



## Reliability problems solved at mill

A Canadian paper mill was having issues with a series of seal failures, which were compromising the reliability of its Chlorine Dioxide Generator Circulation Pump.

Recurrent failures of the competitor's seal resulted in concentrated or diluted process leakage, which caused corrosion of the pump and its mounting base. In addition, the highly toxic nature of the process fluid was a serious safety hazard and triggered multiple gas alarms and local area evacuations.

The problem was resolved with the installation in 2016 of an AESSEAL® dual cartridge seal and 25L Water Management System. The system supplies pressure-regulated filtered clean water, and during mill water interruptions the seal remains cooled and lubricated by the seal water. Water recirculates through the seal water supply lines instead of going directly to sewer.

The previous MTBF had been less than a year, and often less than six months. Since installation in 2016 the mill has not had a seal failure. The first seal was replaced when a bearing failure was detected, so in fact the seal outlasted the pump. The next seal replacement was early in 2021 due to a pressure regulator failure on the water management system after five years of operation.

The reliability of the AESSEAL® solution has saved the company CAD\$50,000 (US\$39,000) a year in maintenance costs. The water management system also regulates the seal water pressure, and this not only helps extend seal life, but also reduces the risk of corrosive and toxic chlorine dioxide generator solution and gas leaking into the workplace.

## 'More than 400% MTBF Increase'

Industry:	Pulp & Paper
Product:	CDSA™ and SW2™
Application:	ClO <sub>2</sub> Generator Circulation Pump
MTBF Increase:	>400%
Savings:	CAD\$50,000 (US\$39,000)
Reference N.O:	CS0172

