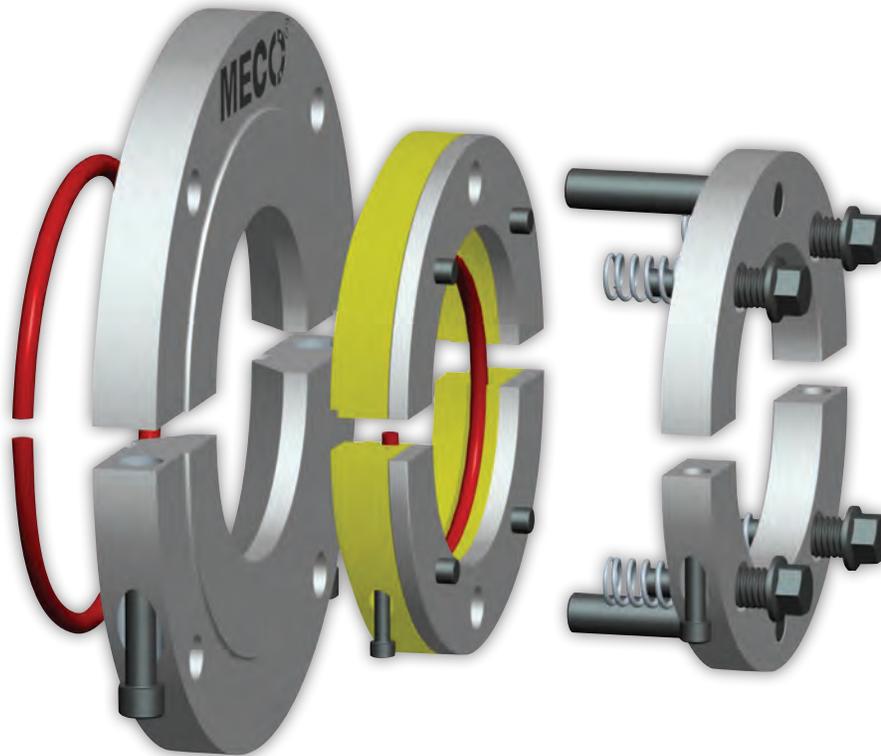


WHAT IS MECO'S OFS TYPE-2 SEAL?

The MECO OFS Type-2 model is the best choice in many sealing applications for low to moderate speed equipment. The OFS Type-2 uses full contact, soft face mechanical shaft sealing technology, sized for OEM and custom in-house process equipment. The OFS Type-2 model provides the superior performance, durability and quality of workmanship that are hallmarks of MECO's many other highly-regarded seals. MECO's first rate customer service is provided for each OFS Type-2 seal sold.



WHEN ARE OFS TYPE-2 SEALS THE BEST OPTION?

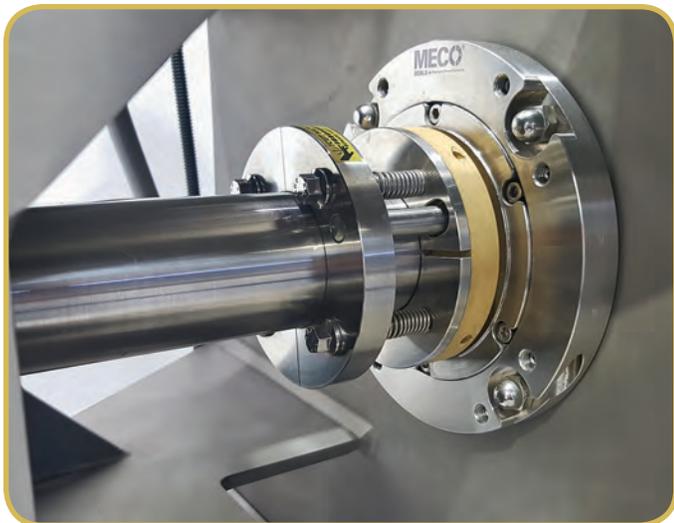
The OFS Type-2 seal model is ideal for blenders, mixers, cookers, conveyors and similar rotating equipment used in the food, pharmaceutical, chemical, plastics, metals, and other bulk process industries. The OFS Type-2 seal model is used on horizontal, inclined, and top entering shafts for split and unsplit installations. They are frequently used in dry powder blending applications including sugar drink mixes, spices, flavorings, nutrients, plastic and metal powders, and chemicals. It is also used in wet mixing for products like soups, sauces & pet foods.

