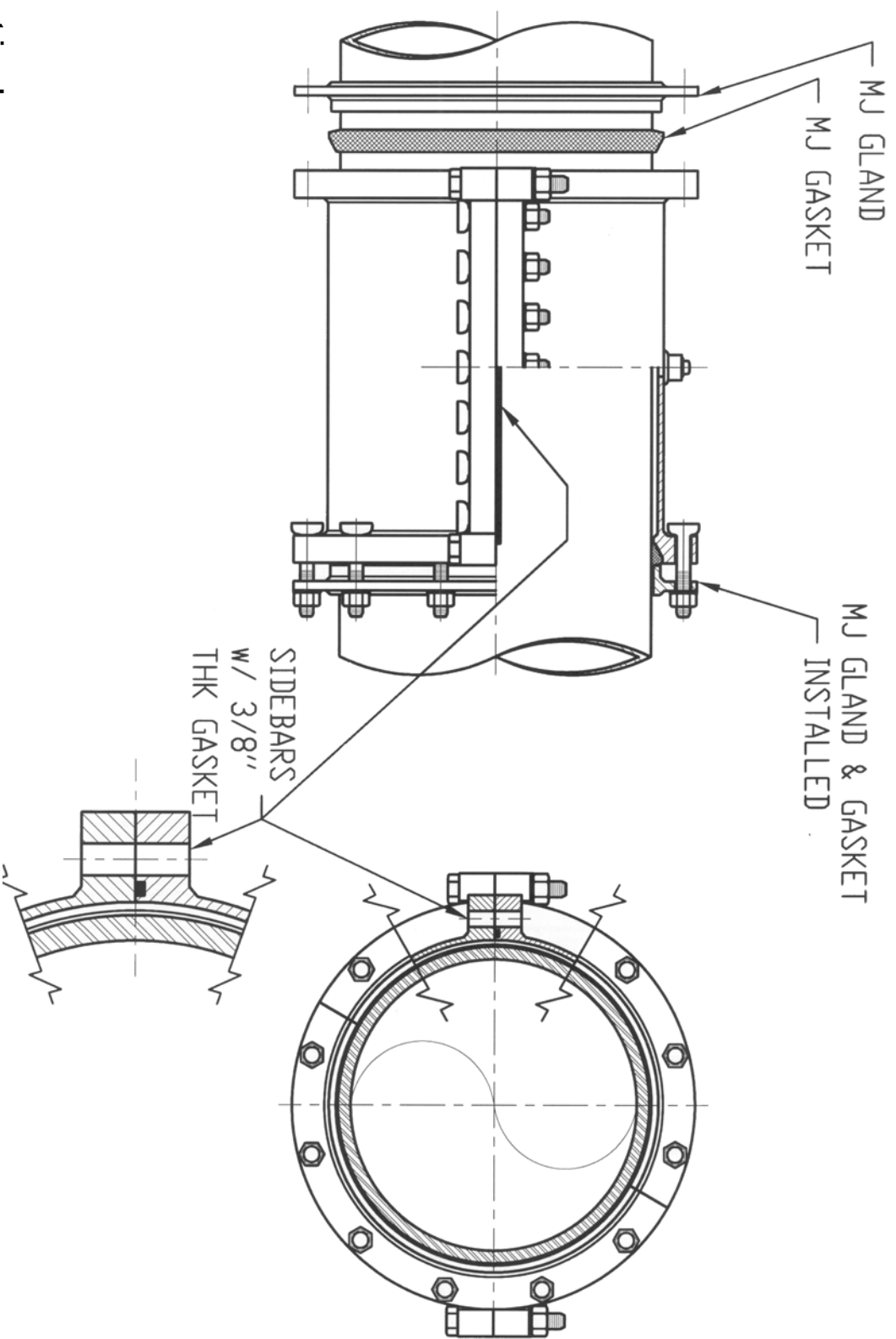
JCM Industries, Inc.  
P. O. Box 1220  
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Phone 800-527-8482 or 903-832-2581  
Technical and Engineered Sales

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JCM 114 Mechanical Joint Repair Sleeve



## JCM 114 Mechanical Joint Bell/Split Repair Sleeve Installation Instructions

This repair sleeve with mechanical joint ends is designed for a quick, simple installation with a minimum of equipment. To assure a proper installation please follow this steps:

1. Check sleeve, bolts and gasket to make sure all parts are included and undamaged.
2. Clean pipe in area where sleeve is to be installed. Check pipe dimension to be certain it is correct for the size sleeve.
3. Check to be sure that the round side gaskets are properly seated in side bar grooves.  
**DO NOT CUT SIDE GASKETS.**

(Drawing - A) See reverse drawings. Install sleeve in proper position on pipe and match color marks on body. For underwater applications be familiar with and rehearse proper procedures.

4. Tighten shorter side bar bolts first, starting in the center and working toward the ends. Next, tighten the longer end bolts so that the sleeve halves are butted together evenly and squarely.  
**Note: At this point, the round side gaskets should protrude slightly into where end gasket will seat.** (All bolts should be @ 80 Ft/Lbs. minimum).
5. **Block under sleeve to center it on pipe.** (Drawing - B) Install end gaskets, placing lap 45° (1/8 turn) from side bars.

