





Sealmatic Delivers CTX Mechanical Seal For Caustic Application At J K Paper Ltd

Sealmatic CTX mechanical seals have been performing satisfactorily for caustic application at J K paper Ltd for their Sulzer pump.

In pulp production, wood chips are chemically pulped under the effects of pressure and temperature. The pulp is bleached in a number of stages, using oxidative-based chemicals such as oxygen, hydrogen peroxide, or ozone. Two processes are used here: the sulphate and the sulphite processes. The wood chips are digested in an alkaline sodium salt solution to remove the lignin from the wood. The process is very gentle to the fibers and produces pulp with a very high strength. The waste materials produced during the removal and recovery of chemicals are used in both processes to generate energy and steam.

High plant availability paired with economical operation are important requirements of the end users. This also includes efficient mechanical seals for economical and reliable non-flow operation. Pumps, agitators, chest agitators, pulp digesters, washers and sorters are sealed with mechanical seals of the CTX series.

Performance Capabilities

Sizes: d₁ = Upto 100 mm (Upto 4.000") Other sizes on request Temperature: t=-40 °C ...+220 °C (-40 °F ...+428 °F) (Check O-ring resistance) Sliding face material combination BQ1

Pressure: $p_1 = 25$ bar (363 PSI) Speed = 16 m/s (52 ft/s) Sliding face material combination Q1Q1 or U2Q1

Pressure: p_1 = 20 bar (290 PSI) Speed = 10 m/s (33 ft/s) Barrier fluid circulation system:

 $p_{3max} = 25 \text{ bar } (363 \text{ PSI})$

 Δp (p₃ - p₁) ideal = 2 ... 3 bar (29 ... 44 PSI), 7 bar (102 PSI) for barrier media with poor lubricating properties)

Pump startup:

 $\Delta p \ (p_3 - p_1) max = 25 \ bar \ (363 \ PSI) \ allowed$ Recommended supply medium: max. ISO VG 5 Permissible axial movement: $\pm \ 1.0 \ mm$, d₄ > 75 mm $\pm \ 1.5 \ mm$

API SPEC Q1 - API - ISO 9001:2015 - EU 1935:2004 - ATEX - 2014/34/EU - ISO 9001:2015 - ISO 14001:2015 - BS-OHSAS 18001:2007 - PED-CE

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