



## 7850<sub>Model</sub> Stainless Steel Sanitary Seal



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 [See How CinchSeal Works](#)

## About the Seal

The maintenance free 7850 model for screw conveyors and other bulk handling equipment is made out of 316 Stainless Steel to handle dry and slurry products in the food service, pharmaceutical and chemical industries where stainless steel is a requirement.

- Designed for C.E.M.A. screw conveyor and bulk handling equipment
- Consumes 30% less power than rope packing
- Temperature ranges -50F to 400F
- Bolting pattern will accommodate flange mounted bearings
- Manufactured out of 316 stainless steel to handle caustic wash downs
- Designed to handle linear shaft growth, and 1/4" total radial shaft runout
- Purge with air, 5 to 8 psi above vessel pressure, or silicone grease
- Zero maintenance due to unique self adjusting design

### Our Certifications



# How the 7850 Works

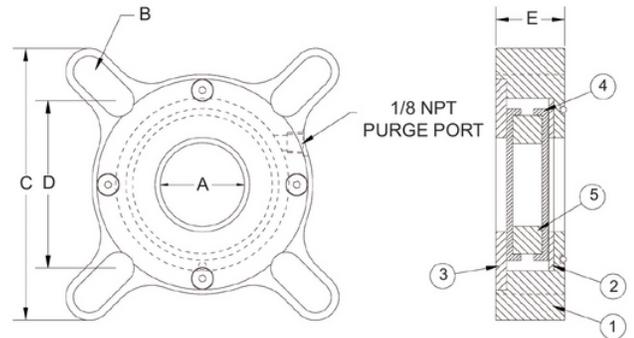
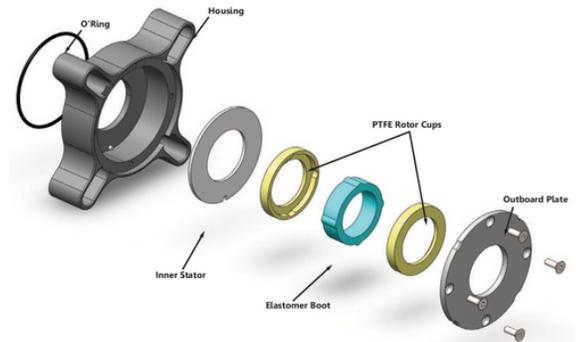
The key component in the 7850 solid seal is the elastomer which is molded out of a special silicon material that can handle high temperatures. The elastomer is molded slightly smaller than the shaft size so that an interference fit is achieved. It is the interference fit of the elastomer and shaft that not only seals the shaft so product can't migrate past and leak out, but it also causes the internal seal parts to turn with the shaft so that damage to the shaft is eliminated. As the elastomer turns with the shaft it drives a pair of PTFE mineral filled rotor cups against two stationary faces to form the primary seal. The fact that CinchSeal turns with the shaft is what makes it unique and superior to rope packing and lip seals that are stationary and have the shaft turning through them which lead to scored shafts.

As the shaft turns, the elastomer drives two PTFE rotor cups that are being compressed with the optimum face pressure against a stationary face. It is the face pressure between the rotating faces and the stationary faces that stops material from leaking by. The PTFE rotor cups are the softer and sacrificial part of the seal, and are designed to wear and be replaced. Inexpensive rebuild kits, which consist of a new elastomer and two new PTFE rotor cups, can be installed in minutes.

CinchSeal is an air purged seal that performs best when purged with 5 to 8 PSI of air over vessel pressure. The air purge improves seal life by accomplishing 3 things: it creates a higher pressure inside the seal which creates a natural air barrier that helps keep material out of the seal. Keeps the rotating faces cooler, and it adds to the closing force on the seal faces so product can't leak by.

The 7850 seal meets all C.E.M.A. dimensions and is easy to bolt up in place of waste packs, plate seals, and packing glands.

