

MECHANICAL SEAL

After many years of application experience, the design and face material that has proven to be the most durable is the dual inside mechanical seal with silicon carbide faces.

DUAL INSIDE MECHANICAL SEAL FEATURES

The spring mechanism **1** seal bellows **2** and all seal faces **3**, **4**, **5** and **6**, are located inside the oil chamber **7** (clean, non corrosive, abrasion free and lubricating environment). Seal faces are lubricated solely by the oil, thus eliminating the following issues common for seals located in the pumpage:

- 1. Spring failure causing the seal faces not to close properly, due to corrosion, abrasion or fouling.
- 2. Loss of cooling to the bottom seal faces during run dry conditions, causing bottom seal failure.

SILICON CARBIDE SEAL FACE FEATURES

- 1. Silicon Carbide's high, uniform hardness and high density makes it an extremely abrasion resistant. material that outperforms other seal face materials.
- 2. High thermal conductivity, high tensile strength and low thermal expansion, makes it highly resistant to thermal shock.
- 3. Does not heat check, like tungsten carbide.
- 4. High corrosion resistance & PH range.
- 5. Low coefficient of friction.



PLEASE NOTE: The seal seats **3** and **6**, and are in direct contact with the cast iron oil chamber. This allows heat transfer directly to the casing and thereby utilizing the whole pump as a heat sink.

