Installation Instructions
for Turbulator® Bars – Edge and Groove Control

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

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

Tighten all fasteners in a star pattern. Torque specifications are listed on the product assembly drawing and are available from Kadant Johnson.

STEP 1.
Some dryers will be equipped with Kadant Johnson edge or groove control bars. These will be identified on the Kadant Johnson drawing. Edge control bars are a short segment of bars that are located outboard of a stationary syphon and/or in a shallow circumferential groove in the dryer shell.

STEP 2.
The control bars consist of three identical hoop-bar ring segments. The bars are welded to the rings. Each control bar assembly is held in place with one ring segment.

STEP 3.
The control bars are installed using the same tools used for the full-width Turbulator bars.

STEP 4.
Position the control bars as indicated on the Kadant Johnson drawing, normally about 25 mm (1”) from the end of the dryer shell flange taper. There should be a gap of about 25 mm (1”) between the end of these bars and the stationary syphon shoe.

STEP 5.
Begin by placing two of the control bar segments on the bottom of the dryer, with one extending up from the 6 o’clock position to the 2 o’clock position, and the other one extending from the 6 o’clock position to the 10 o’clock position.

STEP 6.
Place the head of compression bolt through the hole in the bent tab of the ring segment and the threaded end through the hole in the bent tab of the adjacent ring segment, where the two segments come together at the bottom of the dryer.

STEP 7.
Set the top ring segment on top of the two lower segments, with compression bolts between the tabs.

Note: The ring segments and the compression bolts are symmetrical. They can be installed in either position. Typically, the heads are positioned in the same direction, but this is not necessary.

STEP 8.
Tighten the three compression bolts by turning the nuts in a clock-wise direction. Maintain equal spacing in the space between the bent tabs.

STEP 9.
A pneumatic air wrench can be used for tightening the nuts on the compression bolts or a manual ratchet wrench can be used to tighten the bolts.

STEP 10.
After all of the compression bolts are in position, tighten them each to 20-35 N-m (15-25 ft-lb). A pneumatic torque wrench would be adequate for this tightening. Do not over tighten the compression bolts.

STEP 11.
Tighten the jam nuts for each of the compression bolts. Use a pair of open-end wrenches for this and apply approximately 100 N-m (75 ft-lb) of torque to seat the two nuts against each other. Tightening the nuts does not have to be accomplished with a torque wrench as long as the two nuts are tight.

STEP 12.
When completed with installation, be sure to remove all tools, spare components and miscellaneous parts from the dryer.

Dimensions are for reference only and subject to change. Certified drawings are available on request.

The Kadant Johnson Warranty

Kadant Johnson products are built to a high standard of quality. Performance is what you desire: that is what we provide. Kadant Johnson products are warranted against defects in materials and workmanship for a period of one year after date of shipment. It is expressly understood and agreed that the limit of Kadant Johnson’s liability shall, at Kadant Johnson’s sole option, be the repair or resupply of a like quantity of non-defective product.

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