

# Jumbo Seal for the main cooling water pump

#IS2013\_85EN

## The Challenge



In a power plant in Germany, the main cooling pump was sealed with a traditional packing. The water contained a lot of slurries, and the customer replaced the packing each year and the sleeve every 3-5 years. The gland needed retightening once per month. As a result, pump was causing a very high maintenance and cost effort, especially when changing the sleeve.

### Application Details

Equipment	KSB Vertical Pump : Q: 38.000 m <sup>3</sup> /h, 2400 KW		
Media:	River Water	Shaft Diam	240 mm
Pressure	0,7-1,5 bar bar	Speed	1450 RPM

## Why use Chesterton?

- Reduce of maintenance and repair costs
- Overall cost reduction

## The Chesterton Solution



In order to decrease the shutdown time, the Chesterton advised to combine 2 products: A split Mechanical seal - eliminating the need for equipment disassembly during seal installation, and a SpiralTrac environmental controller - to remove solids and improve cooling of the stuffing box. An adapter plate was manufactured to be able to mount the 221 split seal. For this application a fresh water flush is used with an appropriate piping plan# 33H.

## ROI

*Previous costs:*

Replacing the sleeve: 40.000 € per change

*New Solution:*

Cost of 221 Jumbo and SpiralTrac: 26.500 € / piece

**Cost saving at the installation: 13.500 €**

## Chesterton Products used in this solution

Jumbo Seal 221 - SpiralTrac Version D