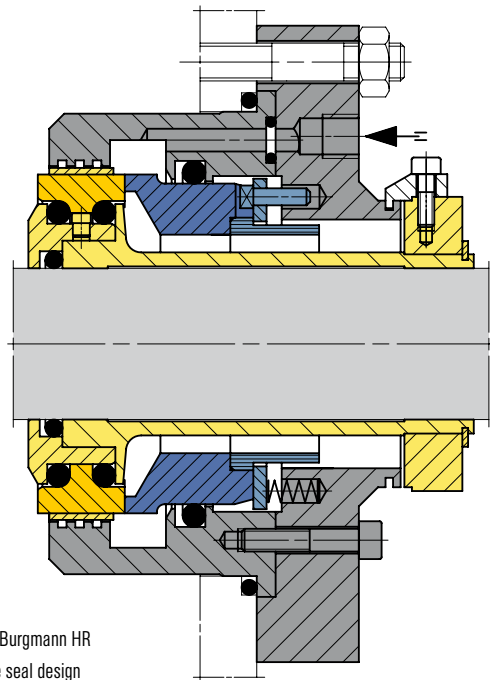
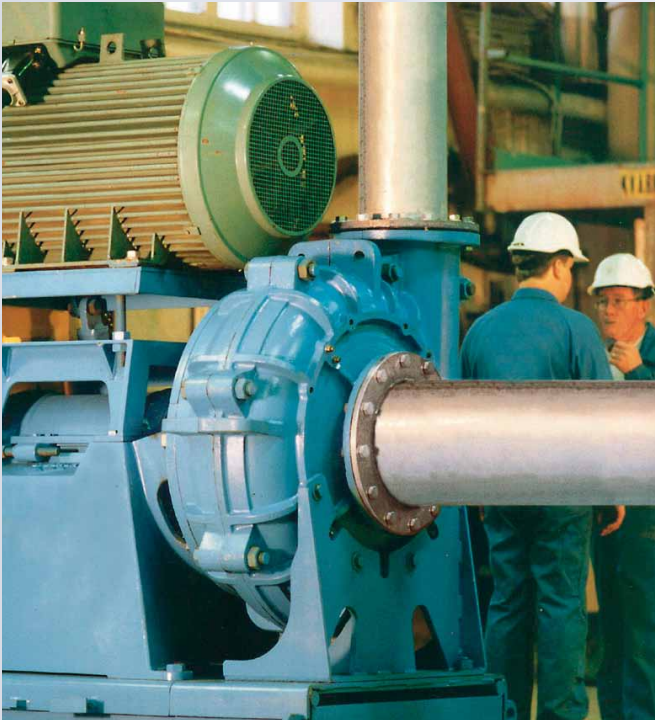


Service life exceeds expectations

EagleBurgmann®
Rely on excellence

HR Mechanical seals for sealing slurry pumps



Queensland Alumina (QAL) is one of the world's largest aluminum oxide producers and meets around 10 % of worldwide needs. Centrifugal slurry pumps of a world-wide reputable pump manufacturer are used in production to pump aggressive media with a high solids content.

The problem

The service life of earlier seals was unacceptable for QAL. The company therefore set the task of developing a single seal with a minimum service life of 6 months. Complicated double seals with buffer system could not be used. The six month

minimum service life was derived from the service life of the pump components in contact with the product up to the first maintenance.

The EagleBurgmann solution

The EagleBurgmann HR proved to be the optimum solution and exceeded expectations concerning service life six-fold. A flushing connection and a throttle with self-cleaning profile integrated into the seal housing were provided to aid lubrication of the sliding surfaces and keep out solids. The very small throttle gap means that purging water consumption can be limited to no more than 2 l/min.

This mode of operation achieved a service life of more than 3 years.

Operating conditions

Medium: Caustic hydrate with solids content >40 %
Relative Density SG = 1.4 ... 1.5 g/cm³
Temperature: t = 70 °C (158 °F)
Pressure: p₁ = 9 bar (131 PSI)
Rotational speed: n = 1,450 min⁻¹
Shaft diameter d_N = 82.5 mm (3.250")
Face materials (seal face and seat):
Silicon carbide (Q1)



EagleBurgmann Germany GmbH & Co KG
Aeussere Sauerlacher Strasse 6-10
D-82515 Wolfratshausen / Germany

Phone +49 8171 23 0
Fax +49 8171 23 1214

info@eagleburgmann.com
www.eagleburgmann.com