

# AST 70

## SINGLE CARTRIDGE SEAL



### Field Rebuildable

No more waiting for seal repairs, and no more worries about installing exchange seals that might have previously held hazardous materials, because the AST 70 is easy to rebuild on site using standard tools.

### No Measurement Required

Simply slide the seal onto the shaft, bolt down the gland, tighten the set screws, and remove the centering blocks.

### Easy replacement on split case and vertical pumps

No pump teardown required. Just slide the seal over the end of the shaft.

### No Shaft Fretting

The static O-ring eliminates any grooving or fretting of the shaft.

### Easy Impeller Adjustment

Adjust impeller clearance without removing the seal or dismantling the pump.

Use AST Mechanical Seals for the ultimate in sealing simplicity. The AST 70 is designed for a wide range of applications including

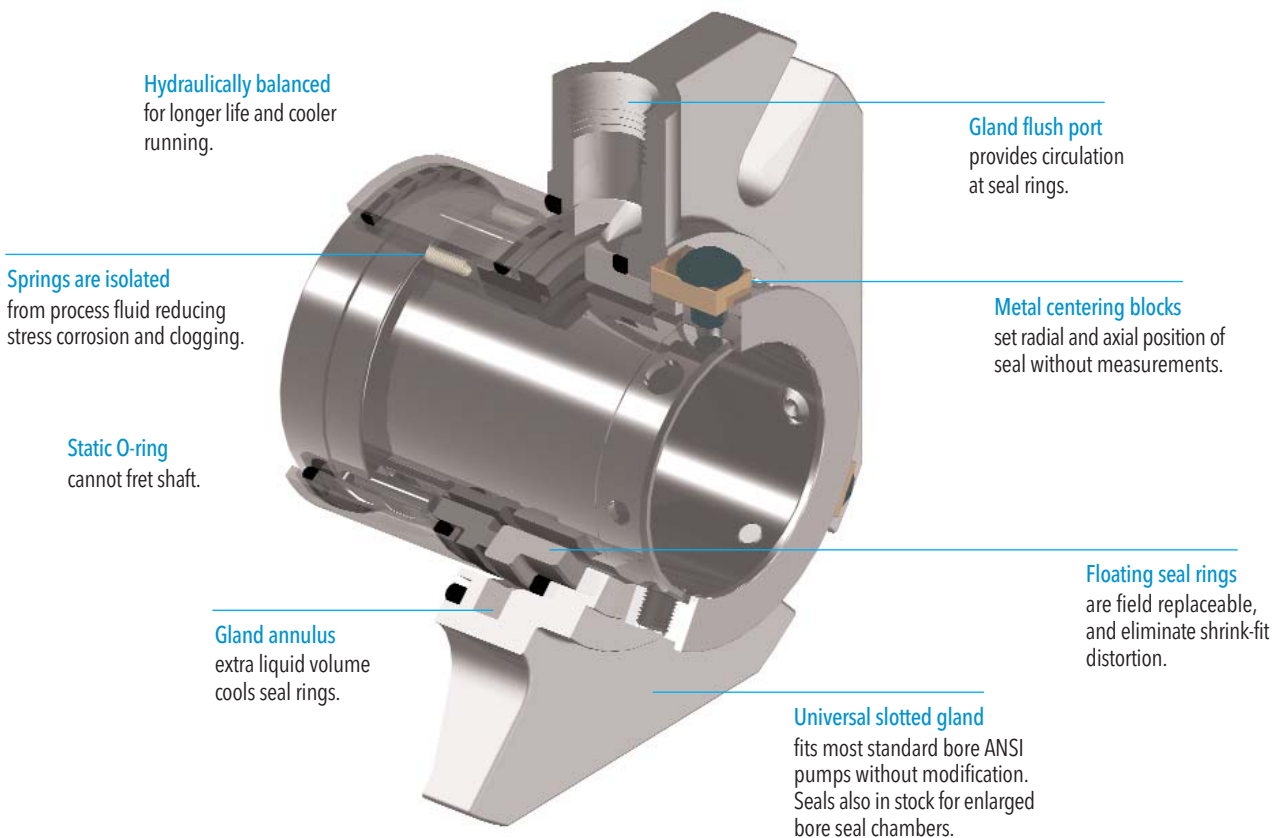
- Food Processing
- Mining Services
- Pulp and Paper
- Corn Processing
- Marine Operations
- Phosphate Production
- Chemical Processing
- Sugar Refining
- Brewing and Distilling
- Pharmaceuticals
- Petroleum Systems
- Waste Treatment
- Water Treatment
- Power and Energy

ADVANCED SEALING  
TECHNOLOGY

Reliable Sealing for Rotating Equipment



# AST 70



Hydraulically balanced  
for longer life and cooler  
running.

Gland flush port  
provides circulation  
at seal rings.

Springs are isolated  
from process fluid reducing  
stress corrosion and clogging.

Metal centering blocks  
set radial and axial position of  
seal without measurements.

Static O-ring  
cannot fret shaft.

Gland annulus  
extra liquid volume  
cools seal rings.

Floating seal rings  
are field replaceable,  
and eliminate shrink-fit  
distortion.

Universal slotted gland  
fits most standard bore ANSI  
pumps without modification.  
Seals also in stock for enlarged  
bore seal chambers.

## OFF THE SHELF...

AST 70 seals are available off-the-shelf to fit most ANSI pumps, including enlarged bore pumps, without modification. Seals are in stock to fit many split case, positive displacement, and vertical turbine pumps.

## ...or ENGINEERED

We design and build special AST 70 seals for vertical turbine pumps, large split case pumps, and other systems that require more than a standard seal. Rebuild parts are still off-the-shelf.

## MATERIALS OF CONSTRUCTION

Metal components:	316 Stainless Steel standard; Alloy 20, Titanium, and Hastelloy C-276 <sup>1</sup> available
Rotating seal ring:	Carbon-Graphite or Graphite-Loaded Sintered Silicon Carbide
Stationary seal ring:	Sintered Silicon Carbide or Tungsten Carbide
Springs:	Hastelloy C-276
O-rings:	Fluoroelastomer, EPDM, Aflas <sup>2</sup> , or Isolast <sup>3</sup> perfluoroelastomer

## OPERATING LIMITS

Pressure:	28 in (710 mm) Hg vacuum to 400 PSIG (28 bar) maximum, depending on shaft size and speed.
Temperature:	To 500°F (260°C), depending on O-ring elastomer limits in fluid sealed

Notes: <sup>1</sup>Trademark of Haynes International Inc., <sup>2</sup>Trademark of Asahi Glass Co. Ltd., <sup>3</sup>Trademark of Busak+Shamban

ADVANCED SEALING  
TECHNOLOGY

250 NORTH STREET A-11  
DANVERS, MA 01923 USA  
[www.astseals.com](http://www.astseals.com)

tel. (978) 750-8001  
fax. (978) 750-6980  
[sales@astseals.com](mailto:sales@astseals.com)

