



ENVIRONMENTAL TECHNOLOGY

New approach for slurry pumps reduces water usage by 95%

A copper mining company in the central Africa was encountering problems of excessive water usage combined with leakage into the process as a result of the use of unsuitable gland packing.

The process involved the pumping of a combination of sulphuric acid and slurry. In order to keep the packing in serviceable condition, the company was using 42 litres of water per minute, or 22 million litres a year for each of its 24 pumps.

In addition to the costly use of huge volumes of water, leakage from the gland packing was also leading to bearing failures, resulting in periods of downtime.

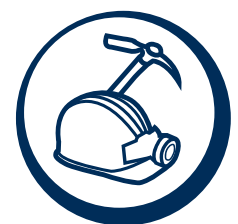
The company turned to AESSEAL® for a solution. The problem was rectified by the installation in January 2022 of two AESSEAL® 180mm FGDSS-N™ single seals. These are using water at a rate of just two litres a minute (as opposed to the previous rate of 42 litres a minute), with no leakage, no bearing failures, and saving over 21 million litres of water each year.

The company was impressed by the speed with which AESSEAL® responded to their request for assistance, and by how effectively the new mechanical seal has been operating. “It’s a huge improvement,” said the plant’s maintenance manager. “We have not had to touch the pumps since the seals were installed.”

The company is now in talks with AESSEAL® about the installation of similar seals on all its 24 pumps which could potentially save more than 500 million litres of water each year!

‘Saving over 21 million litres of water each year’

Industry:	Mining
Product:	FGDSS-N™
Application:	Slurry pump
Savings:	21,024,000 litres of water each year
Reference N.O:	TD3079304



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