

Superior Sealing Solutions for Industrial Applications



Advanced Sealing International

Customer Service

Advanced Sealing International (ASI) designs and manufactures mechanical seals to meet a broad range of industrial applications. Based in Baton Rouge, Louisiana, ASI operates regional offices and facilities in Texas, New York and Florida. Building upon its advances in both design and technology, ASI has become a worldwide player in the highly competitive mechanical seal industry. The ASI stationary design was the first of its kind on the market, and with over thirty (30) years of field exposure, continues to be the most reliable. ASI also produces special seal models (including our gear pump and mixer seals) that successfully tackle some of industry's toughest applications. The ability to respond to our customers needs sets ASI apart and ensures that we are always on the cutting edge of technology.



ASI provides a professional and knowledgeable support team, which includes in-house application and sales engineers, as well as experienced, factory-trained representatives (domestic and international). Our on-site machining and assembly facilities ensure unsurpassed “hands-on” quality control and the quickest possible response time for our customers.



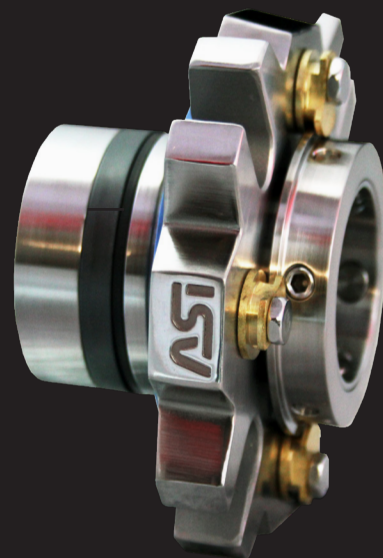
ASI has always demanded the highest level of quality and performance from our mechanical seals. The stationary design of our seals derives sealing face alignment from the pump shaft, not the stuffing box, guaranteeing perfect seal face squareness. Our seal components are manufactured to tougher tolerances than our competitors' parts, and our seal faces are lapped beyond industry standards. The end result is a perfectly fitted, precisely aligned mechanical seal, built the way it was originally designed... for superior seal performance.

Single Seals

The 585 Series

Single Cartridge-Mounted Stationary Seal

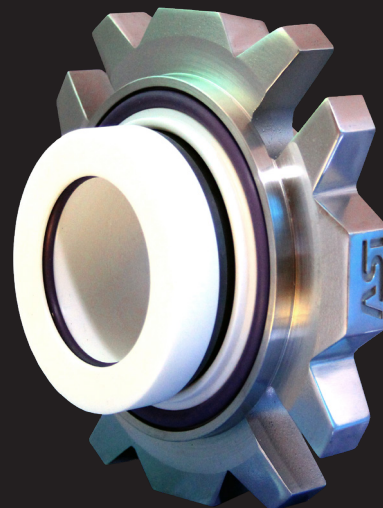
The **ASI 585 Series** delivers a state-of-the-art single seal **unsurpassed in reliability and performance**. The stationary design and progressive machining techniques of the 585 Series guarantee perfect seal face squareness upon installation. Seal faces are not required to compensate or adjust during operation, limiting face wear while providing the optimum sealing face surface. Also unique to the 585 Series is its piston device, Spring Guard™. This device, activated by hydraulic pressure, forces the seal's springs into their drilled recesses; this operation guards against spring fatigue while protecting the springs from clogging deposits and achieves the uniform face wear derived only from hydraulic pressure. Additionally, the seal's spring load is significantly reduced at lower stuffing box pressures and completely eliminated at pressures over 50 psi. The **585 Series** is available in three universal style options- a piloted non-flush style (585-1), a flush inlet style (585-2), and a vent/quench and drain inlet style (585-3). Each option is designed with enhancements that not only perform well, but also perform "smart," furnishing the highest quality at the lowest price.



