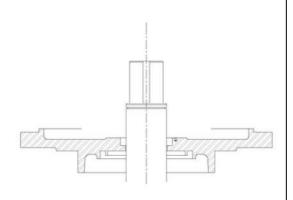
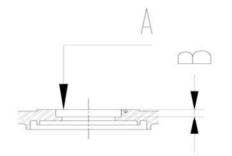
# VULCAN PUMPS SUPER SLURRY SEAL INSTALLATION

**1.0 SCOPE:** The purpose of this Engineering Standard Document is to define the procedure to be followed in the installation or retro-fitting of a "Super Slurry Seal" mechanical seal assembly.

#### 2.0 METHOD:





### 2.1 - Motor Preparation

#### 2.1.1 - **New Motors**

Position the motor on a suitable stand with the drive shaft up and vertical. Start by removing the OEM John Crane seal rotating assembly.

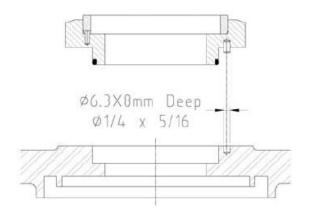
Remove the motor mounting flange from the motor housing. Remove the stationary seal face and rubber mounting from the seal face socket.

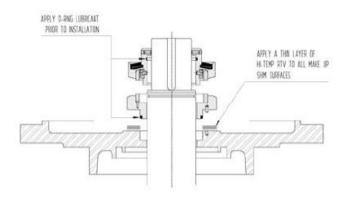
#### 2.1.2 - Rebuilt Motors and Retrofits

Position the motor on a suitable stand with the drive shaft up and vertical. Start by removing the OEM John Crane seal rotating assembly.

Remove the motor mounting flange from the motor housing. Remove the stationary seal face and rubber mounting from the seal face socket.

Clean up the seal mounting surfaces **A** and **B** by removing any burrs or sharp edges that may cut o-rings during installation.





## 2.2- Anti Rotation Pin Hole

Spot and drill an anti-rotation pin hole to match anti rotation pin in the stationary seal flange.

Standard pin hole diameter is  $6.3 \text{mm} \times 8 \text{ mm}$  deep ( $1/4\text{"} \times 5/16\text{"}$ ). Verify pin diameter and depth before drilling and adjust as necessary. Remove any burrs from the pin hole.

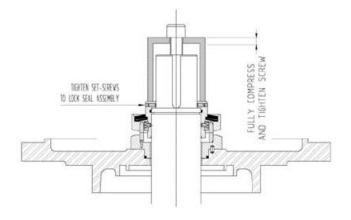
Insert the stationary flange into the socket to verify proper fit and location of the pin hole.

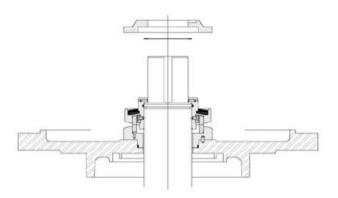
## 2.3- Final Seal Assembly

Verify all parts for cleanliness before assembly. Install the stationary seal flange and apply a liberal amount of o-ring lubricant. Apply a thin coat of Hi-Temp RTV to the motor flange mounting surface and position the stationary seal flange into the top of the mounting bore.

Push the assembly home until the stationary seal flange is seated flush with the motor mounting surface.

Wipe the stationary seal face clean with an alcohol wipe. Clean the rotating seal face with an alcohol wipe and seat it on top of the stationary assembly.





# 2.3- Final Seal Assembly cont'd.

Install the compression sleeve and screw into the shaft end. Make sure everything is seated properly and slowly tighten the screw to fully compress the rotating assembly. Compress the assembly until the rotating assembly bottoms out on shaft step up.

Tighten the set screws located around the rotating assembly to lock seal into place.

After tightening set screws, apply a small amount of RTV to set screw heads.

Remove the compression sleeve. Install the impeller deflector gasket and impeller deflector. The installation is now complete.