

Case Study: Paper mill process pump

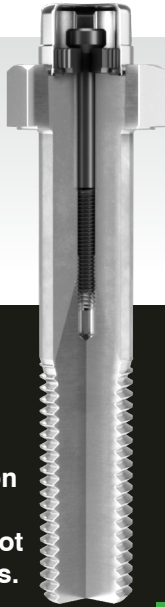
Problem

The customer was experiencing failures of casing cover bolts in service on average every 5-6 weeks. This created a lot of unnecessary downtime and led to rising maintenance and material costs. The root of the problem could be traced back to installation procedures, whereby the bolts on the casing cover were simply torque tightened.

Regular installation and service failure

James Walker solution

Existing bolts were replaced with RotaBolt® RB1 Touch, which accurately measures tension so that it can be correctly achieved, maintained and monitored and ensures that installation is not reliant on torque tightening. A quick and easy tactile check of the bolt load ensures that regular maintenance checks can be made during operation without incurring downtime of the process.



Results and benefits

Since the introduction of RotaBolt® technology, the customer has eliminated the problem of bolts snapping during tightening. This is due to controlling tension during installation and using the RotaCap indicator to determine that the correct tension has been achieved, which ensures that the bolts do not suffer fatigue-fail as a result of vibration and transverse forces.

Bolt failure eliminated

Application

Large paper mill facility in the US.

- Sulzer process pump
- Mixing process creating excessive forces in the pump, transferring to the casing cover bolts



Existing solution

3/4" (M20) - 10UNC stainless steel bolts



Improved operational efficiency due to less downtime



Zero occurrence of installation failure



Reduced lifetime material costs



Significant reduction in maintenance