

FHDS

Flex-A-Seal Heavy Duty Slurry Seal

The FHDS series is a heavy duty stationary multi-spring single cartridge seal design for the industry's most challenging slurry applications; including mining, mineral and ore processing, and flue gas desulphurization. The FHDS is available in single or double cartridge seal arrangements and can be custom engineered to fit your specific piece of equipment without modification! Flex-A-Seal's unique design allows for increased seal reliability, flushless operation if required, lower operating costs, and an economical two piece construction when exotic metallurgies are required. We encourage you to contact us to learn more about this product!

Applications

- Copper Mining
- Nickel Mining
- Phosphate Mining
- Coal Mining
- Aluminum Bauxite
- Tar Sands
- Flue Gas Desulphurization (FGD)

Typical Pump Manufacturers

- Weir Mineral Group Warman Pump
- ITT Goulds
- KSB GIW
- Toyo Pumps
- Metso
- Flowserve Worthington



Materials of Construction:

Rotary Face: Sintered Silicon Carbide

Stationary Face: Homogenous structure of graphite in Sintered Silicon Carbide Matrix

- Superior corrosive and abrasion resistance face material. It is extremely hard and has the lowest coefficient of friction with the highest PV rating of any hard face combination
- Option: Nickel Bound Tungsten Carbide

Elastomers: Aflas®, Viton®, EPR®, Kalrez®

Wetted Metal Parts: Duplex Stainless Steel (Alloy 255)

- Hastelloy C276 and other alloys available

Non-Wetted Metal Parts: 316 Stainless Steel

Springs: Hastelloy C276

Dual or Tandem Design Options are available

FHDS

Two Piece Gland Construction most economical design which allows for the use of more abrasive and corrosive resistant material on the wetted side of the pump.

- One piece option is available with 316 Stainless Steel

Heavy Duty Metal Shrouded faces provides for maximum protection from abrasives.

- Provides uniform 360 transfer of torque to the rotating face.ue conditions during start up.
- Strong Uniform shapes of faces have no inherent high stress risers due to drive notches or holes needed for pin drive systems.

Gland Options:

- Plain no connection
- Flush or clean out connection
- Quench connections with Glass Filled Teflon Bushing
- Quench connections with Lip Seal

Large Cross Section Dynamic O Ring slides on smooth clean stationary seal ring.

- Eliminates shaft or sleeve fretting.

Hydraulically Balanced Seal Faces

- Lowers face heat generation over a wider range of pressures.

Flushless Operation

- Faces are located in open area for optimum heat dissipation.

Simple Rugged Heavy Duty Cartridge Seal Design which can be mounted either on the dry or wet end of a pump.

- Easy to assemble.
- Impeller adjustment can be made without removing the seal.

Heavy Duty Multi Springs located outside of the product with Spring Protection Sleeve.

- Effective means of preventing the slurry from clogging the springs and causing the seal to hang up.

Hardened Steel or Corrosion Resistant Set Screw Sleeve locking mechanism.

- If the shaft is hardened, a collet clamping option is available.

US Patented Plunger Lock Drive is located out of the product and sealed in a clean environment.

- Eliminates sleeve deformation due to set screws.
- Will not back out due to vibration or pressure changes due to the unique spring loaded mechanism keeping the lug trapped in position.
- Sleeve is non-wetted, located outside of product so a more economical 316 stainless steel material can be used.

Heavy Duty Construction

- Large open radial clearances to prevent clogging.

Stationary Design

- Insures better face tracking and alignment.
- Springs do not have to flex with every revolution.

