

Rotary Unions for Corrugating or Pulp and Paper Applications

Product Information

Corrugators and pulp and paper manufacturers can reduce downtime, extend maintenance intervals, and enhance productivity with a high-performance lubricant.

Rotary unions—also known as rotary joints, swivels, or couplings—are used to



transfer cooling water, steam, hot oil, or process fluid from a stationary source, such as a supply pipe, into a rotating piece of equipment. Rotary unions often incorporate ball bearings to keep the motion of the rotary union smooth. Seals are typically made from rubber and plastic, and may need to be changed periodically, depending upon the type of material being transferred. Rotary unions are used in single-facer rolls, glue applicator rolls, chill rolls, rewinders, sheeters, paper machine calender stacks, and paper machine dryer cans.

The Challenge

The ball bearings and seals found in rotary unions used in the corrugating and pulp and paper industries are exposed to extreme conditions that can include: steam temperatures ranging from 204–343 °C (400–650 °F); pressures of 100–250 psi; and speeds ranging from 300–700 rpm, to name just a few. The lubricant selected must be able to withstand these extreme operating conditions and be compatible with the metals and elastomers used for the ball bearings and seals.

The Solution

Krytox[™] GPL 227 lubricant provides superior lubricity, stays in place in the presence of steam or water, performs at temperatures up to 288 °C (550 °F)*, and does not react with the chemicals used by corrugators and pulp and paper manufacturers.

Krytox GPL 227 will not carbonize on the ball bearings, nor break down under the pressures and speeds found in rotary unions. In addition, Krytox GPL 227 is compatible with all elastomeric seal materials and all steels, stainless steels, and alloys typically used in rotary unions.

Key Advantages

- Using Krytox™ GPL 227 lubricant, corrugators and pulp and paper manufacturers can improve productivity by reducing breakdowns of rotary unions and extending intervals between re-lubrication.
- Krytox™ GPL 227 grease stays in place in the presence of steam or water, performs at temperatures up to 288 °C (550 °F), and does not react with the chemicals used by corrugators and pulp and paper manufacturers.
- Krytox[™] GPL 227 can also be used for rotary unions used in textile equipment.

*Krytox" GPL 227 performs at continuous operating temperatures up to 288 °C (550 °F); for higher temperatures up to 343 °C (650 °F), Krytox" XHT BDX is recommended.



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