

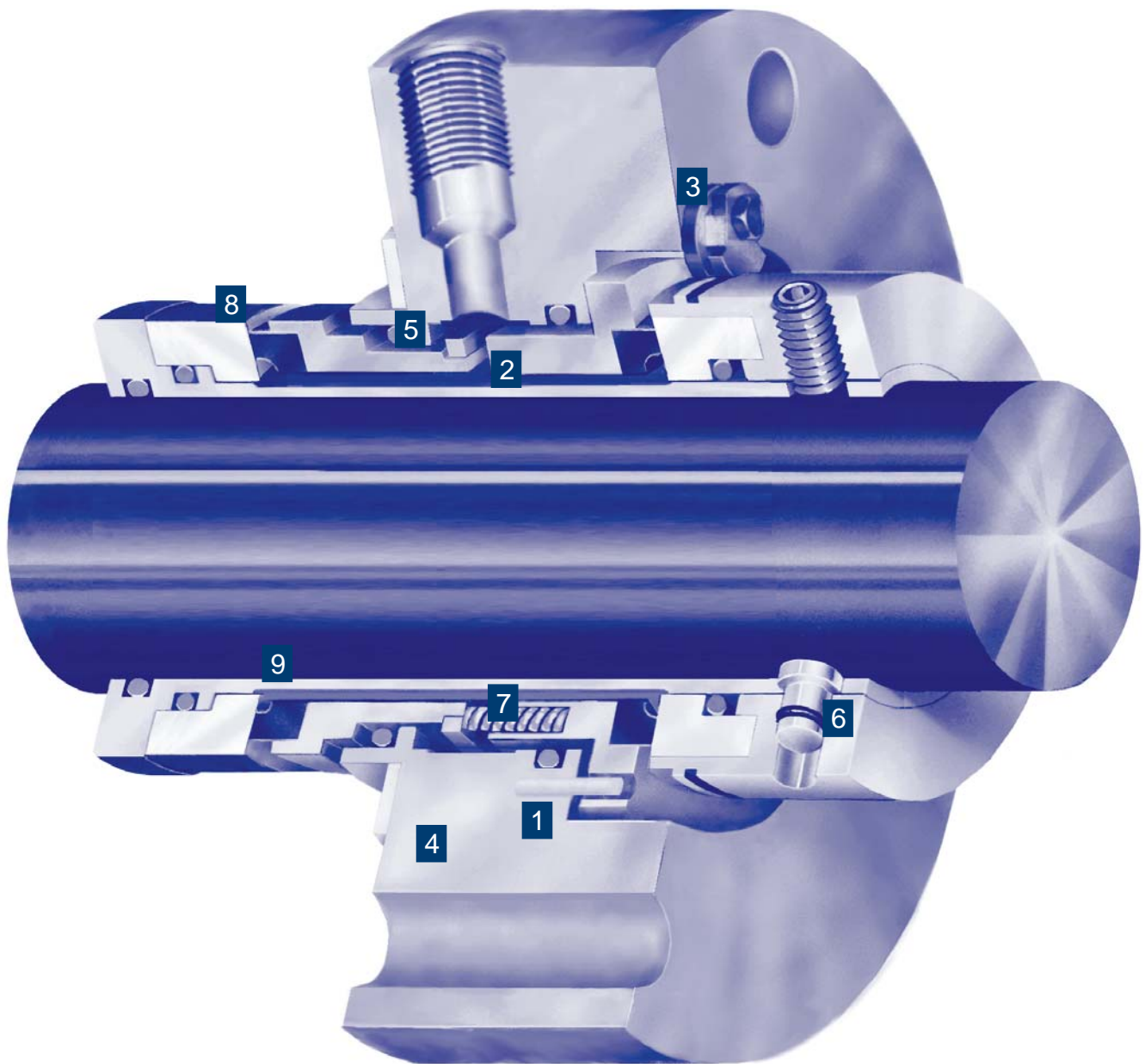
# **Model 600**

**Performance in Motion**



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# The Model 600



*The ASI Model 600 is specially engineered to withstand greater radial and axial movement common to larger equipment such as slurry pumps, mixers and agitators. The seal components are designed to work in unison, preventing under or over-compression of the seal faces, as well as increasing free movement of the seal.*

## **Unison Component Design**

**1**

One set of springs, independent of the gland plate, energizes both stationary faces. Anti-rotation devices are positioned to give seal components maximum movement. This allows seal components to move freely with the pump shaft without increasing or decreasing the mechanical load on the inboard or outboard seal faces.

## **Greater Radial Clearance**

**2**

The Model 600's design incorporates greater radial clearances between individual seal components, enabling the seal to compensate for increased shaft whip or radial thrust.

## **Assembly Cams**

**3**

ASI's Handy-Cams not only align the seal, but protect against handling and installation damage (common to larger and heavier seals), all with the ease of one-step disengagement.

