Seal Plus SP1 Single and SP2 Double Mechanical Seals
The Logical Alternative to Component Seals

CARTRIDGE DESIGN
No measurement required, setting clips ensure the exact seal setting every time.

PREMIUM FACE COMBINATIONS
Comes standard with carbon vs. silicon faces. Optional silicon vs. silicon construction also available.

MULTIPLE SPRING DESIGN
Ensures even face loading. Alloy 276 construction standard.

ISOLATED SPRINGS
Springs are completely isolated from the pumpage to prevent clogging. Aflas is standard.

CAPTURED O-RINGS
Fully captured o-rings are unique and allow the SP1/SP2 to operate even under vacuum conditions.

PREMIUM ELASTOMERS STANDARD
Process wetted o-rings use Aflas material as standard. Provides a wide range of application flexibility.

TAPPED CONNECTIONS
SP1 comes standard with tangential flush taps with a vent & drain. SP2 comes standard with in/out ports.

CARBON RESTRICTING BUSHING
Provided as standard. Limits leaking to environment in the unlikely event of a catastrophic seal face failure.

316 STAINLESS STEEL GLAND
High-quality, 316 stainless steel to insure optimum chemical compatibility.

METAL-TO-METAL DRIVE
True metal-to-metal drive eliminates slippage and potential shearing of drive pins.

FULLY-BALANCED DESIGN
Allows for higher working pressures. Hydraulically balanced faces ensure optimum fluid film at the faces during process fluctuations.

SET SCREWS FOR POSITIVE DRIVE
Screws clamp directly to the shaft/sleeve ensuring positive lock. Drive screws will not deform the sleeve.

STAINLESS STEEL SLEEVE
Standard sleeve material is 316 SS.

Maximum Operating Pressure @ 3600 rpm: 300 psi @ 20°F (-5°C)
Maximum Operating Temperature: 400°F (205°C)
When Ease of Maintenance and Reliability Rule...

For years, conventional mechanical seals have been used in applications where, often due to cost, cartridge seals were prohibitive. Goulds Seal Plus SP1 and SP2 are changing all that! From the company you trust for the best process pumps in the industry, look to Goulds now for the most economical and reliable seal alternatives.

**SP1 Parts List and Materials of Construction**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rotary O Ring</td>
<td>AFLAS® 100</td>
</tr>
<tr>
<td>2</td>
<td>Sleeve O Ring</td>
<td>AFLAS® 100</td>
</tr>
<tr>
<td>3</td>
<td>Sleeve</td>
<td>316L Stainless Steel</td>
</tr>
<tr>
<td>4</td>
<td>Springs</td>
<td>Alloy 276</td>
</tr>
<tr>
<td>5</td>
<td>Rotary Face</td>
<td>Carbon or SiC</td>
</tr>
<tr>
<td>6</td>
<td>Stationary Face</td>
<td>SiC</td>
</tr>
<tr>
<td>7</td>
<td>Stationary O Ring</td>
<td>AFLAS® 100</td>
</tr>
<tr>
<td>8</td>
<td>Gland</td>
<td>316 Stainless Steel</td>
</tr>
<tr>
<td>9</td>
<td>Clamp Ring</td>
<td>316L Stainless Steel</td>
</tr>
<tr>
<td>10</td>
<td>Drive Screws</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>11</td>
<td>Clip Screws</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>12</td>
<td>Setting Clips</td>
<td>Brass</td>
</tr>
<tr>
<td>13</td>
<td>Anti-tamper Screws</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>14</td>
<td>Gasket</td>
<td>AF1 / GFT</td>
</tr>
<tr>
<td>15</td>
<td>Restriction Device O Ring</td>
<td>EPR</td>
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<td>16</td>
<td>Restriction Device</td>
<td>Carbon</td>
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All Tapped Connections are 1/4" NPT

**SP2 Parts List and Materials of Construction**

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<td>3</td>
<td>Sleeve</td>
<td>316L Stainless Steel</td>
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<tr>
<td>4</td>
<td>Springs</td>
<td>Alloy 276</td>
</tr>
<tr>
<td>5</td>
<td>Inner Rotary Face</td>
<td>Carbon or SiC</td>
</tr>
<tr>
<td>6</td>
<td>Inner Stationary Face</td>
<td>SiC</td>
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<tr>
<td>7</td>
<td>Stationary O Ring</td>
<td>AFLAS® 100</td>
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<td>8</td>
<td>Outer Stationary Face</td>
<td>Viton®</td>
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<td>9</td>
<td>Outer Rotary Face</td>
<td>Carbon</td>
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<tr>
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<td>Drive Band O Ring</td>
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<td>Clamp Ring O Ring</td>
<td>Viton®</td>
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<tr>
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<td>Clamp Ring</td>
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<td>Gasket</td>
<td>AF1 / GFT</td>
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</tbody>
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All Tapped Connections are 1/4" NPT
Standard Seal Flush Pot
for conventional plan 52 and
53 flush plans

**Features:**
- 2.64 US gallons (10 liters) or
  6.60 US gallons (25 liters) compact capacity
- 304 stainless steel construction to
  ASME VIII Div 1. 1995 / BS5500
  CAT III. 1997
- Maximum working pressure 232
  psig @ 212°F (16 barg @ 100°C).
  Tested to 348 psig (24 barg)
- All systems are shipped complete
  and fully pressure tested
- 1" (25.4mm) NPT port for top
  entry-level gauge
- Current and peak temperature
  strips fitted as standard
- Minimum fluid level indicator
- Sediment pipe on feed port
  prevents contamination going
  through the seal
- Integral mounting bracket
- High quality powder coat finish
- Internal cooling coil optional
- Push-in fittings standard with
  nylon hose
- Compression fittings and braided
  stainless lines available

Water Miser™ Flush Pot
for use with mill water and plan 53
and plan 54 flush plans

**Features:**
- 2.64 US gallons (10 liters) or
  6.60 US gallons (25 liters) compact capacity
- 304 stainless steel construction to
  ASME VIII Div 1. 1995 / BS5500
  CAT III. 1997
- Maximum working pressure 232
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- Compression fittings and braided
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Visit our website at www.gouldspumps.com

Goulds Pumps

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