# JCM

# JCM 230 and 231 HDPE Pipe Stiffeners



### New, Advanced Design Provides...

- Corrosion Resistance
- Rigid Reinforcement of Pipe Wall for Pipe Connections
- Accurate Pipe I.D. Sizing maintains proper Outside Diameter
- 1/8" Tapered Insert End provides for Easy Installation
- 90° 1/8" Flared End Secures Stiffener to End of Pipe
- Positive Reinforcement without interference of Pipe Joint

JCM HDPE Pipe Stiffeners are designed to support the interior wall of HDPE for critical pipe joining applications. Recommended for all pipe end connections utilizing mechanical bolt-on fittings, the JCM 230/231 Pipe Stiffeners support the pipe's end and controls the "necking down" reaction to the pressure applied during normal installation of fittings used in pipe joining applications.

The JCM 230/231 HDPE Pipe Stiffeners are formed of stainless steel, 304 or 316 material is available, to the HDPE manufacturers published average Inside Diameter (I.D.) of the specific size and SDR of the HDPE. This accurate formation provides for ease of installation and maintains the proper outside diameter for a successful, trouble free application that provides long-term service.

JCM 230/231 Pipe Stiffeners are readily available for both Steel Size and Ductile Iron Size HDPE:

### SDR11, 13.5, 17, 21, 26, 32.5

JCM 230/231 Pipe Stiffeners Material Specifications: ASTM - 240 - TP 304 Stainless Steel or 316 Stainless Steel, available in sizes 4" and larger.

Note: JCM recommends fusion joints as a primary method of connection. Mechanical fittings are a secondary and limiting choice. See JCM Fittings and Fabrications Designed and Engineered for HDPE Book, Page 3 - General Application Information. JCM 230/231 Pipe Stiffeners are designed for use with mechanical couplings, clamps and fittings where stiffening of the pipe is necessary for proper gasket seal. Caution needs to be taken to prevent (1) shear loading on the joint, (2) migration of the stiffener out of the end of the pipe from lack of a back load on stiffener rim or load on the stiffener. Applications in which pipe may move out of the fitting, correct anchorage of the pipe must be provided.

# JCM INDUSTRIES, INC.

## JCM 230 and 231 HDPE Pipe Stiffeners



JCM Pipe Stiffeners available for: Steel Size and Ductile Iron Size HDPE in SDR11,13.5, 17, 21, 26, 32.5 JCM Pipe Stiffeners Material Specifications: ASTM - 240 - TP 304 Stainless Steel or 316 Stainless Steel

Nominal Pipe Size	230 Stiffener 6" Width	231 Stiffener 12" Width
4	230-04-xxxx	231-04-xxxx
6	230-06-xxxx	231-06-xxxx
8	230-08-xxxx	231-08-xxxx
10	230-10-xxxx	231-10-xxxx
12	230-12-xxxx	231-12-xxxx
14	230-14-xxxx	231-14-xxxx
16	230-16-xxxx	231-16-xxxx
18	230-18-xxxx	231-18-xxxx
20	230-20-xxxx	231-20-xxxx
22	230-22-xxxx	231-22-xxxx
24	230-24-xxxx	231-24-xxxx
30	230-30-xxxx	231-30-xxxx
36	230-36-xxxx	231-36-xxxx

Smallest I.D./O.D. available 3.65 - Sizes larger than 36" available upon request Stiffeners provided as 304 Stainless Steel. Optional 316 Stainless Steel available - priced on application. Nominal Size Stiffeners 4" - 22" are 17 Gauge Stainless Steel Material Nominal Size Stiffeners 24" - 36" are 12 Gauge Stainless Steel Material

### HOW TO ORDER

1. Select nominal pipe size of HDPE.

6" wide or Model 231 - 12" wide).

2. Select Width of Stiffener (Model 230 -

3. Insert actual HDPE pipe I.D. (provided by customer) @ xxxx. The pipe I.D. determines the stiffener O.D. and completes the order number. **Example:** To order a 304 stainless, 12" wide stiffener, for steel size 8" nominal SDR 17 pipe, with an actual pipe I.D. of 7.55, order number: 231-08-0755.

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JCM Industries, Inc. P. O. Box 1220, Nash, Texas 75569-1220 Call Toll Free: 800-527-8482 or 903-832-2581 Fax Toll Free: 800-874-9524 or 903-838-6260 www.jcmindustries.com

Brochure No. 230-0302



# JCM 230/231 Stainless Steel Stiffener Typical Specifications

### JCM 230/231 Stainless Steel Stiffener

All plain end pipe connections made with High Density Polyethylene Pipe shall have an internal stainless steel 18 - 8 Type 304, minimum, stiffener. Stiffener shall have a permanent O.D., which fits into the pipe I.D. to reinforce and maintain concentricity of the pipe.

Stiffener shall be JCM 230, JCM 231 or approved equal.

JCM Tees, Spools and Fabrications are ANSI/NSF Standard 61 Certified.



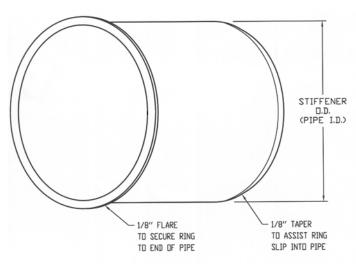
# JCM 230/231 HDPE Stiffener Insert Installation Instructions

### JCM 230/231 High Density Polyethylene Pipe Stiffener Inserts Installation Instructions

- 1. Clean pipe ends the distance back equal to the length of the mechanical fitting to be installed. \*Prepare pipe ends, measure I.D. of pipe to verify correct size stiffener. Stiffener outside diameter will be equal to the HDPE Manufacturers published average inside diameter of the pipe.
- 2. Inspect pipe surface where mechanical fitting will be installed. Make sure there are no gouges, bumps or areas that will interfere with the gasket seal.
- 3. Place the Tapered End of the stiffener into pipe end . To ease installation, the stiffener can be lubricated with water or soapy-water. DO NOT USE PIPE LUBRICANT. Insert stiffener into the pipe until the 1/8" Flared End securely catches the pipe end. To firmly insert the stiffener so that the Flared End runs home, gently tap the flare face with a rubber hammer or lay a flat piece of wood across the diameter of the stiffener and tap with a heavy object.
- 4. For application joining HDPE to HDPE, insert JCM stiffener to other end of pipe to be joined and proceed with fitting installation per instructions. Review fitting instructions for any special notations concerning use of mechanical fitting on high density polyethylene pipe.

\*In applications where HDPE pipe end has been cut and the I.D. has closed or "necked down", installation can be eased by taking a knife and bevel the I.D. of the pipe to open the I.D. to allow insertion of the stiffener.

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INT230/231-07/02

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