



## Installation of John Crane Type 7700 Mechanical Seal

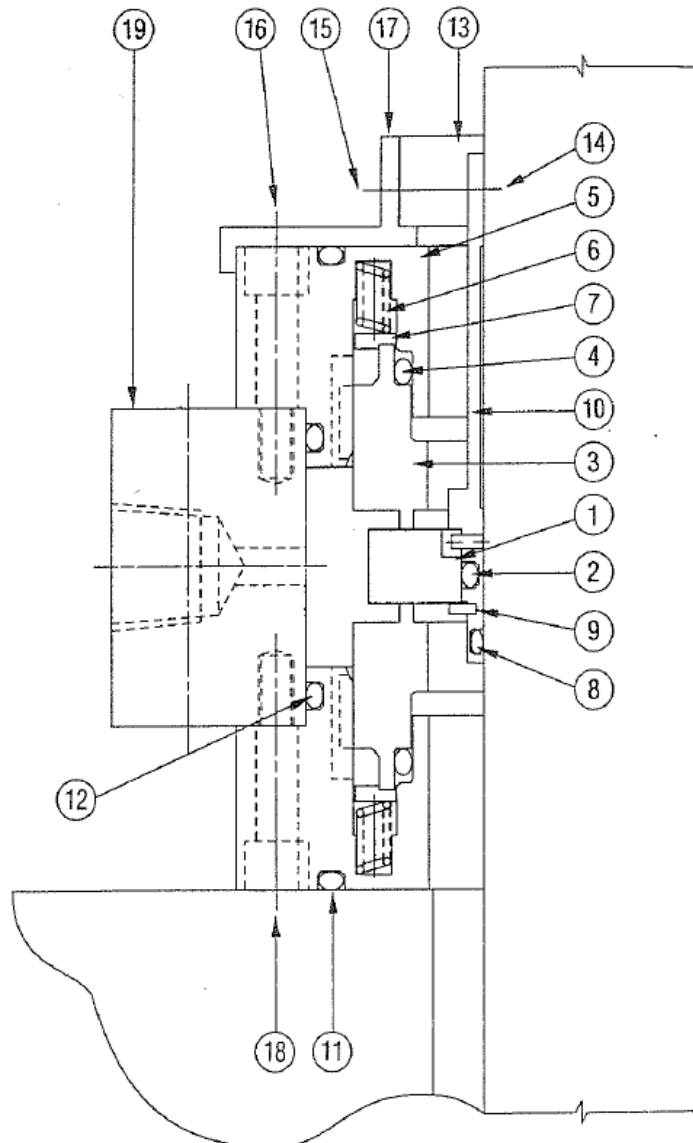
### 1. General

Be sure to read all instructions carefully before installing seal.

The John Crane Type 7700 Seal is a precision product and is shipped as a complete assembled package seal for ease of installation.

#### Part Name

- 1- Mating Ring
- 2- O-Ring
- 3- Primary Ring
- 4- O-ring
- 5- Retainer
- 6- Spring
- 7- Disc
- 8- O-Ring
- 9- Snap Ring
- 10- Sleeve
- 11- O-Ring
- 12- O-Ring
- 13- Collar
- 14- Set Screw
- 15- Cap Screw
- 16- Cap Screw
- 17- Spacer
- 18- Cap Screw
- 19- Gland Plate





UET Mixers Inc.  
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Mechanic Falls, ME 04256  
Tel: (207)-345-3330  
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## XCEL Series of Turbine Mixers

