ELIMINATE FLUSH WATER USAGE

CMS 2000
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. Process fluids are contained within the pump, minimizing stuffing box leakage. This also improves your equipment life by eliminating leakage of process fluid or flush water as a potential source for bearings 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 teardown and shutdown to repack
Improve equipment maintenance efficiency and productivity. CMS 2000 can be added during equipment operation to maintain leak free sealing. Simply inject the CMS into the stuffing box lantern ring port inlet at any time.

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

For optimum performance we recommend the use of Chesterton Stabilizer Cage to maintain end ring loading in tough applications.
Create a solid composite ring that has no leak paths

CMS 2000 is a high-purity, fiber-reinforced composite which forms a homogeneous mass inside the stuffing box. The sealant clings to the shaft sleeve on the inside diameter and to the box bore on its outside diameter. Internal Laminar Shear™ within the low friction sealant, reduces sleeve wear. CMS 2000 seals against the sleeve by forming an endless composite ring, and molds to irregularities of the stuffing box and shaft sleeve. Packing end rings are generally used to prevent extrusion.

**Technical Data**

<table>
<thead>
<tr>
<th>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.</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injectable Compound</strong></td>
<td><strong>Temperature Limit</strong></td>
</tr>
<tr>
<td>Cartridge</td>
<td>205°C (400°F) white</td>
</tr>
<tr>
<td>CMS 2000 Injectable 13.2 liter</td>
<td>205°C (400°F) black</td>
</tr>
<tr>
<td>CMS 2000 Injectable 3.8 liter</td>
<td><strong>Shaft Speed</strong></td>
</tr>
<tr>
<td></td>
<td>10 m/sec (2000 fpm) white</td>
</tr>
<tr>
<td></td>
<td>8 m/sec (1600 fpm) black</td>
</tr>
<tr>
<td></td>
<td><strong>Chemical Resistance</strong></td>
</tr>
<tr>
<td></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 4–13 black not recommended for oxidizing agents</td>
</tr>
<tr>
<td><strong>Product Characteristics</strong></td>
<td>Available in cartridge, bulk, and Online Injector Sticks</td>
</tr>
<tr>
<td>Available in non-staining white, food grade, and black</td>
<td></td>
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</tbody>
</table>
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.

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.

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.

Chesterton ISO certificates available on www.chesterton.com/corporate/iso

GOLDN 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 100 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians

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