The OFS Type-2 seal model is an air-free design. This, allows users to steer clear of the cost and hassles associated with compressed air use. The seal is extremely effective in vacuum service.

The OFS Type-2 seal model allows for easy, speedy cleaning. The seal may be washed in 10 minutes time while assembled on the blender or freely disassembled along the shaft for cleaning and inspection.

Using the Meco OFS Type-2 seal model offers the answers to 3 common questions, “How are we going to keep braided packing from cross-contaminating our finished product; provide reliable sealing during dry blending with frequent water washing for allergen and cleaning controls; contain various food slurries during cooking and mixing?”

HOW DOES THE OFS TYPE-2 SEAL MODEL WORK?

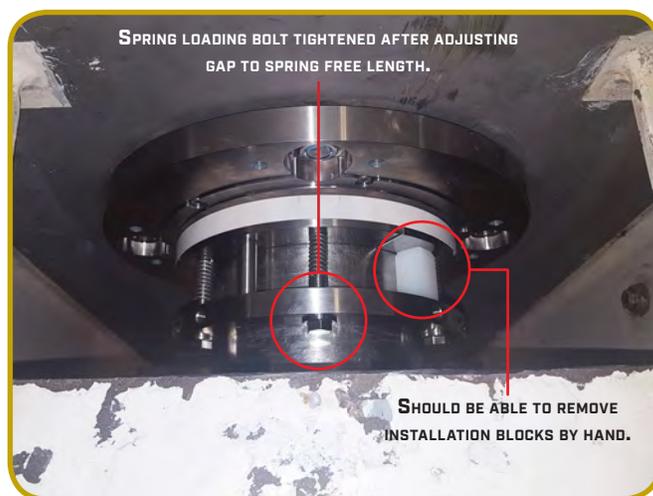
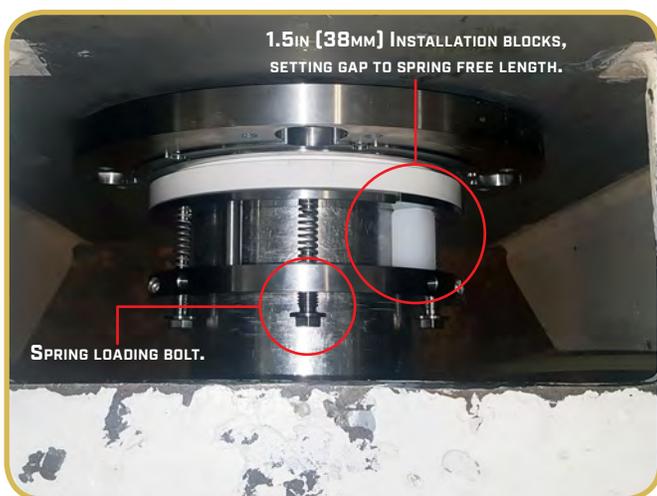


OFS TYPE-2 SEAL INSTALLED ON DRY POWDER BLENDER.

The OFS Type-2 seal model replaces stuffing boxes, lip seal housings and other types of seals. It is made with a heavy, hardened stainless steel stationary seal face or stator that bolts directly to the machine. A low friction rotating seal face is at a right angle to the shaft and in full contact with the stator. Sealing along the shaft is accomplished with an O-ring contained in the rotor that turns with the shaft and rotor. A drive collar, with large drive pins and self contained springs, locks to the shaft at a predetermined distance from the rotor. Factory calibration is set by fully tightening the spring actuators, providing the seal face closing force.

