



AESSEAL® cools the temperature at Canadian paper mill

The installation of an AESSEAL® SMSS™ single cartridge seal has saved thousands of dollars in repair and replacement costs for a Canadian paper mill.

The company turned to AESSEAL® following the repeated failure of its existing system. The problem was being caused by the seal's failure to deal with the excessively high temperature of the condensate, which was at around 300°F.

AESSEAL® engineers also identified a failed level control switch on the receiver tank that feeds the condensate to the pump. This failed switch allowed the pump to run while there was no condensate to pump, causing both the pump and seal to run dry. Each time this happened, the seal would fail, if it hadn't already failed due to the 300°F temperature of the condensate.

In April 2023 the company replaced its existing system with AESSEAL® SMSS™ seal faces fitted to a modern Flowserve pump. A cooler was also installed, which reduced the temperature of the condensate from 300°F to 103°F, so that it was able to cool and lubricate the seal faces. As of October 2024, the seal has been in operation for 18 months, with the expectation that it will continue to work leak-free for at least five years.

Each pump and seal repair and replacement was costing almost \$10,000 CAD, and since the original system was failing at least every six months, and sometimes more often than that, this upgrade has already saved the company around \$30,000 CAD.



before



after

'Reliability increased from <6 months to >18 months'

Industry:	Pulp & Paper
Product:	SMSS™
Application:	Main Dryer Condensate Return Pump
MTBF Increase:	>200% (and counting)
Savings:	\$30,000 CAD (and counting)
Reference N.O:	TD3112069

