MECHANICAL SEALS

A mechanical seals by definition is a device which helps join systems or mechanisms together by preventing leakage. A good mechanical seal will eliminate any leakage to atmosphere of the fluid being pumped and the entrance of air while the pump case is under a vacuum. For those reasons the mechanical seal is a very important component. The seal consists of one rotating portion and a stationary portion. Both pieces contain a sealing face. The mechanical seal is located on the engine crankshaft between the impeller and the rear pump casing.

While the pump is not running the spring on the mechanical seal act to apply pressure to the sealing faces. Once the pump is running additional water pressure also acts with the spring to keep the sealing faces closed.

The mechanical seal is to be considered a wear component as it is subjected to the contaminants that run thru the pump. The seal should be inspected periodically for signs of wear. Cooling of the seal is provided thru cool water flow thru the pump. The pump should never be operated without water in the casing.

INSTALLATION TIPS

1. Do not lubricate the sealing faces or the outer rubber sealing surface.
2. Clean off the surfaces where the outer portion of the stationary seal seats into the pump case.
3. Make sure the stationary portion is installed into the casing square and is not crooked.
4. Always replace the complete mechanical seal.
5. Do not touch the sealing faces (possible contamination).
Technical Information

Shim

Collar

Carbon Seal

Ceramic Seal

INSTALLED