



ENVIRONMENTAL TECHNOLOGY

DMSF™ makes its mark in Japanese paper industry

The installation of an AESSEAL® DMSF™ seal at a Japanese paper plant has increased the MTBF from just six months to seven years.

It replaced a competitor's seal, a back-to-back rotating type seal with a carbon face on the outboard seal, operating with a Plan 54 external water flushing source.

Due to the flushing system design, the pressure of this water source is very unstable, fluctuating between 0.5 MPaG - 2.5 MPaG. This pressure fluctuation was causing the carbon face to crack within six months of seal installation. This was resulting in frequent and costly maintenance and repeated outages, reducing the productivity of the plant.

In 2017, in an attempt to resolve the problem, the competitor's seal was replaced by the AESSEAL® DMSF™ (tandem and stationary seal), with a tungsten carbide outboard seal face. This has had the effect of increasing the seal life to more than seven years as of August 2024. The DMSF™ seal still operates with a Plan 54 external water flush with the same pressure fluctuations, but they have had no negative impact on the tungsten carbide faces.

The strength and reliability of the DMSF™ seal has resulted in a significant reduction in costly seal and pump maintenance, as well as in seal repair and procurement costs. The success of the installation has become widely known in the Japanese paper industry, and is proving a valuable example of the quality of AESSEAL® products, and an important selling point for Torishima-AESSEAL Japan in the local market.



'Reliability increased from 6 months to >7 years'

Industry:	Pulp & Paper
Product:	DMSF™
Application:	Black Liquor Pump
MTBF Increase:	>1300% (and counting)
Reference N.O:	TD3110796



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