

## Product Information Sheet

The 'modified' Caledus **RotoTEC Friction Reducer**® is a drill-pipe deployed tool designed to eliminate casing wear and reduce Torque and Drag in the drill string. Casing Wear and Torque and Drag problems can occur when the drill string/tool joint comes into contact with the casing during any pipe movement creating a load between the surfaces. High frictional wear can threaten the casing integrity whilst increasing both the torque at surface and drag forces.

**RotoTEC**® eliminates casing wear and reduces Torque and Drag by providing positive drill string/casing stand off.

### New Design Features

- **Wear indicators on Thermoplastic parts**
- **Parts reduced in number by more than 50%**
- **Integral pipe sleeve/rim bearing**

**The RotoTEC**® Tool - Comprises of a rotating outer body called the Protector and an internal Pipe-Sleeve. The Pipe-Sleeve importantly protects the drill pipe from any wear. These parts are constructed from a Thermoplastic, which is highly durable, chemically inert and made from a self-lubricating material with a low coefficient of friction. The superior bearing qualities, allow surfaces to take higher loads, speeds and temperatures. Furthermore the high strength of the Thermoplastic allows for generous fluting, optimising flow by area thus minimising the effects on the ECD. The sleeves are fixed by robust upper and lower retaining clamps. The Pipe-Sleeve, which is unique to RotoTEC® prevents rotating part contact with the drill pipe, negating any wear that may be caused by 'other designs' when abrasive particles are present in the drilling fluid.

**The Clamps** - The clamps are manufactured from a high strength alloy. Embedded in the internal diameter of the clamp, is a non-slip galvanic flow barrier for extra gripping power on the pipe.

**Proven to reduce; Torque** by +/- 35% **Drag** by +/- 27%

**Casing Wear** – significant reduction on metal returns, reported to be circa 60%/day.



## RotoTEC Friction Reducer®

**Caledus UK Ltd** Tel: +44 (0) 1224 659000  
 4 Rubislaw Terrace Fax: +44 (0) 1224 659001  
 Aberdeen  
 AB10 1XE [www.caledus.com](http://www.caledus.com)