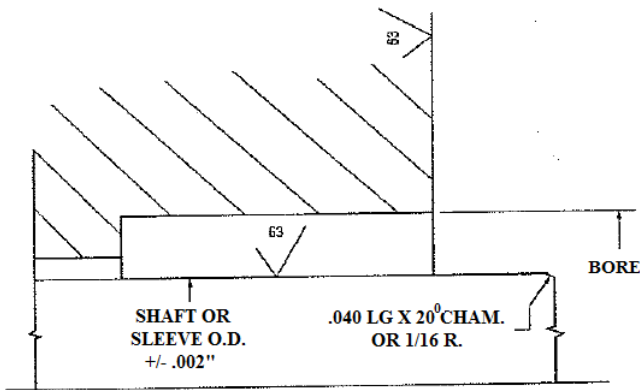
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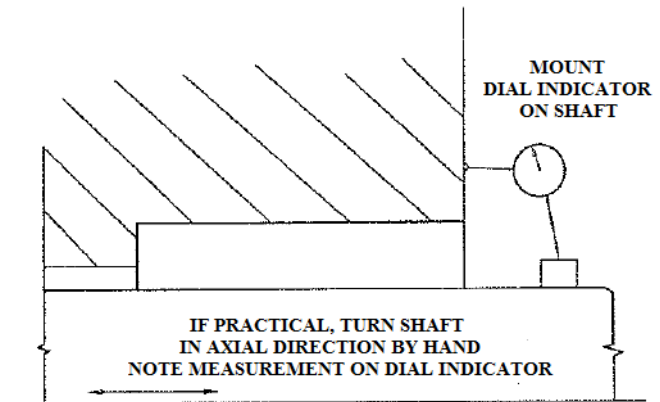
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#### 2. Preparing the Seal

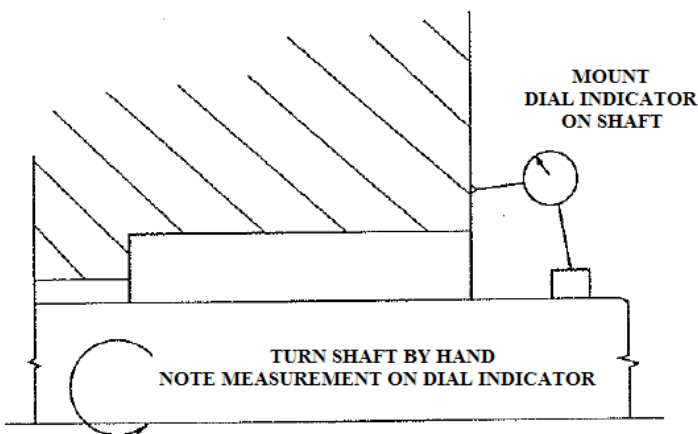
A. Check seal chamber dimensions and Finishes



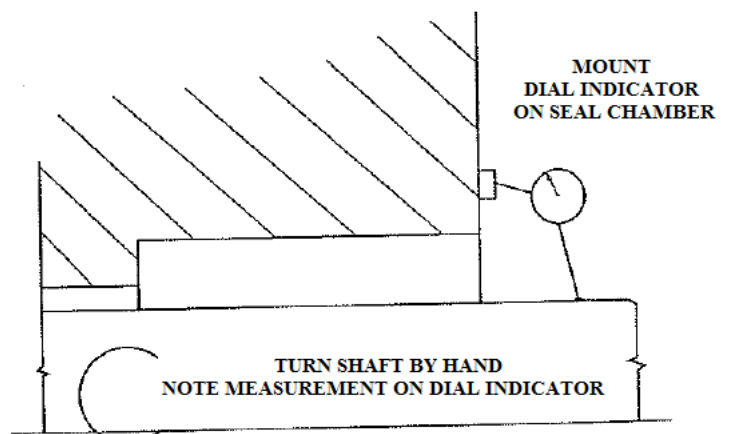
B. Measure axial end play (0.030" TIR max.)



C. Determine squareness of seal chamber face To shaft (0.020" TIR max.)



D. Measure shaft runout (0.180" TIR max.)



Note: If measure dimensions exceed those values given, consult equipment manual.



