

## Pre-Installation:

Before you can install your DURA-SHIELD Seal you must examine the sides of the seal, and locate the two openings. The 1/8" NPT is the connection port for the air or grease purge supply. The ½" NPT plug is the screw driver access port for the driving and sealing thermoplastic rubber elastomer; once this plug is removed, the clamp which can be viewed internally in the DURA-SHIELD Seal can be adjusted to get the proper grip to the shaft.

Depending on the type of DURA-SHIELD Shaft Seal you have purchased, removal of the trough end bearing may be necessary. Please don't forget to remove existing seal entirely. Now you can inspect your shaft- If the shaft is badly worn or undercut by more than 1/16" replace or repair it.

## Installation Procedure: (Non-Split Type) with Standard Elastomer & Ring Configuration.

To ensure the proper installation of your DURA-SHIELD Seal, it can be very helpful to mount the seal on a mandrel equal to the shaft size or if the space permits, directly to the shaft. Tighten the clamp gradually, until the seal firmly grips the shaft equally around the diameter, and will not slide when heavy force is applied.

At this point, relax the clamp three full 360 degree turns. The seal is now ready for final installation.

Apply an approved sealant for your process to the inboard side of the seal housing, You can use a com<u>pressible</u> gasket between the seal and the trough end. Do not exceed 1/8" gasket material thickness. Exceeding thickness could result in bending the housing when tightening. Now slide the seal into position on the through end. The seals are designed to slide smoothly onto the shaft. If necessary: lubricate the contact area with clean water or a <u>very light</u> soap and water solution only. Never use any other lubricant.

Bolt or nut the seal firmly to the trough end and wipe away any sealant that squeezed out from the sides of seal to keep your installation clean. If a four bolt flange bearing is used, the seal should be placed between the trough end and the bearing. Be careful not to bend, compress or distort the seal housing. This will lead to premature wear and increase load on equipment. SD Series DURA-SHIELD Shaft Seals 2.00" in shaft Dia. and over now come standard with our Compression Limiting Sleeves. When seal is seated use a straightedge across the outboard face of the seal housing to ensure that housing is flat. If necessary, shim behind the seal until the housing is flat and no longer distorted. At this point, also check that seal is square with the shaft. Keep run out to less than 1/16".

Once the seal is fully mounted, rotate the shaft by jogging the machine until the head of the hose clamp aligns with the access port on the side of the seal. Use a flat head screw driver and tighten the hose clamp three full 360 degree turns. Replace the access plug.

Attach your purge medium (clean air or an inert gas, like nitrogen) to a low pressure adjustable air regulator / filter (Available Directly through AGD Products, Inc.) and then connect to the 1/8" NPT purge supply. Set final purge pressure 3-5 psi. above the product pressure. You should detect air leakage at the I.D. of the stainless face plates, all the way around the seal. (Note: A Good Starting Pressure is about 10-15psi.)

At this time you can run the seal on your equipment. If time permits run approximately 1 hour before loading machine with product to ensure proper working order. If seal seems to be in good working order after trial operation add materials to equipment and watch closely for first day of operation. Please Note: Periodically you will need to adjust the torque of the hose clamp on the elastomer. Never adjust the hose clamp beyond finger tight with an additional 1/4 turn. Schedule maintenance operation to do this once monthly. (Please ask about our maintenance free internal ring designs if periodic maintence is difficult after seal has been installed.)

AGD offers support on installation and all trouble shooting topics. Our team of engineers are here to help! e-mail: support@agdproducts.com or call 1-877-243-7325. We also offer support products to aid in installation. Please contact your AGD rep for more details and pricing