



ENVIRONMENTAL TECHNOLOGY

Tailored seal solution cuts costs and operational downtime

A global food and beverage manufacturer produces quality bespoke alcohol for a wide range of leading brand spirits producers. The company's distillery in Poland, was experiencing problems with a fan fume pumping toxic fumes as a by-product of the distilling process.

The fume fan was sealed with a felt cord, which was proving to be inefficient. It allowed harmful fumes to leak into the bearings area even just after start-up, causing damage to the bearings. The 200C temperature of the fan fumes was also proving a serious challenge to the labyrinth seal.

The MTBF was six months, with the fan being taken out of production each time whilst the bearings were replaced - a time-consuming and expensive operation. The cost of replacement felt cord for the seals, new bearings and maintenance fees totalled £3,200 a year, not including the operational losses incurred through interrupted production.

There was insufficient space for AESSEAL to install its standard LabTecta-IAP seal, which is designed specifically for applications where gases, product or exhaust must be retained within an enclosed space. So it tailored the standard seal with an adaptor plate specifically engineered for the fume fan at the distillery.

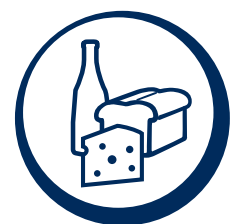
The LabTecta-IAP uses labyrinth technology to direct the air purge inboard instead of outwards, preventing harmful fumes from entering the seal and escaping into the bearing chamber.

This protected the bearings on the fan fume from the damaging high temperature fumes. As a result the MTBF for the bearings increased and they only needed to be replaced as part of scheduled maintenance work 15 months later.

The upgrade achieved significant savings - £1,800 in the first year alone and £2,700 to date. ROI was achieved in just in five months.

'250% increase in MBTF'

Industry:	Food & Beverage
Product:	Alcohol
Application:	Distilling
MTBF Increase:	250%
Savings:	£2,000
Reference N.O:	CH01437



aes seal.com/info