AMPS™ Technology Reduces Leakage and Improves Safety in Paper Mill

Pulp and Paper Industry
Chesterton AMPS™ Technology
Packing Case Study

Challenge

Issue

A paper mill was experiencing leakage problems on a 13" shaft hydro re-pulper, which is used to break down and disperse pulp, waste paper, and other materials into a dilute slurry. To prevent pulp debris buildup, air was continuously blown on the backside of the shaft.

Maintenance personnel had to adjust the packing or repack the equipment a maximum of every three months.

The equipment is hard to access, making packing adjustments difficult and a safety concern. As a result, packing adjustments were neglected which led to further issues.

Top view of the re-pulper "pit" where waste paper is ground by the blades. The lower right image shows the exterior bottom of the tank.

Solution

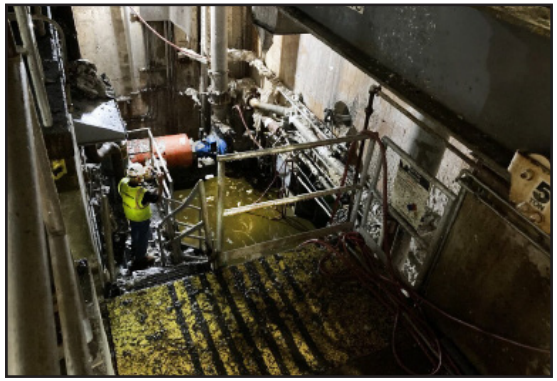
Application

All four bolts were fitted with ***Chesterton® AMPS™*** double cylinder units and pressurized to 30 psi.

A pressure regulator was mounted outside the re-pulper "pit" allowing for easy adjustments without the need to crouch in the oily water and pulp slurry.

Goal

Extend continuous operation in alignment with the plant's 12-month cycle and enhance safety.



Previously, maintenance had to go down into the "pit" to adjust the packing.

Results

Increased Reliability and Improved Safety

After installation and the equipment restart, the ***AMPS technology*** is sealed with minimal leakage.

The packing can be adjusted from outside the "pit," improving safety and allowing for easier adjustments during maintenance checks.

The customer was highly satisfied with the results. With the AMPS units installed, the customer was able to achieve continuous, trouble-free operation for 24 months. They plan to install ***AMPS technology*** on all three re-pulpers.

*Equipment outfitted with **AMPS technology** on all four bolts, with the pressure regulator installed remotely in a safe, accessible location.*

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