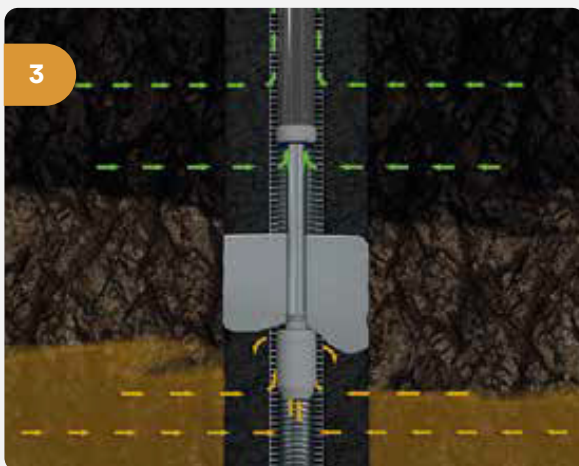
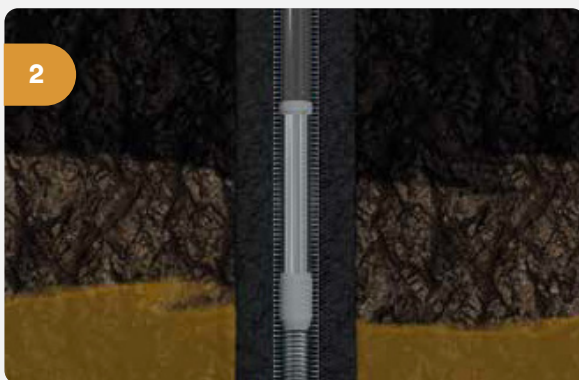
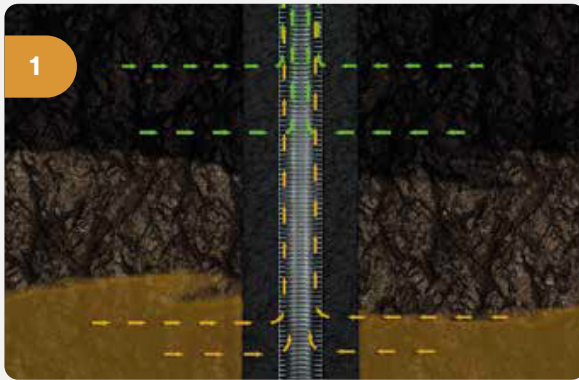


Reduce Unwanted Sand Production

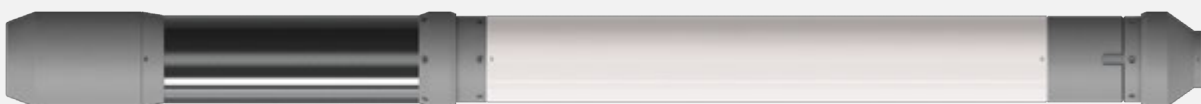


APPLICATION

The Wel-lok™ SCT (Sand Control Tool) has been developed to eliminate unwanted sand production by isolating both inside the completion string and in annulus of an open hole gravel pack completion (OHGP). This can be done without damaging the completion string with perforations or squeezing as is required for traditional methods. Due to its viscosity and density, the liquid alloy will flow through the sandscreen and into the open hole with gravity, completely isolating the sand producing zone.

WEL-LOK™ - AN OVERVIEW OF THE TECHNOLOGY

The Wel-lok™ technology consists of utilising a modified thermite chemical reaction heater to melt bismuth-based alloys downhole. The melted alloys have a viscosity similar to water, and a specific gravity 10 times that of water, allowing them to flow into the smallest areas of a wellbore without the need of any surface pumping equipment. As the alloys cool and solidify, they expand to provide a seamless gas tight seal that is non-corrosive and not affected by H_2S or CO_2 .



Features



WEL-LOK™ SCT FEATURES

- Seals the annulus as well as the wellbore with advanced bismuth technology
- No need to damage the casing with perforations as melted alloy flows through the sand screen
- Molten alloy is gravity fed, eliminating the need to pump or squeeze
- Utilises modified thermite chemical reaction heater to quickly melt bismuth based alloys
- No moving parts means reliable operation
- No maximum run rate
- Easy and quick to deploy in a single trip intervention

KEY BENEFITS OF USING WEL-LOK™SCT FOR ANNULAR SEALING

- Reduced intervention costs
- Reduced sand production
- Extends production life of the well
- Increased oil production
- Non-corrosive and not affected by H₂S or CO₂
- Reduced contingent liabilities
- Reduced environmental impact
- Temperature ranges up to 160°C
- Available in a range of sizes to suit API & non API tubing and casings