HOW IS THE OFS TYPE-2 MAINTAINED?

The OFS Type-2 seal model is easily maintained. The seal is easily disassembled for cleaning and resetting the spring load. By loosening the spring actuators, drive collar and rotor split-line, the parts may be pulled back for inspection and cleaning. Reassembly sets the seal face closing force to original values. The external parts of the seal are easily hosed off following Good Manufacturing Practice (GMP).

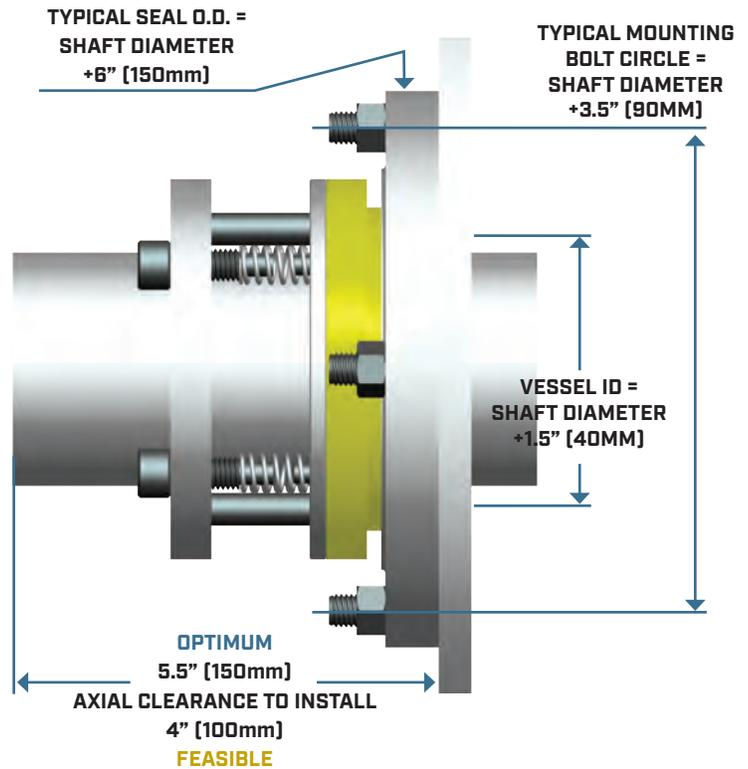


www.mecoseal.com

MECO OFS Type-2, available fully split and designed for your site.

WHAT SIZES ARE AVAILABLE?

OFS Type-2 seals are not inventory or “off the shelf” seals. They are custom designed and built to order. Dimensions will vary according to each application, but typical dimensions are shown in the illustration at right. They are readily designed to fit most mounting arrangements specified by blender and cooker OEMs and are designer-friendly, to interface with customized, in-house process equipment requirements. Seals can be built either to S.A.E or metric dimensions.



WHAT CONSTRUCTION IS AVAILABLE?

The OFS Type-2 seal’s rugged components are designed for long life. Standard configuration uses a hardened stainless steel stationary seal face. The standard rotor is MECO 3000, a high-performance, bearing-grade, polymer-filled PTFE with FDA approval. No abrasive filler material is added to the MECO 3000. The standard elastomer for the O-ring is FDA Viton®. For large shaft diameters or highly-abrasive process materials, a replaceable hardened stator insert, the polished central ring at left, can be offered. MECO seals can be fabricated from a wide variety of suitable materials.



