

# SCP MASTER SEAL SCREW CONVEYOR SHAFT SEAL

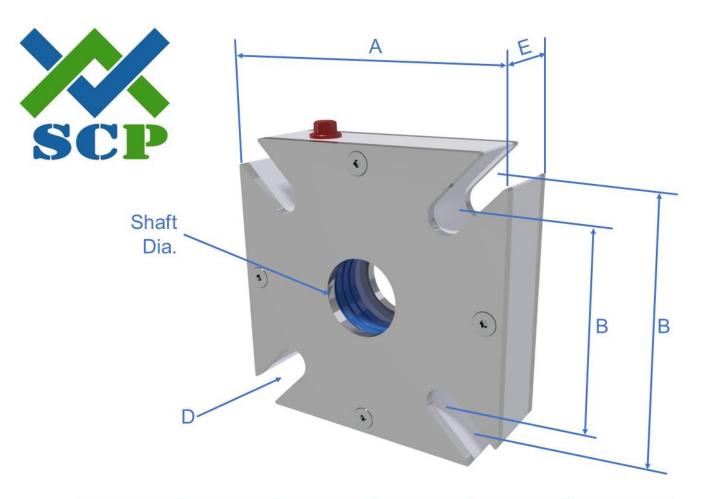
### SCP MASTER SEAL DESCRIPTION

Screw Conveyor Shaft Seal, SCP Master Seal, Stainless Steel (316SS) Cover Plates, UHMW Body, Teflon Rotor Cups, Silicon Elastomer.

## ADVANTAGES OF THE SCP MASTER SEAL:

- This is a fully mechanical screw conveyor shaft seal with Teflon rotors cups sealing against 316SS face plates. This sealing mechanism eliminates the traditional Teflon rope against the conveyor shaft leading to premature seal and shaft failure.
- 2. Optional air purge keeps the sealing surfaces clean of contaminants and increases screw conveyor shaft seal life, even in the most abrasive products such as sand, coal dust, minerals and metal recyclables.
- This mechanical screw conveyor shaft seal takes the place of traditional waste pack and plate seals meaning a superb sealing option is available without the need for costly upgrades to existing and new-build screw conveyors.
- 4. With a housing made of 316 Stainless Steel and UHMW, this seal is well suited for any environment and will usually outlast the conveyor it is attached to.
- 5. This seal is completely rebuildable without needing to be removed from the shaft. Over time abrasive products can take their toll on any seal so easy to install rebuild kits are available and can be installed in as little as 30m.

6. Affordability – For a few hundred bucs over the cost of a waste pack seal, these seals will pay for them selves over and over.



Shaft Dia.	A (SQ.)	B – Min (SQ.)	B – Max (SQ.)	D (Bolts)	Е
1 1/2"	5 3/8"	4"	4 1/8"	1/2"	1 5/8"
2"	6 1/2"	4 3/8"	5 1/8"	5/8"	1 5/8"
2 7/16"	7 3/8"	5 3/8"	5 5/8"	5/8"	1 5/8"
3"	7 3/4"	6"	6"	3/4"	1 5/8"
3 7/16"	9 1/4"	6 3/4"	7"	3/4"	1 5/8"

Dimensionally the same as a std Waste Pack Seal

### **Screw Conveyor Parts, LLC**

PO Box 470187, Fort Worth, TX 76147

(682) 231-1225 <u>GetHelp@ScrewConveyorParts.Com</u>

www.ScrewConveyorParts.com

### INSTALLATION INSTRUCTIONS

- 1. The Seal is shipped in its final assembled configuration.
- 2. Loosen spring tension ring two 360\* turns via the adjustment port.
- 3. Slide seal along shaft and position seal at vessel end wall. If resistance is present, lubricate with dissipating solution, (eg) soapy water.
- 4. Test perpendicularity with square, seal must be square to the shaft within 1/16".
- 5. Secure seal with mounting bolts using torque wrench at 20-25 foot pounds of torque. <u>DO NOT OVER TIGHTEN.</u>
- 6. Once seal is secured in position, retighten spring tension ring the two 360\* turns, or three finger tight. <u>DO NOT OVER TIGHTEN.</u>
- 7. Install air purge gauge at either of the two ports, set the purge pressure at 5-10 psi above any internal vessel pressure. Purge should be detectable at the lip of the 316SS mounting plate, if no purge detected, increase the purge pressure or loosen the spring tension ring, at ½ turn increments. Use clean dry air, or silicone based grease.
- 8. If any product leakage is detected, adjust the spring tension ring, at ¼ turn increments, or increase air purge.
- 9. Test Seal for any heat at the outboard endplate, if heat is present loosen spring tension ring and check perpendicularity of seal to shaft.

Routine checks of seal is suggested, as the rotor assembly will seat itself upon operation. This will be evidenced by a slight flaking of the Teflon rotor cup. The spring tension ring should be adjusted at ¼ turn increments. This will compress the silicone elastomer slightly causing it to spread laterally, maintaining correct pressure / tension between the stationary and rotating faces.