

Zirconia Mud Pump Liners



Zirconia Liners are ultimate in liner performance and durability. The offshore industry has made the Zirconia Ceramic liner the new industry standard.

A Zirconia Ceramic liner is a proprietary zirconium based matrix that has significantly improved and superior mechanical characteristics. This translates to cost saving, better performance and significantly longer service hours than those of the more commonly used alumina ceramics.

Zirconia liners have three important property advantages compared to alumina ceramic liners.

- Zirconia exhibits superior impact strength
- Zirconia is harder than alumina ceramic
- Zirconia can be honed to finer surface finishes than other ceramics. Finished to 4RMS, this Zirconia liner provides a surface finish that is three to four times finer than other ceramics

All three of these property advantages translate to lower operating costs. This improved wear directly extends the service life of the sleeve, while improved impact strength cuts down on the significant cost of replacing cracked liners in the field. Additionally, the improved and finer surface finish means less friction with the pump pistons, which in turn reduces heat and improves piston life.

FEATURES AND BENEFITS

- HP design – prevents sleeve slippage
- Reduced liner and piston wear
- Increased impact characteristics
- Higher Thermal ratings
- Tighter I.D. tolerances: $+ .10 / - .000$
- Surface finish: 4-8RMS
- Hardness = HV 0.3 KG/MM – 1100/1200 (92- 94RC)
- Good heat dissipation in Hi-Temperature applications

