OFS Type-1



Where Cleanliness Counts

The MECO OFS Type-1 is a fully custom, air-free mechanical seal designed with cleanliness in mind. Its single, dynamic seal is easily accessible for washing and drying, while remaining highly effective in sealing product. Unlike standard stuffing box seals, the OFS Type-1 is non-abrasive to the machine's shaft and can accommodate shaft runout. The OFS Type-1 is available fully split for efficient installation and maintenance.

How It Works

The OFS Type-1's dynamic seal is formed between a rotating, stainless-steel seal face (rotor) and a stationary, polymer seal face (stator). The dynamic seal is loaded by spring force, providing even and self-adjusting seal face pressure between the larger, intermittent adjustments. A stainless-steel drive collar firmly clamps to the machine's shaft, locking the stainless-steel seal face into rotation with the shaft via two drive pins.

Applications

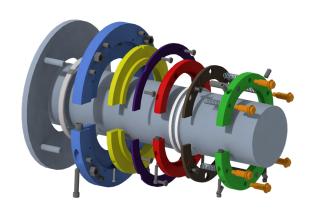
The OFS Type-1 is best suited for damp or wet blending applications and is capable of sealing applications with cold to hot temperatures. It can be especially useful for food grade and similar applications that require frequent and thorough cleaning to avoid cross-contamination of flavors, colors, or allergens. The OFS Type-1 can be used on horizontal, inclined, and vertical shafts. Several common machines and process material applications are listed below.

OFS Type-1 Machine Applications

- Blenders
- Mixers
- Cookers

OFS Type-1 Process Material Applications

- Wet Food Applications
- Pharmaceutical Processing
- Damp or Wet Powder Mixing
- Other Processes
 Requiring Frequent Wet-Washing and Drying



OFS Type-1 Features:

- Fully Split
- Easily Cleaned
- Air-Free
- Self-Adjusting



MECO evaluates the parameters of each application individually to provide a custom engineered solution. For applications involving high speed, high pressure, thermal cycling, low viscosity, or small particle sizes one of MECO's many other available seal models may be a more appropriate solution.

Sizing & Material Options

MECO's OFS Type-1 is custom-engineered and manufactured to fit the needs of each application. Shaft sizes typically range from 1" [25 mm] to 12" [305 mm] and MECO engineers can accommodate most mounting arrangements.

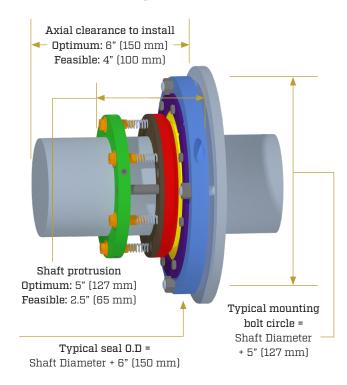
The OFS Type-1 seal is available in a variety of materials. The most common materials are listed below, but alternative materials are available upon request. Contact MECO with your specific application requirements for a custom solution.

Metal Component Materials	O-Ring Materials	Rotor Materials
304L Stainless-Steel	Viton®	MECO 3000 *
316L Stainless-Steel	Silicone	MECO 3120 *
17-4 Stainless-Steel	EPDM	MECO 3400 **

^{*} FDA Approved Polymers

Fully-Split

For External Mounting



Maintenance

Natural wear of the stationary, polymer seal face is accounted for by the OFS Type-1's self-adjusting spring force. When the drive collar gap increases beyond the specified range due to stator wear, the OFS Type-1 can be quickly adjusted by loosening its drive collar and resetting the spring gap. The same procedure can be followed to open the seal interface for thorough washing and drying.

MECO offers fully split repair kits to replace all wear items within the seal. Repair kit options are available for replacement of all wear components including the stainless-steel rotor, or to replace only soft wear components like the polymer stator.

Operating Parameters

MECO specializes in custom engineered seals designed for the particulars of each specific application. The mechanical capabilities of the OFS Type-1 are dependent on the materials and processes involved in the application. MECO has a range of other seal models that may be more applicable if the OFS Type-1 isn't a good fit for your application.



To learn more and to find out if the **OFS Type-1** is the right seal for you, please give us a call, or submit an online application today!



^{**} EC10/2011 Approved Polymers