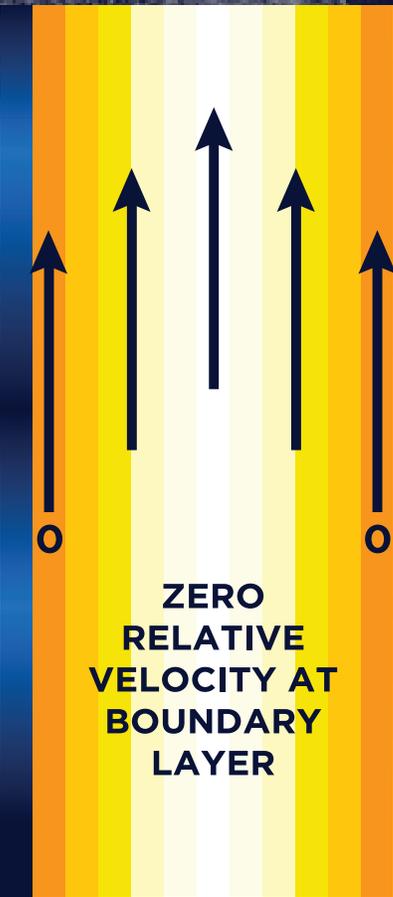


The **non-impingement** and **laminar flow** pumping of the Disc pump is similar to flow through an ordinary pipe. The layers of fluid at the walls are stationary (relative to the rotating discs), creating a protective boundary layer. Viscous drag pulls layers into flows of smooth laminar streams.



### NO CLOSE TOLERANCES

The Disc pump is not a centrifugal pump, positive displacement, gear or lobe pump. Unique in design, the Disc pump bridges the performance gaps of conventional pumps and is capable of out-performing all of them in many applications.

**Runs Dry Indefinitely** Provided seal must be protected because there is no direct metal-to-metal contact in the pump. The seal must be protected under these conditions

**Deadheading Discharge or Starving the Suction** It is possible to deadhead the discharge and/or starve the suction for extended periods of time at normal operating speeds, without damaging the pump. Seal flushing must continue under these conditions

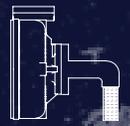
**Open design** prevents clogging, so pump can handle large or stringy solids, as well as fluids with varying solids content, size or viscosity

**Low maintenance/minimal spare parts** Disc pumps suffer little-to-no wear even in severely abrasive service due to their non-impingement operation and laminar flow. Less than 5% of Discflo's business comes from spare part purchases

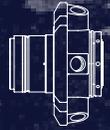
**Higher yields and improved Quality** When pumping delicate and shear sensitive (e.g. dilatant or thixotropic) products, disc pumps can increase productivity and reduce product losses due to the non-contact pumping mechanism and laminar flow

**Hydraulic flow capacities:** 1-8000 GPM  
**Discpac diameters:** 1.75"- 24"  
**Operating temperatures:** Up to 1000°F  
**Solids size (max):** 8"

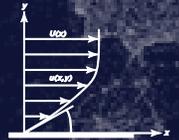
**Differential pressures:** Up to 433 psi  
**Working pressures:** Up to 2500 psi  
**Viscosities:** Up to 70,000 + cP  
**Pump speeds:** 3600 + rpm



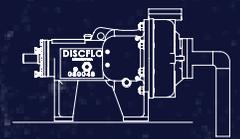
**NO PULSATION**



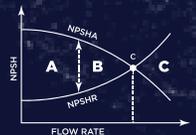
**LONGER SEAL LIFE**



**LAMINAR FLOW**



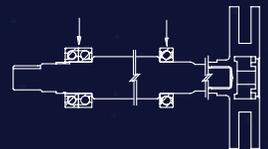
**HIGH SUCTION  
LIFE CAPABILITY**



**VERY LOW NPSH**



**EXCELLENT  
MEAN TIME TO  
REPAIR (MTTR)**



**NO RADIAL LOAD**



**EXCELLENT MEAN  
TIME BETWEEN  
FAILURE (MTBF)**

**HARNESSING THE POWER  
OF BOUNDARY LAYER VISCOUS DRAG**