The 724 Series

Single Cartridge-Mounted Non-Metallic Seal

Developed to tackle evolving application needs, the **ASI 724 Series** offers **multiple material options to provide performance and protection**. The unique "split-housing" gland plate provides the strength and stability of metal parts where beneficial, and the design flexibility of application-specific wetted-end seal materials. The Model 724, which utilizes a high performance PPS composite material for its wetted parts, provides unrivaled chemical resistance for corrosive applications without any trace mineral contamination. Adapted for the aquatic industry, the Model 724A combines PNM™ composite material with metal parts to successfully seal process fluids while protecting them from metal contaminants. Advanced seal features like monolithic seal faces, isolated springs, and ASI's patented Safe-T-Studs™ assure continuous, reliable service. Remarkably, all of these benefits are incorporated into the proven stationary design that is the cornerstone of ASI's mechanical seal success.



Double (Dual Operation) Seals

The Model 590

Double Cartridge-Mounted Seal

The **ASI Model 590** is designed to operate with the occasional fluctuations that may occur in a seal barrier fluid supply. This characteristic makes it *perfect for handling the more difficult to seal process liquids* including those that are sensitive to contact with air, contain abrasive material or may have environmental consequences. The Model 590 monitors the barrier fluid pressure and takes evasive action to protect the environment (and itself) from damage caused by accidental over or under pressurization. Integrated features, like the 590's stationary design and dual spring isolation (from process and barrier fluids), help distinguish this seal from its competition. Additionally, the seal's cartridge-mounted unit is equipped with ASI's Handy-Cams™ and patented Safe-T-Studs™ to protect the seal against damage in handling and provide simple, "worry-free" seal installation.



The Model 595

Double Cartridge-Mounted Circulating Seal

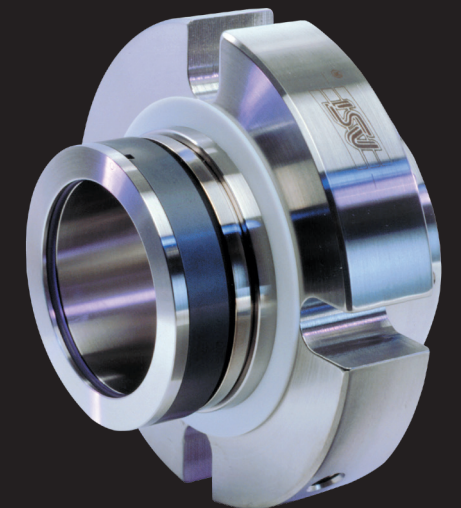
Incorporating all of the advanced technology of the Model 590, the **ASI Model 595** is also equipped with a pumping device. This patented self-circulation device extends the full distance between the inboard and outboard seal faces, allowing the seal to remove heat from the seal faces while it is circulating fluid. This process insures lubrication and cooling to both sets of sealing faces and protects the rotary seal face o-ring, typically the "weakest link" in most pumping seal designs. As an added safety feature, both the Model 590 and 595's seal faces are encased in metal, protecting plant personnel and the environment from catastrophic seal face failure. The combination of the Model 595's reciprocal balance and circulation system creates a seal *unsurpassed in controlling hazardous emissions*, and makes it ideal for vertical applications as well as gas pressurized barrier fluid systems.



The Model 600

Double Cartridge-Mounted High Motion Seal

Specially engineered to withstand *greater radial and axial movement*, the **ASI Model 600's** seal components are designed to work in unison, independent of the seal gland plate. The free movement of the seal parts prevents under or over compression of the seal faces while increasing the internal radial and axial motion capabilities of the seal (typically .180 T.I.M.). The Model 600's single set of springs is positioned to maintain tension on the second set of seal faces, should the first set of faces fail. The seal's reciprocal balance automatically protects the seal during pressurization changes, insuring lubrication to the seal faces. As with all of ASI's stationary seals, perfect squareness to the shaft is inherent to the seal design.