OFS TYPE-2 HOUSING WITH REMOVABLE STATOR

Viton® is a registered trademark of E.I. DuPont de Nemours & Company

Mechanical Capabilities	
Temperature	-60° to 425° f [-50° to 218° C]
Pressure	Vacuum to 10 psig (70 kPa)
Shaft Speed	Up to 290 RPM
T.I.R. Runout	1/4" (6mm) standard; greater runout can be accommodated
Repeated Axial Shaft Motion	1/64" (0.4mm)
Thermal Shaft Growth	1/8" (3mm) typical; actual limits are set by physical space and application parameters
Results may vary with operating conditions - please call for discussion.	

MECO OFS TYPE-2

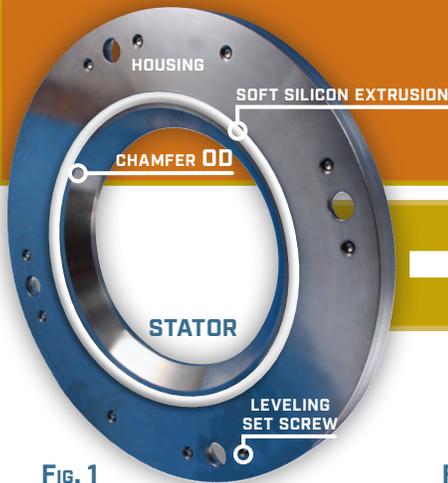


FIG. 1

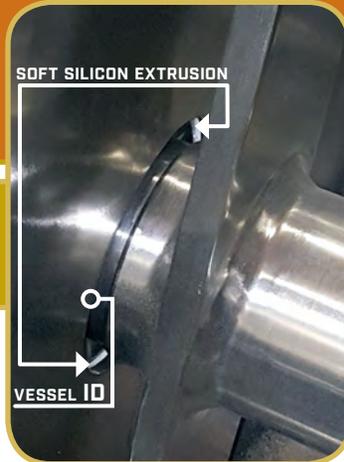


FIG. 2



FIG. 3

HOW DOES THE OFS TYPE-2 MODEL SEAL TO THE EQUIPMENT?

Meco offers “O”-rings following USDA guidelines or flat gaskets provided there is a machined, flat and square mounting condition. Otherwise, bedding compounds or a commonly used soft, FDA silicone extrusion adjusted with setscrews in the housing form a true mount both flat and square. Typical tapered mounting surfaces are on equipment heavily welded during fabrication and cause the seal housing to potato chip at installation. The extrusion approach corrects the problem -an example is shown above in Figures 1-3 and discussed below.

FIGURE 1 - Typically the OFS Type-2 seal housing or mounting plate has a groove capturing the soft, FDA silicone extrusion and a large chamfer is machined into the back with the chamfer OD slightly smaller than the vessel ID. The soft, FDA silicone extrusion forms the static seal against the end wall with installation controls via the leveling setscrews to set perpendicularity to the shaft and control the housing flatness.

FIGURE 2 - The larger vessel ID is recommended when following the USDA Guidelines for cleaning. It minimizes product retention time in this dead space; minimizes the chances for product to transform, harden, burn or provide a fulcrum against the shaft; eases the cleaning of this void or dead space plus the opening offers an opportunity for a visual inspection from the inside.

FIGURE 3 - Installed seal using leveling setscrews to assist the mounting of the seal housing with a soft, silicone extrusion floating between them and against the blender wall, forming a static seal. The mounting establishes a plane perpendicular to the shaft to connect the stationary seal face. The rotating seal face slides against it, forming a single faced, dynamic sealing interface.

MECO's design staff or your local distributor can help tailor the OFS-2 to your individual needs.
Below are a few examples of other **MECO** seal models.



AH Model

- Blenders
- Screw Conveyors
- Tight Spaces



EP Model

- Reactor Vessels
- Dryers
- Extruders



MB Model

- Air locks
- Rotary Feeders



HB Model

- Air Purged/Air Free Standard Seals for C.E.M.A. and Metric Screw Conveyors



EA Model

- Abrasive Slurries
- Adjustable on-the-Fly
- Large Diameters

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