

## Handling & Installation For Diaphragm Seal Systems

Reotemp Diaphragm Seal Systems are highly accurate and sensitive pressure measuring instruments. Careful handling of these systems is important at all times, but proper handling is especially critical during transportation, storage, handling, and installation.

### Visual Check of Packaging

All our diaphragm seal systems are rigorously tested prior to shipping, and they are packaged to provide maximum protection during shipment. However, excessive shock or damage during shipment can damage the contents. Check packaging for evidence of excessive shock upon receipt.

### Handling Prior to Installation

The seal system is designed to be a rugged but accurate instrument after it is properly installed. However, it is most vulnerable during handling before and during installation.

1. Remove packaging with care – risk of damage is very high if not done carefully.
2. Lift the complete system as a unit, using two (or four) hands.
3. Prevent stress on threaded or welded connections.
4. If the system is connected by capillary tubing:
  - a. Lift unit under seals and instrument – do not lift by pulling on capillary.
  - b. When unwinding capillary coil, carefully unreel capillary, without kinking the capillary.
5. Clear the workspace where the system is unpacked of loose items that could damage the seal.

### Diaphragm Protection

Each diaphragm seal has been shipped with a protective cover to prevent damage to the diaphragm.

1. Do not remove the protective diaphragm cover until just before installation.
2. After removing the diaphragm cover, do not touch the diaphragm with hands or tools. It can be easily damaged with just a slight touch.

### Installation

1. Carefully bend capillary to fit installation. Sharp bends can cause cracks in the capillary.
2. Do not twist the capillary at any time. To install a threaded seal, carefully turn the whole system. For differential threaded seals:
  - a. Remove lower flanges.
  - b. Screw in place.
  - c. Replace lower flanges on seal system, with care not to touch diaphragm.
3. Fix capillary in place after seal installation, to minimize movement or vibration.
4. Thoroughly clean pipelines of debris or loose metal particles before installing seals.
5. Use of standard gaskets is recommended, consistent with temperature requirements.
6. Gasket should not cover any part of the diaphragm.
7. All screwed joints are sealed to protect integrity of seal fluid. Do not open sealed joints, or the seal will not function properly.
8. Tighten flange bolts to recommended torque only - do not over-tighten.