



AN ENGINEERED DESIGN SOLUTION

Pipe Rotation



Pipe rotation is recognised to be of significant importance when carrying out primary cement jobs. The aim is to agitate the pipe to enhance the cement displacement efficiency, improving mud removal and thereby providing a good cement bond and competent long term isolation.

Key factors which also need to be considered are inadequate centralisation of the pipe and significantly the inclination of the well bore. Mathematical simulations and operator feedback indicate that with 80% or less stand-off, lack of pipe rotation will affect results. On liners showing typically <65% stand-off, pipe rotation becomes essential to achieve good cementation results. It must be understood that in some cases not all liners can be rotated and stand-off will be the primary objective in such cases.

Known problems often faced in the field on high inclination liner operations is that of pipe rotation “stall out” due to excessive torque. This occurs as water wet fluids, spacers and cement fill the annulus and a U-Tube effect is encountered. One solution could be the introduction of fluid additives; the other solution would be to improve pipe centralisation.

The Centek S2 centraliser will aid pipe centralisation and pipe rotation through optimum stand-off. The Centek S2 centraliser is a proven tool with a low friction coefficient and design ensuring minimum rotational torque losses due to the centraliser base material.

Typical Centek S2 pipe rotation benefits being achieved:

- Minimise stall out effect
- Proven reduction in torque
- Increased stand off percentage
- Proven results shown via logs

Liner rotation or reciprocation is a method of trying to improve the cement bond to pipe or formation. Achieving good results is critical. The Centek S2 centraliser allows for these actions to be achieved constantly.

- Low Friction Coefficient
- Minimum Rotational Torque Losses
- Minimise Stall Out Effect
- Enhanced Rotation due to Optimised Centralisation



CENTEK – BRINGING ENGINEERING INNOVATION TO THE INDUSTRY



