

# AST 50

## OUTSIDE SEAL



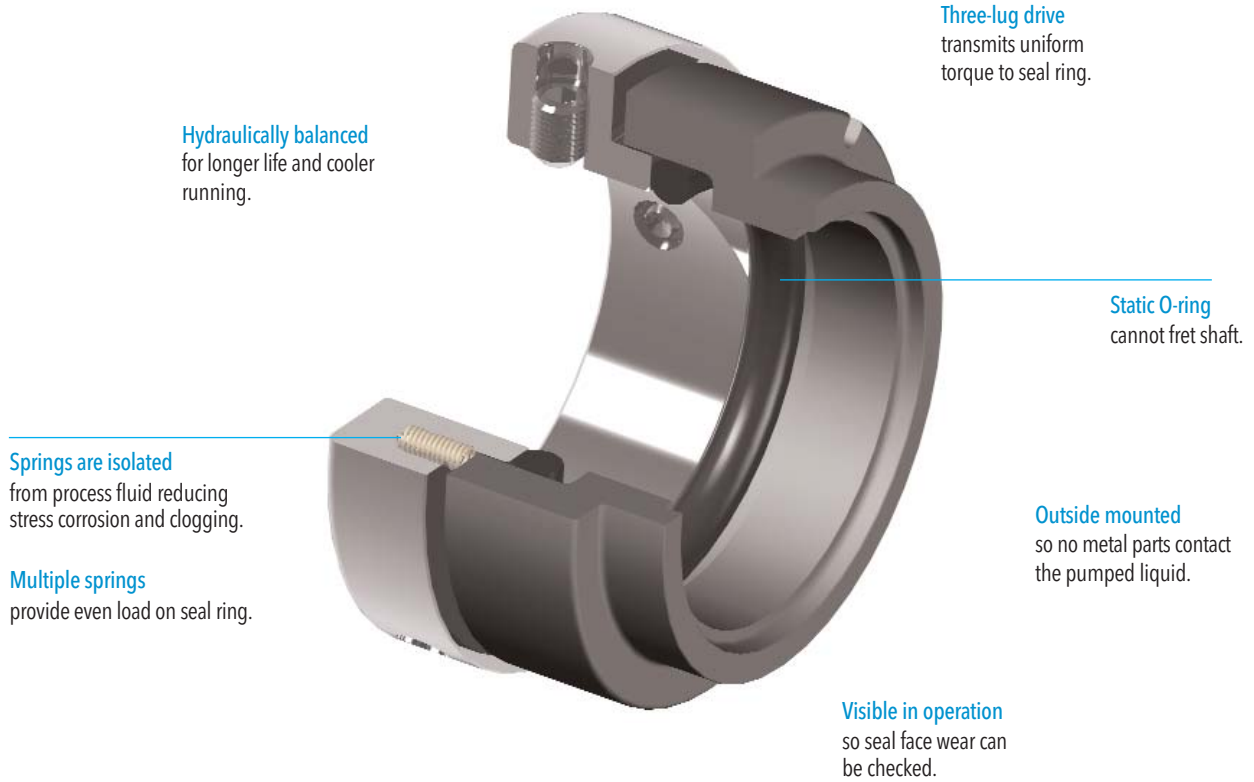
The AST 50 Mechanical Seal is readily accessible, not hidden in the stuffing box, so it's easy to install and replace. Since the proper spring compression is preset, there are only three steps to installation. Just slide the rotary unit over the shaft until it comes in contact with the stationary face, tighten the drive ring to the shaft, and remove the retaining clips.

The AST 50 Seal is designed for use

- where an outside seal is required,
- as a low cost replacement for seals made of exotic metals,
- in corrosive fluids that attack inside-mounted mechanical seals,
- in food processing where the seal must be cleaned in place for sanitation.

This seal has no metal parts in direct contact with the pumped fluid. The multiple springs are also isolated from the fluid. Unlike reverse-mounted inside seals, the AST 50 is hydraulically balanced for use as an outside seal.

# AST 50



**Hydraulically balanced**  
for longer life and cooler running.

**Three-lug drive**  
transmits uniform torque to seal ring.

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

**Static O-ring**  
cannot fret shaft.

**Multiple springs**  
provide even load on seal ring.

**Outside mounted**  
so no metal parts contact the pumped liquid.

**Visible in operation**  
so seal face wear can be checked.

## OFF THE SHELF...

AST 50 seals fit all ANSI pumps and many others which require a single outside seal to withstand an extremely corrosive environment or for low pressure service.

Clamped L-shape and T-shape stationaries are available in silicon carbide and alumina ceramic.

## MATERIALS OF CONSTRUCTION

Metal components:	316 Stainless Steel standard; Alloy 20 and Hastelloy C-276 <sup>1</sup> available
Rotating seal ring:	Carbon-Graphite or Silicon Carbide
Stationary seal ring:	Sintered Silicon Carbide or Alumina Ceramic
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 150 PSIG (10 bar) maximum, depending on shaft size and speed.
Temperature:	To 400°F (205°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*