Operation and Maintenance of Compressed Air and Steam Separators

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.

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.

**OPERATION AND CONSTRUCTION**

Installing separators at or as near as possible to the point of use ensures the cleanest, driest air or steam possible. Kadant Johnson's unique design characteristics integrates the three separating functions of expansion, abrupt direction change, and filtration. The Kadant Johnson construction is such that upon entering the separator, the vapor is forced to change directions many times by negotiating several layers of course mesh wire screen. Immediately following filtration, the air or steam enters the expansion chamber. Together these functions effectively isolate and capture up to 99% of the precipitate. Foreign particles are literally knocked out of the air or steam to settle in the bottom of the separator, where they are removed.

Standard separator construction is ductile iron. The standard screen is constructed of bronze for steam and aluminum for air. Stainless steel screens are also available.

**Type SA Separator with Drain Top**

Maximum allowable pressure 300 psig at 650°F (vessel only)
Maximum operating pressure 250 psig at 100°F

With a complete trap mechanism built in to make it automatically self-draining, the Type SA eliminates uncertainties of manual draining or the need for external traps. All water, oil, and other moisture that have been removed from the compressed air accumulates in the bottom of the separator bowl and, when the level is sufficient to raise the float, the valve opens and the liquid flows down the drain. The trap mechanism has a spherical stainless steel float, valve, and seat, all mounted on the bottom plate of the separator body so it can be easily and quickly removed for inspection or cleaning.

**Type S Separator**

Maximum allowable pressure 300 psig at 650°F
Maximum operating pressure 300 psig at 650°F

Compressed air separators should be installed as close to the point of use as possible to take advantage of all possible...
temperature drop in the piping. If the piping is warm, the separator cannot function. An aftercooler will be required.

The line should be thoroughly blown when the separator is installed to clean out any moisture or foreign matter that may be in the line or the equipment at the outlet side of the separator.

If the separator is not a Type SA, install a trap so that the draining will be automatic.

**MAINTENANCE**

Periodically check the screen for clogging and replace if necessary. An indication of clogging will be increased pressure drop across the device.

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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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