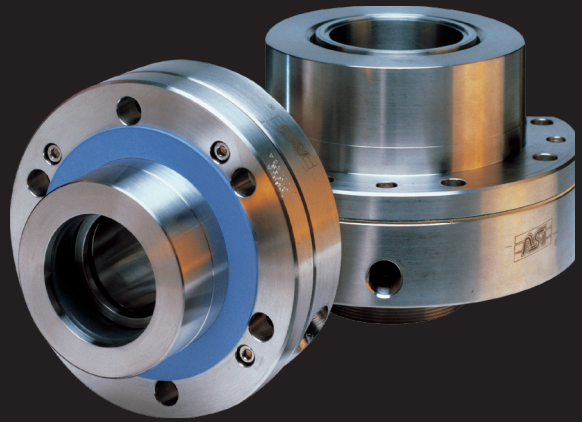


Special Application Seals

The Model 510

Positive Displacement Gear Pump Seal

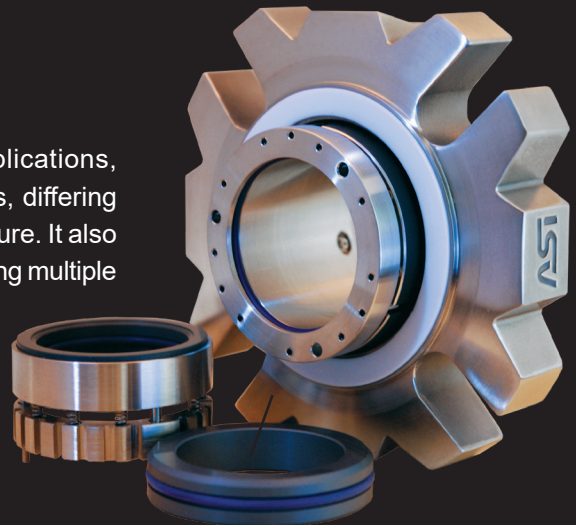
Addressing the problems commonly associated with monomer and polymer-type services, the **ASI Model 510** employs its reciprocal balance to compensate for the varying pressures between normal service and the spikes that often occur, ensuring uninterrupted seal service during the spike and after normal service resumes. Seal components are designed with the maximum possible cross-section and constructed of metallurgy that is thermally compatible to both the seal faces and the equipment. As a result, face distortion is minimized during pressure and temperature spikes, and seal installation and removal is possible while the pump is hot. Equipped with an internal pumping ring to alleviate heat at the seal faces, the Model 510 is *the most advanced gear pump seal* on the market today.



The Model 550

Heavy Duty Slurry Seal

The **Model 550** is ideally suited for slurry applications, particularly those with harsh operating parameters, differing product consistencies, and those of a corrosive nature. It also successfully seals many bleaching materials, including multiple forms of HTH paste and higher concentration caustic products. The 550's unique design eliminates the need for special metallurgy as only the inboard seal faces and o-rings see the product. Equipped with its "pumper" option, the Model 550 also lends itself well to hazardous waste applications, overcoming the large abrasives, varying chemicals and occasional dry-run scenarios typical to the service.



ASI offers many other special application seal assemblies, each customized for specific equipment and application requirements. The majority of these designs utilize existing seal components and configurations for added performance reliability and better response time for our customers.

Component Style Seals

ASI offers three styles of component seals and a number of stationary seats to mate against these rotary units. Our two inside seals, the **Model SD-3** and the **Model 500**, provide cost-effective, hydraulically balanced sealing capabilities without the use of a step shaft or sleeve. The **Model 505** outside seal removes all metal from the stuffing box and is a low-cost solution for many corrosive applications. All three of ASI's component seals are unitized, so there are no loose parts to fall off or jam during seal installation.



Our proven designs operate in a variety of industries including agricultural-chemical, chemical processing, food and beverage processing, mining, municipal water and waste treatment, naval/marine, petrochemical, pharmaceutical, power generation, pulp and paper, refining, textile, utility and nuclear services worldwide.

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