Installation Instructions for Type Over-the-Shaft (OTS™) Rotary Unions (3½”)

Follow your company’s safety procedures whenever working on Kadant Johnson products. Read all of the instructions before proceeding with the installation or repair.

Please refer to the Kadant Johnson assembly drawing for part identification. Assembly drawings are available on request from Kadant Johnson.

Lubricate all fasteners with anti-seize compound. Tighten all fasteners in a star pattern. Torque specifications are listed on the product assembly drawing and are available from Kadant Johnson.

STEP 1.
Clean the shaft from the end up to and including the surface where the rotary union will be positioned. To prevent O-ring damage during installation, use caution to remove any burrs, corrosion, or damage on the shaft. The ports on the shaft should be chamfered.

NOTE: Before installation, verify that the O-rings (11) have been installed into the nipple (4).

STEP 2.
Lubricate the O-rings (11) and the shaft O.D. with silicon lubricant supplied by Kadant Johnson.

NOTE: Kadant Johnson recommends dimpling the equipment shaft to accept the set screws (13) that secure the rotary union to the shaft. If the shaft is not setup to accommodate the set screws, please follow the recommended dimpling procedure.

SHAFT DIMALPING PROCEDURE
Carefully position the rotary union onto the shaft. Align the ports in the nipple (4) with the ports on the shaft. Remove the two set screws (13) from the nipple. Using a small transfer punch and hammer, mark the locations for the dimples on the shaft through the set screw holes on the nipple. Remove the rotary union, dimple the shaft at the marked locations using a drill and a 3/8” drill bit. Do not drill completely through the shaft or leakage will occur. Polish the dimpled area with a fine Emory cloth.

STEP 3.
Before reinstalling the rotary union, verify that the O-rings (11) were not damaged during the dimpling procedure. Install the rotary union onto the shaft carefully and straight so as not to damage the O-rings. The ports in nipple (4) must be aligned with the ports on the shaft. Tighten the set screws (13), locking the rotary union onto the shaft.

NOTE: Some installations require the use of two rotary unions on a single shaft. The rotary union mounting procedure may require reversing the position of the rotary union assemblies to achieve port alignment.

STEP 4.
Apply a torque restraint to the inlet pipe fitting.

STEP 5.
Connect flexible metal hose in a relaxed position (not stretched or compressed). Open the inlet and outlet valves.

STEP 6.
The rotary union is now ready to be put into service.