# 7850 Assembly



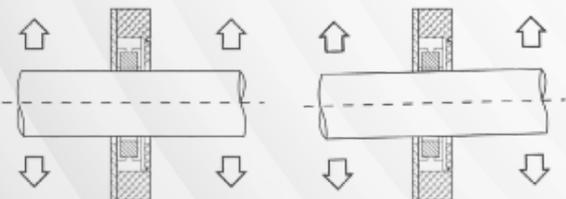
1. Housing - O'ring at Inboard
2. Inner Stator
3. Outboard Plate
4. Rotor Cup
5. Elastomer Boot - FDA Approved

## DIMENSIONAL CHART

A	B	C	D min	D max	E
1.5	.625	5.375	3.30	4.375	1.640
2.0	.750	6.50	4.00	5.386	1.640
2.437	.750	7.375	4.50	6.26	1.640
3.0	.880	7.875	5.50	6.677	1.640
3.437	.880	9.25	6.76	8.052	1.640

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## Self Adjusting Alignment



The CinchSeal module readily accommodates a reasonable amount of shaft vibration, misalignment or wobble. The rotor cup "floats" against the face of the stator plate so any lateral shaft movement produces nothing more than a slight orbital eccentricity.

## Accessories Available

- Seal Repair Kits (Replaceable Internal Components)
- Air Pressure Regulators
- Automatic Greaser



## 7850 Seal Installation

If you have any questions before you begin your installation please call 1-856-662-5162 Shaft should be totally clean of any wear, dirt, oils or grease before installing the seal. Carefully remove seal from shaft.

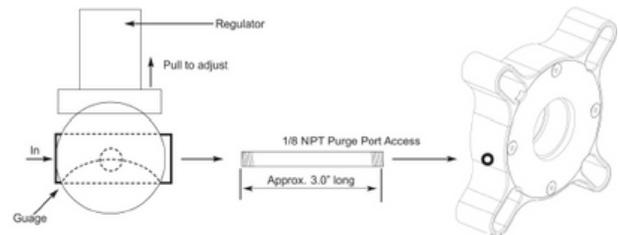
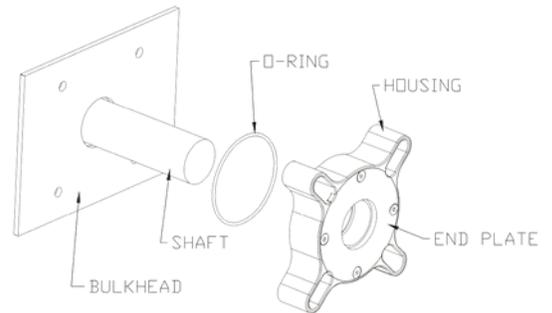
\*Use mild soapy water for lubrication or P-80 Rubber Lubricant Emulsion.

### Contact Us

### Watch Our Seal Installation Video

#### Installing the 7850 Seal

1. The shaft should be totally clean of any wear, dirt, oils or grease before installing the seal.
2. Be sure O-ring is seated properly on inboard of seal.
3. Orient seal with O-ring facing the bulkhead and then carefully slip housing over the shaft and seat it flush against the bulkhead of equipment. Use soapy water or P-80 Rubber Lubricant as needed.
4. Check for equal spacing around the shaft and ID of the seal. Adjust as needed and then tighten mounting hardware to recommended torque setting of 18 ft. lbs. Air Purge seal prior to operation.



#### Air Purge Instructions

1. Mount Regulator to seal using appropriate fitting for gauge.
  2. Assemble gauge as desired. Airflow to be set 5 to 8 PSI about vessel pressure. Each seal should have its own dedicated airline. Sharing a single airline between multiple seals is not permitted.
  3. Pull knob and adjust airflow, then press knob to lock regulator.
- \*\*\*Maximum operating temperature of the seal to be less than 400F. Seal housing should be secured to the vessel wall using bolts/nuts and appropriate torques.

## 7850 Repair Kit Installation

### Watch Our Internal Component Replacement Video

#### Replacing Internal components for 7850 Seal

1. Remove cover plate and take out all internal parts
2. Clean housing and shaft
3. Align notch in new round PTFE stator to pin in housing
4. Place boot between 2 metal rotor cups and place in housing
5. Install square PTFE stator plate
6. Assemble endplate to housing using screws
7. Insert new o-ring in housing groove
8. Install rebuilt seal on to shaft

