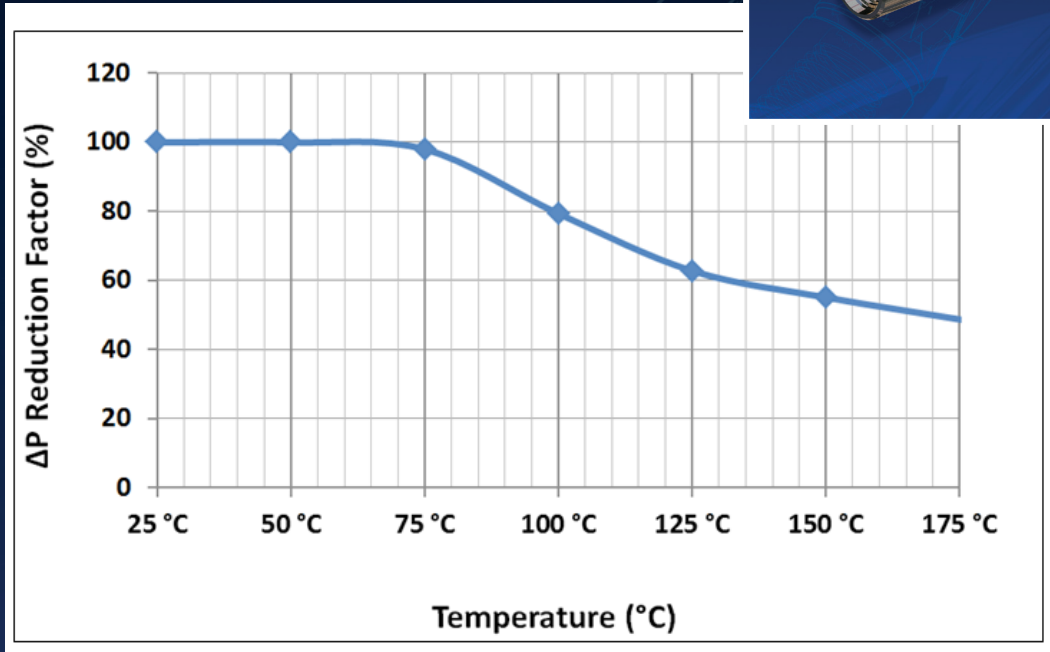


HR Elastomer

Temperature Capability



Temperature Compatibility

- Elastomer properties regardless of manufacturer are degraded by elevated temperatures.
- Power sections can be expected to deliver 50% of its specified performance reliably at 300°F.
- Power section fit should account for circulating temperature, fluid chemical interaction, and most importantly drilling practices. It is important to reduce the load requirements on the motor to achieve optimum life and reliability above 300 °F.
- Curve highlights the percentage of specification sheet performance that can be expected based on circulating temperatures.
- Higher temperatures accelerate the rate of chemical interaction with the drilling fluids and any resulting degradation of elastomer properties. A drilling fluid that degrades the elastomer will result in a greater reduction in Power Section Specifications with rising temperatures.
- To determine an elastomer's compatibility with drilling fluids such as oil based and synthetic drilling fluids, a fluid compatibility test should be conducted. Dyna-Drill can conduct pre or post run fluid compatibility tests to indicate how the drilling fluid can be expected to impact the stator elastomer's properties at a given temperature.

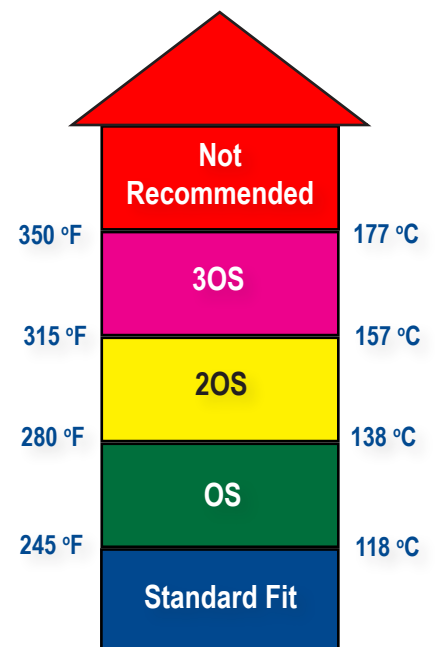


Chart depicts a general guideline for NBR and HR power section fits relative to circulating temperatures.