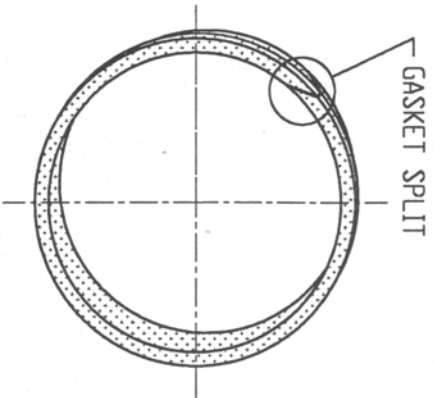
The end gaskets were lubricated before shipment. If necessary to apply additional lubricant, use a standard gasket soap lubricant as used in rubber joint pipe installations. For underwater installations additional gasket lubrication is not required.

6. (Drawing - C) Install pusher gland so that joints are 90° (1/4 turn) from side bars. Pusher glands have color match marks indicating the proper end and location of each segment of the pusher gland. Install pusher gland so color match marks line up. Tighten bolts evenly to approximately 80 ft. lbs. (more if required).

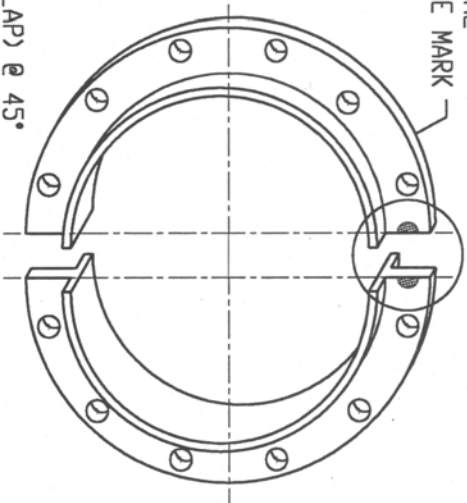
Note: Pusher glands must be positioned and matched to the markings provided for proper installation. For proper gasket and pusher gland positioning, see drawing on reverse. **No "joints"** (gasket, body, pusher gland) should be in line with each other.

7. Test sleeve. A test plug is provided on the sleeve for this purpose should testing be required.

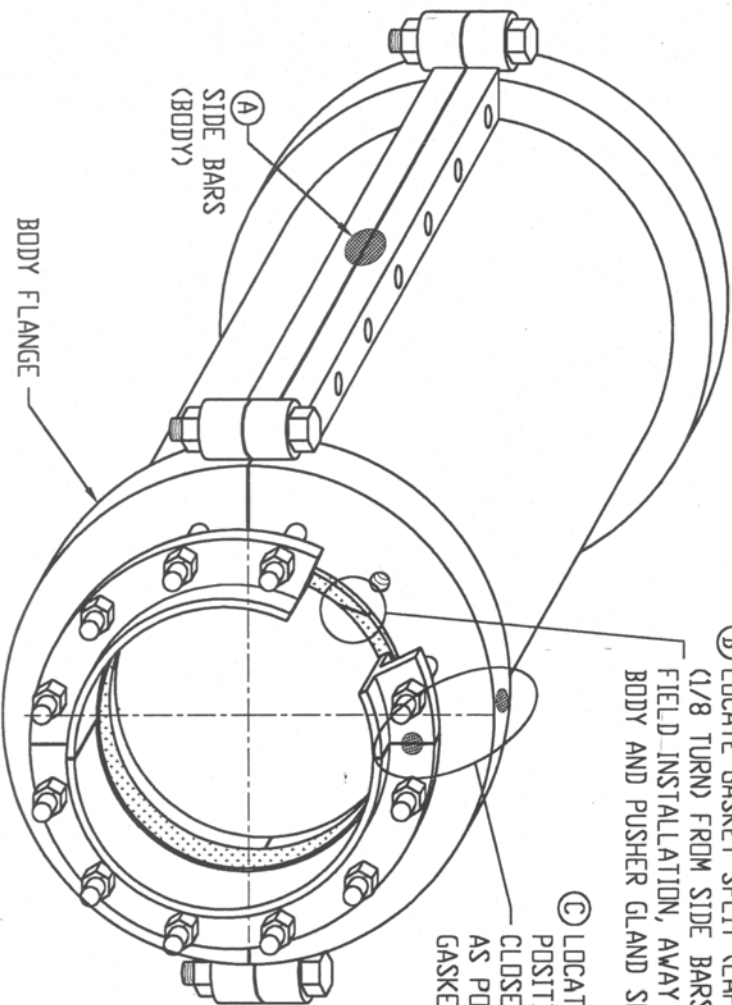
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EACH PUSHER GLAND HAS  
DIFFERENT COLORED MARK  
THAT MATCHES TO THE  
PROPER BODY FLANGE MARK



Ⓑ LOCATE GASKET SPLIT (LAP) @ 45°  
(1/8 TURN) FROM SIDE BARS DURING  
FIELD INSTALLATION, AWAY FROM  
BODY AND PUSHER GLAND SPLITS



Ⓒ LOCATE PUSHER FLANGE SPLIT IN THIS  
POSITION DURING FIELD INSTALLATION AS  
CLOSE TO 90° (1/4 TURN) FROM SIDE BAR  
AS POSSIBLE, AWAY FROM BODY AND  
GASKET SPLITS. (NOTE COLOR MATCHING DOT)

