

Leaking Flange

EPSC flyer June 2017

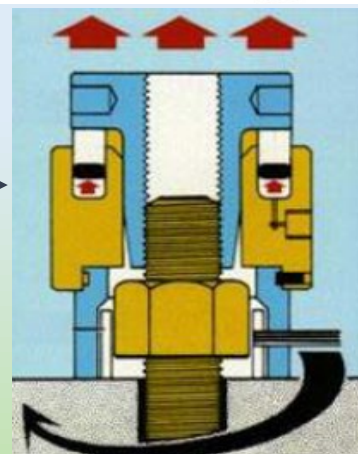
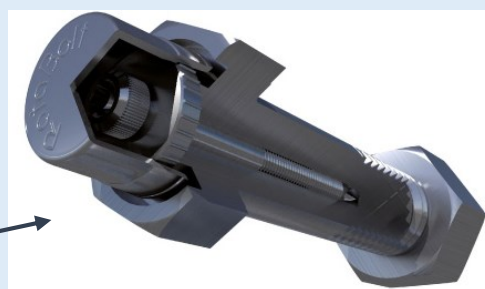


What Happened: In a refinery desulfurization unit a flange leaked hot hydrogen, that took fire. The flames impinged on a reactor that got leak and a large fire started.



Aspects:

- Hydrogen flames are difficult to see in day time
- Bolt tension can change overtime especially at equipment with temperature cycles
- Document the Packing and ideal Bolt Tension for critical flanges
- Use a Torque Wrench, attention for friction!
- Rotaboltstm can measure and adjust bolt tension during use
- Also available Pre-Clamping Cylinders →
- Consider to not insulate critical hot flanges, so leakages can be detected
- Consider a PM or monitor plan



Take Care of Critical Flanges

EPSC flyers are meant to stimulate awareness and discussion on process safety

EPSC can not be hold liaible for the use of this flyer