

Cartridge Seal Solutions



Food and Beverage Industry

Mechanical seals for the food and beverage processing industries

FDA, FSA & EU Compliant Mechanical Seals that you can trust.





Customer Focus

AESSEAL® supplies world class products to a wide range of industries. Although these industries require a variety of different product types and styles they are all linked by one commonality – the products that they use must be world class to ensure that the equipment they are sealing is operational for as long as possible.


AESSEAL® understands that our customers in the food and beverage industry are critical to the world's food supply. That is why we have a wide variety of world class products to suit the wide range of pump makes and models used in the food and beverage industry.

From sealing a Puma or Fristam Pump in a dairy plant to sealing a four-storey fermenter in a bio-products plant, we have the product offering to meet industry requirements. In addition, we have unique designs that make it more profitable to process and convert commodities into food ingredients.

We believe in cleanliness and controlling every step of the supply chain. The manufacturing facilities where our products are produced are world-class; just what you would expect from a supplier to the food and beverage industry.



* For further details please refer to the documents on our website
(www.aesseal.com/en/resources/industry-guides/food-safe-materials-for-mechanical-seals)



“With so many suppliers to choose from
are you sure your seals are compliant?”

Food Safety

Many areas of the world have strict regulations in place that apply to food safety.

These regulations cover all aspects of the supply chain from production, processing, transportation and distribution to the supply of food. While the detail of the legislation may vary in different countries, in general the regulations seek to ensure that equipment is kept clean, efforts are made to eliminate the opportunity for bacteria growth and the materials that come into contact with food do not contaminate it in any way.

“By not complying with the regulation
you may be at risk of prosecution”

EU, FSA and FDA Compliant Components

In the European Community, EU Directive 1935/2004 is valid for suppliers or users of items or ingredients intended for food contact or items where it is likely that they can or will come into contact with food. The Directive, whilst very clear in some aspects, appears non-specific in others and is therefore open to interpretation.

The Food Standards Agency (FSA) guidelines suggest that in such circumstances “Best Practice” is applied and should be supported by robust documentation.

The US Food and Drug Administration (FDA) Food Safety Modernization Act (2011) means that food producers are required to evaluate the hazards in their operations and implement and monitor effective measures to prevent contamination.

Why Trust AESSEAL®? Our materials are traceable in accordance with EC1935/2004 article 17 and our stock control systems are third party audited to ISO9001. We supply Food and Drug Administration (FDA) & EU Directive 1935/2004 compliant product wetted materials as standard so you can be assured your site complies. More importantly we can trace the components that the seal was built from back through the supply chain. Our seals are manufactured in accordance with Good Manufacturing Practice (GMP) which assures compliance with EC2023/2006. This is third party audited to ISO9001.

“Our F - stock code cartridge seals use
FDA/ EU compliant materials as standard*”

“Our purpose is to give our customers such exceptional service that they need never consider alternative sources of supply.”

Global

Customer service is provided from 230 locations in 104 countries, including 9 manufacturing and 44 repair locations, with more than 300 customer service representatives who visit industrial plants every day.

From a Customer Perspective

Service matters. We have a track record with regional and multi-national companies in the food and beverage industry. Our products are global, our information is transparent and our service and support is coordinated.

Unlike other suppliers, we have a global product range and service reach. Wherever your plant is located, the product you purchase from us will have the same product stock coding, name and quality. Our business enterprise system allows us to view and balance inventory anywhere in the world, providing market leading on-time delivery.





Product Design

Our F- range mechanical seals use materials that are suitable for contact with food*. We control the design and procurement of virtually every component in our F- product range to ensure that they are made to the world class standards our customers expect.

Elastomers

The elastomer materials used are compliant to US Regulation 21CFR177.2600 to ensure FDA / EU compliance.

AES-Elast™

As well as the standard elastomers such as EPR, Viton® and Nitrile; AESSEAL® also offers AES-ELAST™ which combines the excellent thermal resistance of Viton® with the unique resistance to chemicals and environments that have historically exceeded the performance of conventional fluoroelastomers, particularly in highly caustic and steam applications. For more information or availability please contact AESSEAL®.