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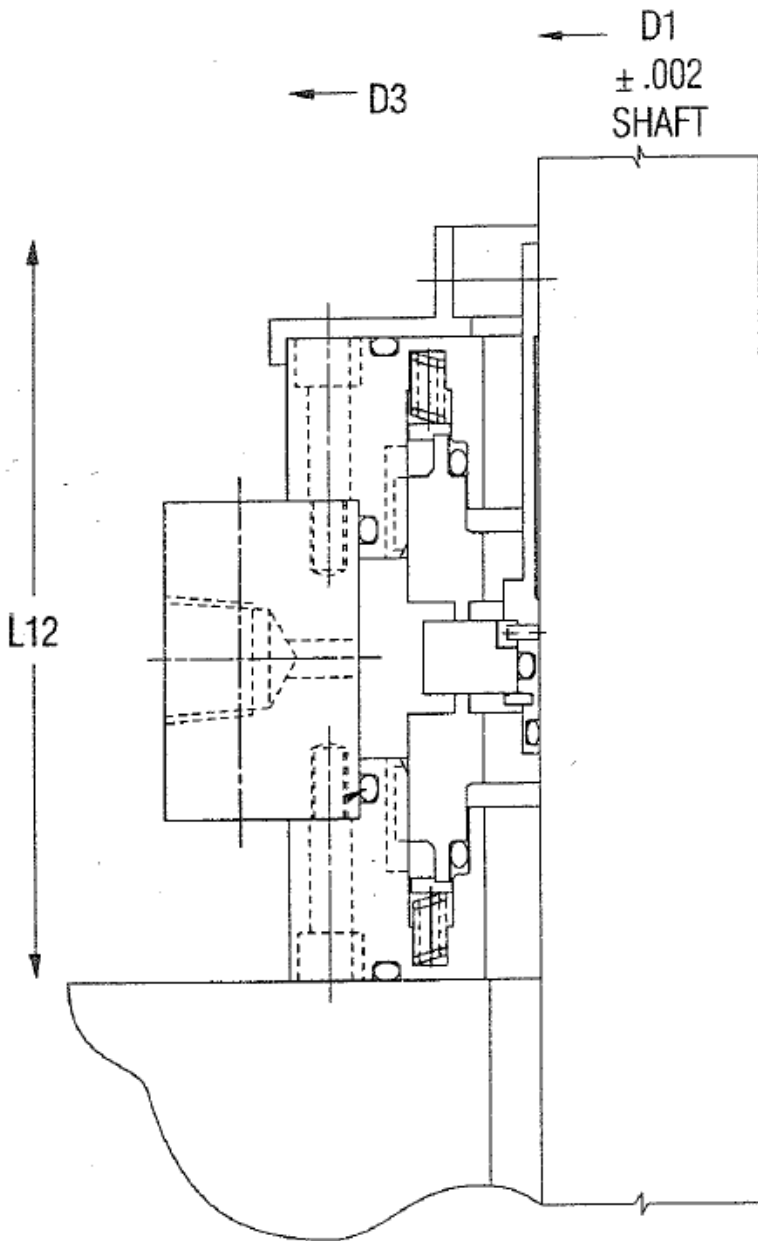
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#### Installation Dimensions



Seal Size	D1	D3	L12
750	0.750	4.281	4.656
1000	1.000	4.531	4.656
1250	1.250	4.781	4.656
1500	1.500	5.031	4.656
1750	1.750	5.281	4.906
2000	2.000	5.531	4.906
2250	2.250	5.781	4.906
2500	2.500	6.031	4.906
2750	2.750	6.281	5.156
3000	3.000	6.531	5.156
3250	3.250	6.781	5.156
3500	3.500	7.031	5.156
3750	3.750	7.281	5.406
4000	4.000	7.531	5.406
4250	4.250		
4500	4.500		
4750	4.750		
5000	5.000		
6500	6.500		
8000	8.000		



