KUBRICKY CONSTRUCTION CORP.
269 BALLARD ROAD

WILTON, NY 12831
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KUBRICKY CONSTRUCTION CORP.
A PROUD MEMBER OF THE D.A. COLLINS™ COMPANIES
An Equal Opportunity Employer

Rutland City BRF 3000 (2014036)
SUBMITTAL 54.1

Issued 07/02/15
Respond by 07/10/15

To

Timothy Pockette, PE

Topic	900.640 DIP, Cement Lined, 6 & 10" on Bridge & In Casing Resubmittal
Status	For Approval
Spec section	900.640
Responsibility	(16) River Street
Sent to approver	7/2/15
Required from approver	7/10/15

From

Volker H.D. Burkowski

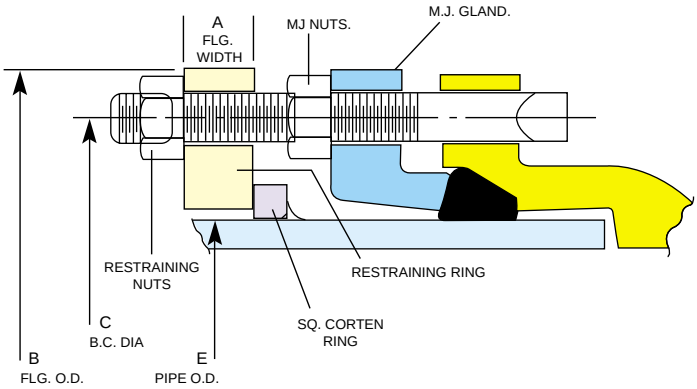
Signed by _____ Date 7/2/15

Proceed as Indicated _____ Date _____
Owner Authorized Representative

Griffin MECH-LOK™ Rigid Restrained Joint

Certain pipeline construction projects require rigid restrained joint pipe for use on bridges or other elevated structures. The ***MECH-LOK*** joint combines the proven mechanical joint with a rigid restraining system. This product can be used on long-span piers at 40 ft. spacings.

The ***MECH-LOK*** assembly consists of a mechanical joint pipe, a ductile iron or A588 alloy steel ***MECH-LOK*** ring, and a factory-welded alloy steel ring on the plain end (spigot) of the pipe. The ***MECH-LOK*** joint is available in sizes 6” through 36” with working pressure ratings of 250 psi. It can be ordered with any standard or custom pipe laying length. ***MECH-LOK*** joints are supplied with the gland and fasteners. Note: **Although mechanical joint pipe is produced in 3” - 24” sizes only**, ***MECH-LOK*** **joints can be specified on any spigot up to 36” diameter.**



The double-nut design of the ***MECH-LOK*** joint allows the first nut to tighten the mechanical joint gland and compress the gasket. The second nut provides the necessary joint restraint and determines the flexibility of the finished joint. If the restraining nut is fully torqued, it will create a rigid pipeline with the capability of spanning 40-foot long span support spacings. The supports can be piers giving support from below or pipe hangers giving support from above the pipeline. Hangers can be as close as the bridge architecture demands or as distant as 40-feet on-center. The hangers are only responsible for supporting the dead weight of the pipe and its contained fluid - the rigid joint handles the thrust force. Isolated expansion is addressed by using readily available expansion joints as necessary.

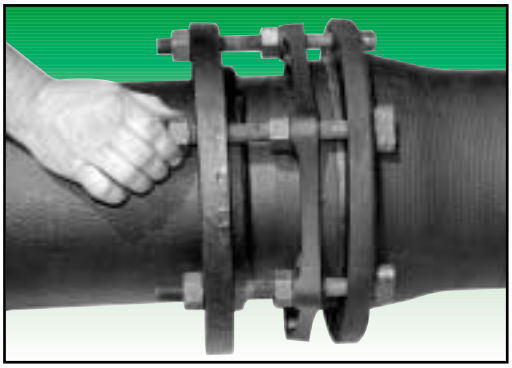
6” - 36” MECH-LOK™ JOINT

Pipe Size	“A” Flange Width	“B” Flange O.D.	“C” B.C. Dia.	“E” Pipe Dia.	Bolt Length	Number of Bolts	Deflection Angle
6”	0.75	11.13	9.50	6.90	8	6	2½°
8”	1.00	13.38	11.75	9.05	8	6	2½°
10”	1.00	15.63	14.00	11.10	8	8	2½°
12”	1.00	17.88	16.25	13.20	8	8	2°
14”	1.25	20.25	18.75	15.30	8	10	2°
16”	1.50	22.50	21.00	17.40	8	12	2°
18”	1.63	25.75	23.25	19.50	8	12	2°
20”	1.75	28.32	25.50	21.60	8	14	2°
24”	2.00	32.44	30.00	25.80	8	16	2°
30”	2.50	39.25	36.88	32.00	10.5	20	½°
36”	3.00	46.00	43.75	38.30	11	24	½°

MECH-LOK™ Rigid Restrained Joint
Assembly Instructions

1. Assemble the mechanical joint as per the standard recommended procedure. Use reasonably straight alignment of the two pipe sections during assembly. Keep the MJ gland square with the MJ flange. Hand-tighten the nuts on the MJ gland.

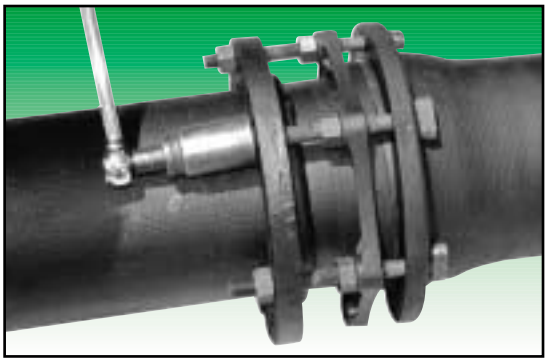
2. Slide the ***MECH-LOK*** restraining ring over the bolts and hand tighten the nuts.



3. For non-rigid pipelines, tighten the nuts on the MJ gland using an open-end adjustable wrench. Uniformly tighten the nuts to the 120-150 ft.-lb torque range.

   For applications that require subsequent joint deflection, the restraining nuts should be finger tightened.

   For applications that require rigid joints, such as long span or bridge crossings, the restraining nuts should be tightened to the 120-150 ft-lb torque range, prior to final tightening of the MJ nuts. This will ensure that the spigot is tight against the socket. After tightening the MJ bolts, retighten and torque the restraining nuts.



A typical ***MECH-LOK*** rigid restrained (long span) pipe design.

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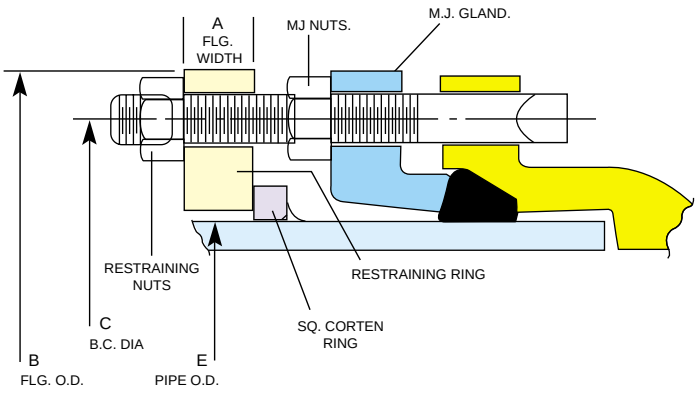

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