Eliminate Flush Water Usage
For Virtually Leak-Free Sealing

The CMS 2000 injectable pump sealant is an environmentally friendly seal that operates with minimal to no leakage, keeping pump areas dry.

Improve Pump Sealing
Unlike conventional packings, CMS 2000 does not require process fluid or flush water leakage for cooling and lubrication. Process fluids stay in the pump, reducing product loss, disposal, and cleanup costs. This can also improve equipment life by eliminating leakage as a potential source of bearing contamination.

No Flush Water Required
CMS 2000 does not require cooling or flush water. This eliminates water intrusion into the process that could contaminate or dilute the pumped fluid, or require additional energy to adjust process temperature to compensate for the cooler flush water.

No Shutdown and Teardown to Repack
CMS 2000 can be added during equipment operation to maintain leak free sealing while reducing maintenance costs and downtime. Simply inject the CMS 2000 into the stuffing box lantern ring port inlet at any time. CMS 2000 can even be injected remotely.

Economic Advantages of CMS 2000 in Pump Sealing:

- No flush ever needed
  - Eliminate flush water costs
- Prevent leakage
  - Reduce product loss, disposal, and cleanup costs
- Improve equipment uptime
  - Reduce sleeve wear and extend bearing life
  - Additional CMS 2000 can be added while operating—no downtime for repacks
- Reduce maintenance costs
  - Can be used on slightly worn or pitted sleeves
  - No gland adjustments after installation
  - No pump disassembly to repack pumps
- Reduce inventory costs
  - The same formable sealant fits any stuffing box size
- Lower operating costs
  - Minimize product loss
  - Improve productivity

The Chesterton Stabilizer Cage can be used to maintain end ring loading in tough applications. For high temperature applications consult with a Chesterton Application Engineer.
Create a Solid Composite Ring That Has No Leak Paths

CMS 2000 is a high-purity, fiber-reinforced composite that forms a homogeneous mass inside the stuffing box. The sealant clings to the shaft sleeve on the inside diameter and the box bore on its outside diameter, molding to the irregularities on both surfaces. Internal Laminar Shear™ within the low friction sealant creates flow within the stuffing box, reducing sleeve wear. Braided end rings are generally used to prevent extrusion.

Technical Data

<table>
<thead>
<tr>
<th>Temperature Limit</th>
<th>205°C (400°F) white</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaft Speed</td>
<td>10 m/sec (2000 fpm) white</td>
</tr>
<tr>
<td></td>
<td>6 m/s (1200 fpm) FP</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>pH 1–13 white not recommended for oxidizers, fluorine, chlorine trifluoride and related compounds, and molten alkali metals</td>
</tr>
<tr>
<td></td>
<td>pH 0 – 14 FP</td>
</tr>
<tr>
<td>Product Characteristics</td>
<td>Available in cartridge, bulk, and online injector sticks.</td>
</tr>
<tr>
<td></td>
<td>Available in non-staining white, food grade (FP)</td>
</tr>
</tbody>
</table>

CMS 2000

<table>
<thead>
<tr>
<th>Description</th>
<th>Item Number</th>
<th>Item Number</th>
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</thead>
<tbody>
<tr>
<td>Injectable Compound</td>
<td>White</td>
<td>Food Grade (FP)</td>
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<tr>
<td>Cartridge</td>
<td>001048</td>
<td>–</td>
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<tr>
<td>CMS 2000 Injectable 13.2 liter</td>
<td>001047</td>
<td>–</td>
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<tr>
<td>CMS 2000 Injectable 3.8 liter</td>
<td>001046</td>
<td>127533</td>
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<tr>
<td>CMS 2000 Injectable 1.2 liter</td>
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</table>

Stabilizer Cage

<table>
<thead>
<tr>
<th>Cross Section Size</th>
<th>Spacer Pin</th>
<th>Spacer Pin Length</th>
<th>Rail</th>
<th>Item Number</th>
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<tr>
<td>mm</td>
<td>Inch</td>
<td>Quantity</td>
<td>mm</td>
<td>Inch</td>
</tr>
<tr>
<td>10</td>
<td>3/8</td>
<td>12</td>
<td>31.75</td>
<td>1.250</td>
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<tr>
<td>11</td>
<td>7/16</td>
<td>12</td>
<td>38.10</td>
<td>1.500</td>
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<td>1/2</td>
<td>12</td>
<td>47.75</td>
<td>1.880</td>
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<td>14</td>
<td>9/16</td>
<td>12</td>
<td>50.80</td>
<td>2.000</td>
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<td>16</td>
<td>5/8</td>
<td>12</td>
<td>57.15</td>
<td>2.250</td>
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<tr>
<td>20</td>
<td>3/4</td>
<td>12</td>
<td>66.80</td>
<td>2.630</td>
</tr>
</tbody>
</table>

The Stabilizer Cage is rated for a maximum service temperature of 110°C (230°F).

Application

The versatility of CMS 2000 allows for use in a variety of pumps including stock, white water, river water, water treatment, cooling tower, wastewater, lift, and sea water, as well as grinders and other rotating equipment. This makes CMS 2000 ideally suited for applications in the paper, ore processing, water, wastewater, food, power, chemical, and refining process industries.
Global Solutions, Local Service

Since its founding in 1884, the A.W. Chesterton Company has successfully met the critical needs of its diverse customer base. Today, as always, customers count on Chesterton solutions to increase equipment reliability, optimize energy consumption, and provide local technical support and service wherever they are in the world.

Chesterton's global capabilities include:
- Servicing plants in over 113 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

Visit our website at chesterton.com

CMS 2000 Delivery Systems

Online Injector
The Online Injector can be attached directly to the lantern ring inlet port with a fitting that allows for topping off of the CMS 2000 as needed—without the need to carry additional equipment.

Online Injector Item Number 329880
CMS 2000 Cartridges (14 pieces) Item Number 004559
CMS 2000 Cartridges (29 pieces) Item Number 004543

Manual Injection System
The Manual Injection System comes in its own case, equipped with the manual hydraulic unit, a three foot hose, a one foot hose, a quart of hydraulic fluid, male and female flow-through fittings, a spanner wrench, and a CMS 2000 volume calculator.

Manual Injection System Item Number 004403

Automated Injection System
The Automated Injection System offers increased delivery speeds, total portability, and all day power during in-field use. This system provides eight hours of battery-operated hydraulic delivery, automatic cylinder retraction, one-hand operation, and remote control capability. This unit contains the same fittings as the manual unit.

Automated Injection System (115 V) Item Number 004560
Automated Injection System (230 V) Item Number 004561

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