



ENVIRONMENTAL TECHNOLOGY

Dual Seal Upgrade saves over 17 million litres of water

A major sugar manufacturer at one of its alcohol manufacturing sites were looking to reduce the amount of water consumed on 19 critical pumps at one of its sites in South Africa.

The pumps used single mechanical seals along with an API Plan 32 seal support system. The pumps were each using an average of 5 litres/minute of flush water and operate typically for 340 days per year. The total water usage for these pumps alone is 46,512,000 litres at a cost of R1,354,429. The customer asked AESSEAL® for assistance.

AESSEAL® recommended replacing the single seals with a dual seal and upgrading the seal support system to API Plan 53A (SW02 Water Management System). The new solution would reduce water consumption to as little as 330ml / month. The first system was installed on a beer circulation pump in December 2019, with a further 7 systems fitted on VAT circulation pumps in January 2020. To date all systems have operated without problems. The cost of the upgrade was repaid in less than 5 months and water consumption has been reduced by more than 17 million litres / year. The site plans to upgrade a further 4 pumps.



‘Reduced water consumption’

Industry:	Food & Beverage
Product:	Dual Seal with Water Management System
Application:	Various
ROI:	Less than 5 months
Water Savings:	17 million litres / year
Reference N.O:	18052021-GJI01



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