Installation, Operation, and Maintenance Instructions for Ejector Type Desuperheaters

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.

INSTALLATION INSTRUCTIONS

The ejector type desuperheater can be installed either horizontally or vertically with the process steam flowing upward. The orientation does affect the turn down; consult the sizing program printout or the factory for turn down information.

A minimum of 10 pipe diameters upstream and 10 feet downstream of straight piping is required.

The temperature-sensing element should be located as close to the process point of use as possible with a minimum of 30 feet downstream of the desuperheater.

In order to prevent clogging of the atomizing steam nozzle inside the desuperheater, a strainer with mesh opening about 1/5th of the nozzle orifice diameter is to be installed on the atomizing steam piping.

A drain pot properly trapped should be installed approximately 10 feet downstream of the desuperheater and another one as close to the point of use as possible.

OPERATION INSTRUCTIONS

1. Open all stop valves.
2. Drain steam line before desuperheater and PRV (if PRV is present).
3. Open atomizing steam line fully. Water line can now be opened to control set point as well as process steam regulators.
4. Refer to control apparatus instructions from other manufacturers.

MAINTENANCE INSTRUCTIONS

The ejector type desuperheater has no moving parts: therefore, maintenance requirements are minimal. If performance is deteriorating, first check that the operating parameters have not changed and that the atomizing steam and cooling water is delivered at the required pressure at the desuperheater inlet. If no external cause can be found, inspection of the internal parts is required. Check for deposits that could clog the orifices and clean as required. Check for excessive erosion of the nozzle. Replace eroded parts as needed to restore performance.

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.