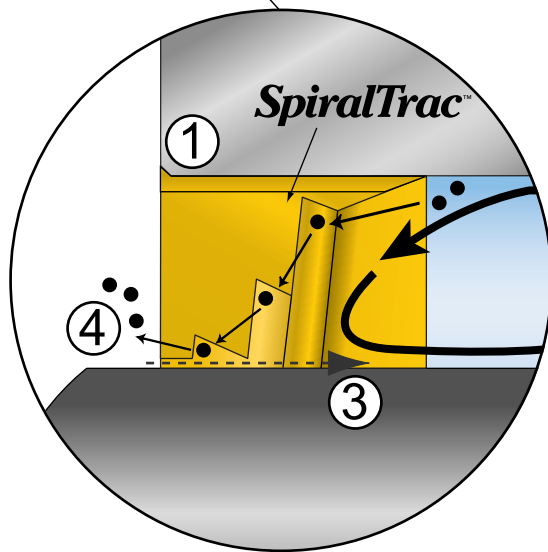
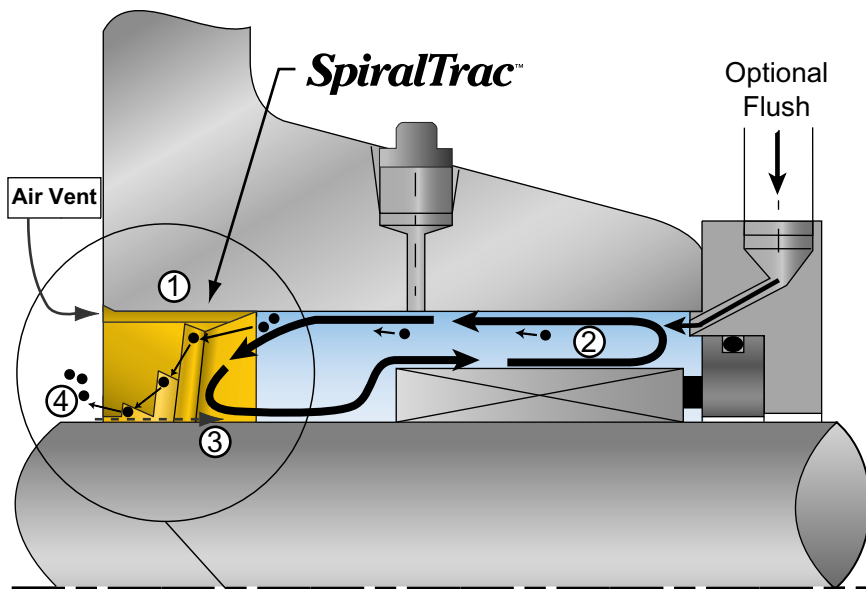


SpiralTrac™ D

How Version D Works in Fibrous Applications

SpiralTrac™ Version D, Type I Installed in a Seal Cavity



- ① **Air**
Vented from cavity when pump is stationary
(Eliminates crystallization, coking, overheating due to air)
- ② **Circulation**
Driven around seal
(Excellent face cooling)
- ③ **Exchange**
In and out of cavity
(Heat removed from cavity)
- ④ **Particulate**
Immediately removed from cavity through the exit groove, flush or no flush

Total Environmental Control (Reduced or No Flush)*

* Elimination of flush is dependent on the type of application. Please contact EnviroSeal to determine your application's suitability for total flush elimination.

During operation, *SpiralTrac* converts some of the rotating flow in the seal cavity into a strong axial flow component. This axial flow is driven along the seal cavity bore in the direction from the gland toward the throat. Since contaminants are centrifuged to the bore during pump operation, the axial flow sweeps them in the direction of *SpiralTrac*, then along a shallow angled lead in ramp, increasing velocity and therefore centrifugal force on the abrasives.

With *SpiralTrac* Version D, there are two spirals cut into the front face. The collection groove leads directly into the spiral that leads to the exit groove at the shaft. The second spiral ends at the shaft, and is only used to create the pumping action necessary to drive the axial flows in the chamber.

The main spiral joins the exit groove with very little decrease in cross-section. This avoids plugging by fibrous contaminants. The exit groove passes through an extended interior section and is designed to capture incoming particulate, cleaning the flow returning through the clearance to the shaft. *SpiralTrac D* performs these functions with or without flush. Flush is only required for face cooling if the pumpage is aerated or the pump is run dry.