

Case Study: Paper mill process pump shaft sealing

Problem

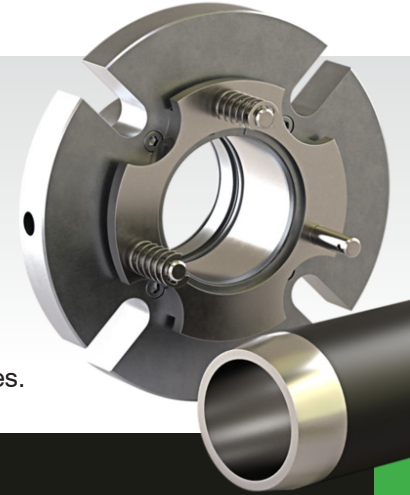
Short seal life cycle

The customer was experiencing a mean time between failure of the mechanical seals of 3 - 6 months. This was resulting in excessive maintenance and downtime, in turn leading to rising costs.

James Walker solution

A KlickFix® cartridge was installed in an effort to prolong the seal life cycle and reduce the costs associated with regular adjustment and replacement.

The KlickFix uses a sequentially deployable sealing lip system and contains five lips. As and when the stored lips need to be utilised, the process can be undertaken in a matter of minutes.



Results and benefits

After over 10 months, the KlickFix® cartridge is still in operation using the first lip. With a further four lips ready to be deployed when required, the cartridge is offering a massive improvement in seal life cycle. The customer has already reported cost savings through reduced downtime and maintenance.

Hugely extended seal life cycle

Application

Paper and pulp mill in Poland, Scanpump BA 250/250-32.

- Shaft diameter: 65 mm (2½")
- Shaft speed: 5 m/s (984 ft/min)
- Discharge pressure: 3.7 bar (37 kPa)
- Media: black liquor



Existing solution

Single mechanical seal



Reduced costs related to regular seal replacement



Improved operational efficiency due to less downtime



Significant reduction in maintenance