Product Availability

AESSEAL® has one of the most comprehensive seal product portfolios available. A modular product range, with over 10 million permutations, ensures AESSEAL® can supply the right solution for your application, where you want it, when you want it. **AESSEAL® provides the sealing solutions you require – from a source you can trust.**

* For further details please refer to the documents on our website (<https://www.aesseal.com/en/resources/industry-guides/food-safe-materials-for-mechanical-seals>)



F- Range

Our F - stock code cartridge seals use FDA / EU compliant materials as standard For further details please refer to the documents on our website:

www.aesseal.com/en/resources/industry-guides/food-safe-materials-for-mechanical-seals

Please contact AESSEAL® for further details.

Tel: +44 (0) 1709 369966, **Email:** enquiries@aes seal.info

AESSEAL® offers a wide range of seals that are suitable for contact with food. A selection of these is shown below.



F-Convertor II™ — Cartridge Seal Designed to Replace Packing

- Cartridge seal designed to replace two-part component seals and conventional packing arrangements
- Short external length
- Compact gland for use on applications with limited space



F-SCUSI™ — Short Cartridge Seal

- Has Flush port as standard for cooling or venting to maximize seal life
- Self-aligning stationary face, maximizing seal life
- Stationary face with radial locating pins minimizes damage in stop / start applications and viscous fluids



F-CSM™ — Single Cartridge Seal for Mixers

- Can accept radial movement up to 0.062" (1.5mm)
- Can be used on mixers with long overhanging shafts
- Suitable for top entry agitator service and vapour applications
- Exotic alloy wetted parts available for use with corrosive chemicals



F-CDM™ — Double Cartridge Seal for Mixers

- Can accept radial movement up to 0.062" (1.5mm)
- Can be used on mixers with long overhanging shafts
- Exotic alloy wetted parts available for use with corrosive chemicals

We work with you to manage your assets
and increase mean time between failures.



F-SCMS™ — Short Canister Mixer Seal

- Designed specifically for Mixer, Agitator and Reactor applications
- Double and Single Seal for both modern and mature mixer designs
- Suitable for both top or side entry applications
- Reduced height - ideal in situations where space is limited
- Dual Balanced Design - maintains containment through a range of process fluctuations
- Fail safe protection - Independent seal face loading using unique common multi-spring design (Patent Pending)
- Accommodates up to 3.5mm of radial (T.I.R.) movement (size dependant)



F-FIDC™ — Cartridge Mounted Double Seal

- This modular seal is ideal for the containment of hazardous process fluids
- Flexible design allows use as a double seal (high pressure barrier fluid) or tandem seal (low pressure barrier fluid) which reduces the necessity to inventory two designs of seals
- Self-aligning stationary seal-faces with radial contacting pin drive which minimizes damage in stop / start applications and viscous fluids
- Bi-metal FIDC™ option also includes Exotic Alloy wetted components at minimum price premium for use with corrosive chemicals



Easyclean™ — Pressure Systems

- Customer effective solution, simple patented design solving critical issues in applications requiring higher standards of cleanliness
- Fully accessible quick release clamp allows vessel to be opened for cleaning and inspection
- 304 Stainless Steel construction is ideal in Pharmaceutical and Food & Beverage industries



FLOWTRUE® — Water Flow Control System

- Adjustable flow meter controls the amount of water flowing to the mechanical seal for cooling purposes
- Innovative flow tube cleaning mechanism allows the device to be cleaned without interrupting flow and pressure to the seal
- Unique segmental valves prevent FlowTrue® from clogging
- Integrated non-return valve protects plant water supply from product contamination
- Modular design ensures that the device can be easily upgraded and repaired



ENVIRONMENTAL TECHNOLOGY

To experience the exceptional, please contact your local representative. Discover full details on our website:

www.aesseal.com

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For further information and safe operating limits contact our technical specialists at the locations below.



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AESSEAL plc is certified to:

ISO 9001, ISO 14001, ISO/IEC 20000, ISO/IEC 27001,
ISO/TS 29001, ISO 37001, ISO 45001 & ISO 50001



Net Zero champions globally



Use double mechanical seals with hazardous products.

Always take safety precautions:

- Guard your equipment
- Wear protective clothing



WARNING

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