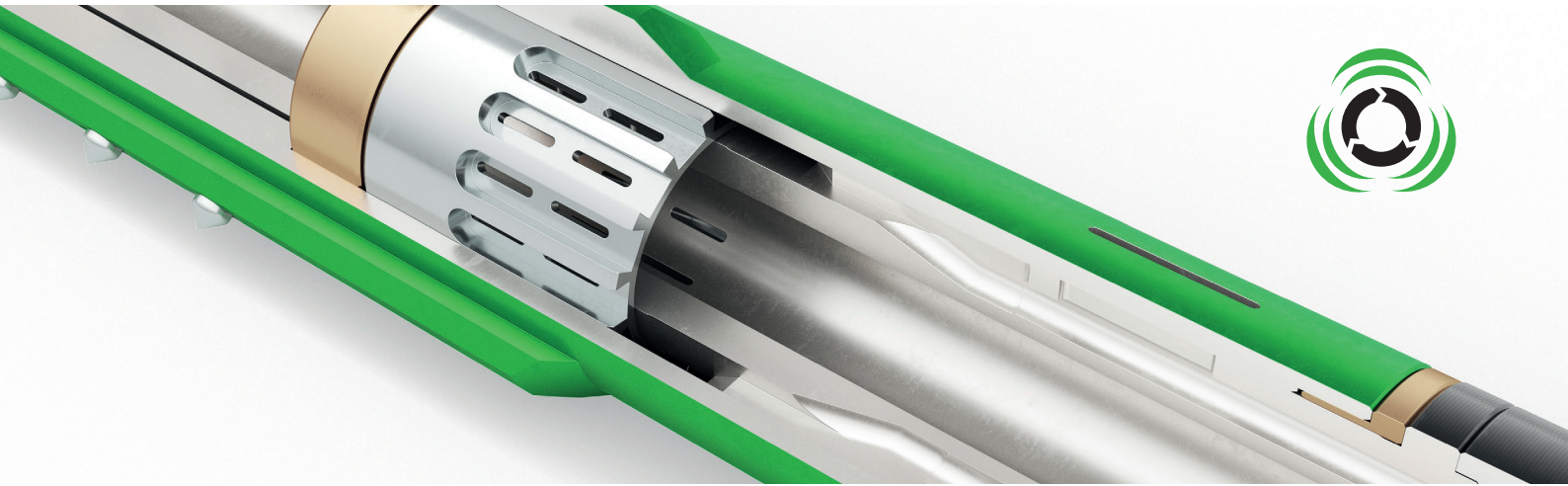


GeoVolve HYPERDRIVE

Super-charging drilling operations



GeoVolve HYPERDRIVE is a percussion-enhanced rotary drilling system expertly engineered to radically enhance the rate of penetration (ROP) and extend bit life whilst drilling in hard, ductile or interbedded rock in geothermal and conventional wells.

Applications

- Geothermal drilling in basement, volcanic or high compressive strength rock
- O&G drilling in hard rock environments
- ERD applications with limited weight on bit

Operating Principle

GeoVolve HYPERDRIVE uses the field proven and trusted INFINITY engine to power a percussion impulse generator. This impulse force is transmitted to the rotary PDC drill bit and in turn into the rock. The percussive impulse force causes the rock structure to fracture and weaken making it easier to drill. This in turn increases the drilling rate of penetration (ROP) and significantly extends the life of the PDC drill bit. GeoVolve HYPERDRIVE is a simple plug-and-play device which connects directly to any BHA configuration. It is very simply powered by the flow of conventional drilling fluid – yet introduces no pressure drop or restriction to flow.

GeoVolve HYPERDRIVE features an uninterrupted through-bore, it requires no complex surface control systems meaning it does not rely on compressed air or complicated cross-flow fluid systems. It operates automatically and autonomously. GeoVolve HYPERDRIVE is designed as a hostile service tool and as such is designed for use without elastomeric seals in ultra-hot well environments – particularly geothermal wells. GeoVolve HYPERDRIVE is unlocking clean geothermal energy, here and now.

Key Features

- Geothermal and conventional well drilling technology
- Huge ROP gains in hard rock
- Incomparable gains in bit life in hard or abrasive rock
- Improves weight transfer to bit
- No elastomeric seals – UHP/UHT
- Reduces WOB requirement
- Compatible with any mud/fluid
- Simple robust construction
- Reduces high frequency vibration
- Simple plug-and-play installation
- No specialist personnel required
- Fast acting
- Minimal pressure drop
- Automatic operation
- Reduces stick-slip dynamic
- Maintains bit contact
- Full bore

Technical Features