## **Cartridge Mounted**

**4**

Factory assembled and inspected, every seal is pressure tested prior to shipment. The Model 600's self-contained cartridge mounting simplifies installation; mechanics are not required to make critical installation measurements.

## **Reciprocal Balance**

**5**

The mechanism controlling closing force to the inboard seal face is completely automatic and regulated by the differential of pressure between the process and barrier fluids. This balance protects the seal from failure due to over or under-pressurization, and also lengthens seal life.

## **Safe-T-Stud™ Patent # 5,27**

**6**

ASI's unique drive mechanism aids in precision alignment while transmitting drive torque from the shaft to the seal. Located inside the lock collar, the Safe-T-Stud prevents installation damage, misalignment, and accidental loosening (common with set-screwed alignment devices), which safely allows for impeller adjustments while the seal is in service.

## **Larger Springs**

**7**

The Model 600's longer, stronger springs have less tendency to clog, as well as greater resistance to fatigue. Springs are strategically secured so that if one set of seal faces should fail, spring tension remains on the other set of faces, ensuring the integrity of the seal.

## **Double Seal Operation**

**8**

The Model 600 can operate in pressurized or non-pressurized stuffing boxes, insuring lubrication to the seal faces, even if the pump runs dry.

## **Stationary Design**

**9**

The Model 600's stationary design derives sealing face alignment from the pump shaft, not the stuffing box or seal gland plate, which assures perfect sealing face squareness. Under normal conditions, the Model 600 adjusts one time upon installation, and thereafter only to compensate for the limited seal face wear.

## MATERIALS OF CONSTRUCTION

### METAL PARTS<sup>1</sup>

Standard Metal Parts- 316ss  
 Standard Springs- Hastelloy® C  
 Standard Set Screws- 316ss

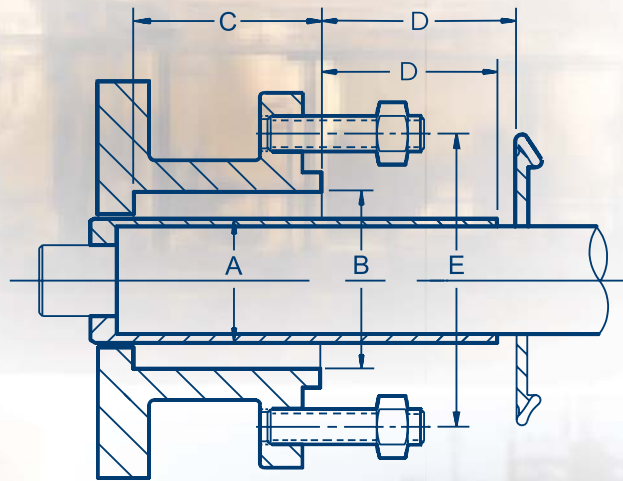
### FACE MATERIALS<sup>1</sup>

Stationary Face- High Quality Carbon Graphite  
 (Tungsten and Silicon Carbide Also Available)  
 Rotary Face- Tungsten Carbide

### SECONDARY SEALS<sup>1</sup>

Standard O-ring Materials- Fluorocarbon, EPDM or Aflas®

<sup>1</sup>Other Materials May Be Specified



To provide superior seal performance, the Model 600 gland plate configuration is pump specific. The dimensions shown below are minimum equipment requirements and are for reference only.

## EQUIPMENT REQUIREMENTS

A shaft/sleeve	B min. bore	C min. depth	D outb'd dist	E (min. b.c.)	
				1/2" bolts	5/8" bolts
2.750	3.875	2.00	2.31	5.000	5.125
2.875	4.000	2.00	2.31	5.125	5.250
3.000	4.125	2.00	2.31	5.250	5.375
3.125	4.250	2.00	2.31	5.375	5.500
3.250	4.375	2.00	2.31	5.500	5.625
3.375	4.500	2.00	2.31	5.625	5.750
3.500	4.625	2.00	2.31	5.750	5.875
3.625	4.750	2.00	2.31	5.875	6.000
3.750	4.875	2.00	2.31	6.000	6.125
3.875	5.000	2.00	2.31	6.125	6.250
4.000	5.250	2.09	2.63	6.375	6.500
4.125	5.375	2.09	2.63	6.500	6.625
4.250	5.500	2.09	2.63	6.625	6.750
4.375	5.625	2.09	2.63	6.750	6.875
4.500	5.750	2.09	2.63	6.875	7.000

If equipment does not meet above requirements, contact ASI's engineering department for possible seal customization.

\*Requirements for Model 600 with silicon carbide inboard stationary face may vary.

*ASI has designed a selection of mechanical seals for virtually all industrial applications*



*Hastelloy is a trademark of Hayes Int'l, Inc., Aflas is a trademark of Asashi Glass Co., Ltd.*