SAFETY INSTRUCTIONS

CAUTION. Please read these instructions before installing, maintaining, or operating the rotary joint.

GENERAL PRECAUTIONS
Kadant Johnson manufacturers rotary joints for air, water, steam, coolant, thermal oil applications, and other media. Please confirm with Kadant Johnson the suitability of the rotary joint for your specific application. Kadant Johnson rotary joints should not be used to transfer fluids or vapors that contact food or are toxic, biohazardous, flammable, or explosive. Rotary joints contain fluids and vapors that can be at high pressure and high temperature. Installation, maintenance, or operation can cause injuries if the instructions provided at www.kadant.com/literature are not followed.

When installing, maintaining, or operating rotary joints, approved safety glasses with side shields and safety shoes should be worn to prevent injuries to eyes and feet.

When handling rotary joints that have been in service, gloves should be worn for protection against touching hot surfaces. Gloves also protect against cuts from machined or worn surfaces. Rubber gloves offer protection against contamination from heat transfer fluids.

Fluids (including lubricants) and vapors leaking from or contained in the rotary joint may be hot and harmful to the health of personnel. Do not touch or breathe any escaping fluid or vapor. Follow the available Material Safety Data Sheet recommendations for safe handling and disposal.

Rotary joints should not be operated until the appropriate pressure and temperature interlocks, guards, and other safety devices have been installed to protect the rotary joint, personnel, and the associated pressure equipment.

Before removing, disassembling, or loosening a rotary joint, check to be sure that the pressure has been properly vented from the pressure equipment to which it is attached.

Rotary joints contain mechanical spring forces when they are assembled. When disassembling a rotary joint for installation or maintenance, be sure that these forces are properly contained, following the instructions provided at www.kadant.com/literature.

EQUIPMENT HANDLING
Rotary joints can be very heavy, particularly when there are hoses, sight flow indicators, and other auxiliary equipment attached to them. Be sure that the rotary joint is properly and securely supported before loosing any mounting fittings.

Rotary joints are sealed with carbon or ceramic seal materials. These seals can be broken if the rotary joint is dropped or experiences similar impact forces. If the seal ring is broken, leakage will occur when the unit is placed into service. The seal ring could fail completely, allowing a sudden and uncontrolled release of the contained fluid or vapor.

Rotary joints should be handled with care and stored where they will be not be subjected to impact forces or exposed to weather.

Joints that have undergone questionable impacts should not be placed into service without the inspection by a qualified technician.

EQUIPMENT INSTALLATION
Rotary joints should be installed and maintained according to the installation and maintenance instructions provided at www.kadant.com/literature.

The assembly and disassembly instructions provide step by step installation and maintenance instructions. If there are any questions, consult the Customer Service Representative of the manufacturer.

Rotary joints are connected to the supply and drainage piping through flexible (rubber or metal braided) hoses. If these hoses are not properly installed, leakage may occur either past the hose connections or through the seal faces of the rotary joint.

In most installations, two flexible hoses are required to insure that excessive forces are not applied to the rotary joint through thermal expansion, weight, or equipment movement. Follow the instructions provided at www.kadant.com/literature for proper piping designs and guidelines for installation.

The weight of the external piping (hoses, headers, brackets, and braces) should not be applied to the rotary joint. This weight should be relieved by appropriate supports extending from external framing to these components.

Rotary joints have threaded and flanged fittings that correspond to industry standards. Connecting piping should use fittings of equal or higher ratings.

SAFETY DEVICES
Appropriate temperature and pressure safety devices should protect rotary joints that are installed in vapor and fluid systems.

These devices should be set to prevent the vapor or fluid from exceeding the temperature and pressure limitations of all components in the system, with the limitations being the lowest of any individual component.

When the rotary joint is installed on an operating machine, the installation of the appropriate interlocks, guards, and other safety devices is the responsibility of the user, the equipment installer, or the supplier of the machinery, as determined by the user.

In particular, the user or his contracted system provider, should incorporate safety devices into the system to prevent the pressure from exceeding the maximum allowable pressure indicated on the equipment.

Users are advised to use temperature sensors and associated safety interlocks for those cases in which the foreseen operating temperature will be close to the maximum allowable temperature of the equipment.

ADDITIONAL SAFETY INFORMATION
For information relating to Compliance with PUWER 98, see Kadant Johnson Supplementary Safety Information sheet IS- Supplementary Safety Info. This is available at www.kadant.com/literature.

To view installation and repair instructions in a different language, visit www.kadant.com/literature.