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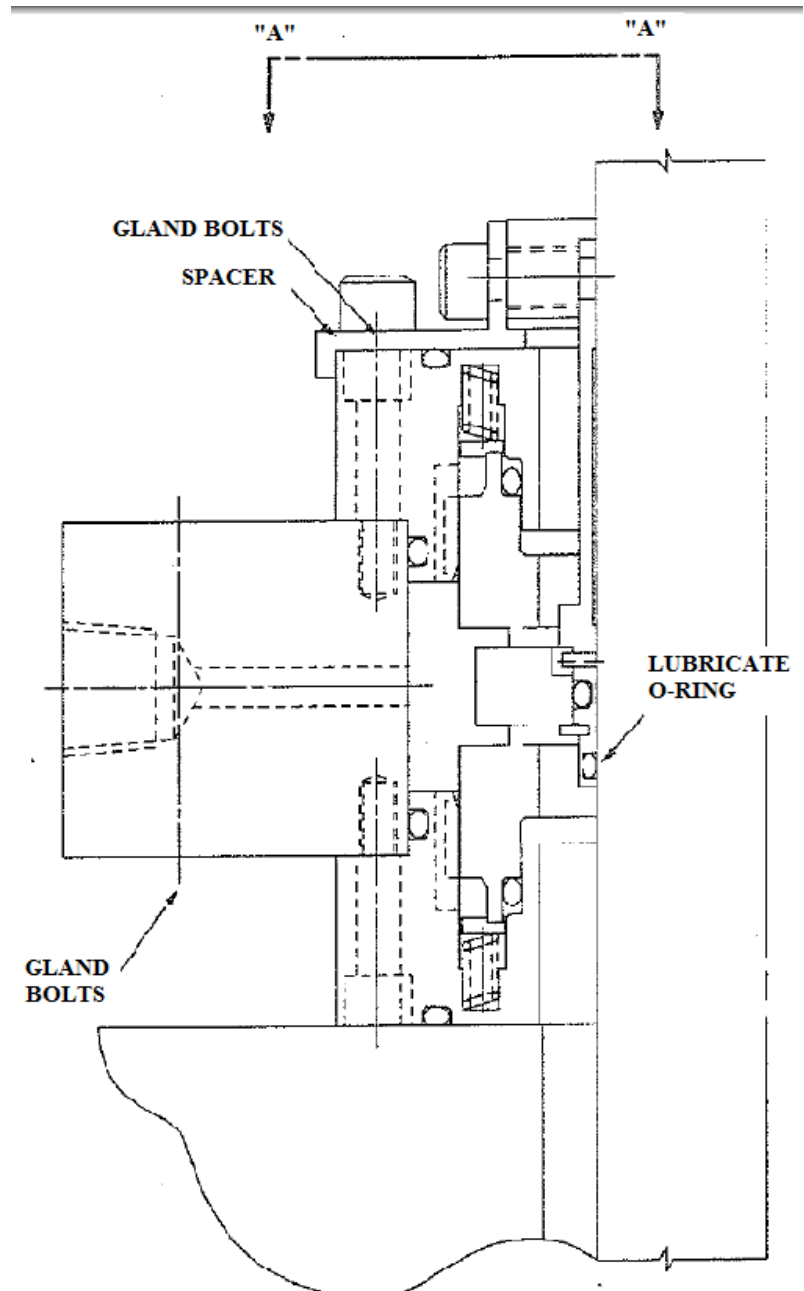
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#### 3. Installing the Seal

1. Lubricate the sleeve O-ring thoroughly with John Crane Silicone O-ring grease (Part #D-0001-637) and slide complete assembly on the shaft.
2. Bolt the gland plate to the face of the seal housing box or the face of the stuffing box. Tighten bolts finger tight.
3. If the stuffing box is to be removed, bolt gland plate to adapter plate. Or, if the seal is to be mounted directly to the stuffing box, tighten the bolts alternately until secure. Do not over-torque bolts.
4. Remove spacers and save by reinstalling them on the retainer with the 1/4-20 screws used for shipping the seal.





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## Before Starting Unit

1. Check mixer at coupling for proper alignment of the driver or motor. Recheck that all gland bolts and set screws are securely fastened.
2. Complete assembly of the mixer. If possible, turn shaft by hand to ensure free rotation.
3. Check to make certain that the circulation lines are open and free of any obstruction which might interfere with circulation.
4. Refer to seal installation drawing or equipment manufacturer's instructions for proper piping connections.
5. Pressurize 15 psi to 20 psi greater than vessel pressure.
6. Contact United Equipment Technologies if seal is to be run in liquid.
7. Ensure before start-up that all personnel and assembly equipment have been removed to a safe distance so there is no contact with rotating parts on the seal, coupling, or motor.

### **Warning:**

*Seal installation should be handled only by qualified personnel. If questions arise, contact the local United Equipment Technologies Representative or United Equipment Technologies directly. Improper use and/or installation of this product could result in injury to the person and/or harmful emissions to the environment, and may affect any warranty on the product. Please contact the company for information as to exclusive product warranty and limitations or liability.*