In the paper manufacturing process, wood pulp leaving the digester wash unit often must be bleached to attain the desired level of paper whiteness. Bleach plants whiten pulp through three to five stages of bleaching and water washing.

Micropump pumps are used in these applications to deliver the appropriate bleaching agent and to maintain the proper chemical balance in the bleaching towers.

**PUMPING REQUIREMENTS**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MICROPUMP SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOW RATE: 0.050 to 18.9 L/min (0.79 to 300 USG/hr) flow rates</td>
<td>We have variable speed pumps with flows from 0.158 to 42.9L/min (2.5 to 680 USG/hr)</td>
</tr>
<tr>
<td>CHEMICAL RESISTANT PUMP MATERIALS</td>
<td>Our pump construction materials stand up to most pulp bleaching chemicals</td>
</tr>
<tr>
<td>PRECISE FLOW CONTROL</td>
<td>We offer positive displacement gear pumps for precise metering of bleaching agents</td>
</tr>
<tr>
<td>LEAK-FREE OPERATION</td>
<td>Our pumps have magnetic drives, so no shafts penetrate the pump cavity, eliminating leak-prone dynamic shaft seals</td>
</tr>
<tr>
<td>MAINTAINABILITY</td>
<td>We offer Service Kits for easy field serviceability</td>
</tr>
</tbody>
</table>
Micropump cavity style pumps are commonly used for this application. Series GJ for lower flow, and Series GL or GN for higher flows. All pump base materials are 316 SS with PTFE wetted materials.

**SERIES GJ**
MAGNETIC DRIVE GEAR PUMP

- **FLOW RATE:** 158 to 6.8 L/min (2.5 to 107 USG/hr)
- **MAX DIFFERENTIAL PRESSURE:** 80 psi (5.6 Bar)
- **MAX SYSTEM PRESSURE:** 300 psi (21 Bar)
- **WETTED MATERIALS:** 316SS and PTFE
- **DRIVES:** NEMA, IEC, EagleDrive™ and Micropump drive mounts

**SERIES GL**
MAGNETIC DRIVE GEAR PUMP

- **FLOW RATE:** 2.3 to 26.6 L/min (36.5 to 421 USG/hr)
- **MAX DIFFERENTIAL PRESSURE:** 125 psi (8.6 Bar)
- **MAX SYSTEM PRESSURE:** 1500 psi (103 Bar)
- **WETTED MATERIALS:** 316SS and PTFE
- **DRIVES:** NEMA, IEC, drive mounts

**SERIES GN**
MAGNETIC DRIVE GEAR PUMP

- **FLOW RATE:** 12.3 to 43 L/min (194 to 860 USG/hr)
- **MAX DIFFERENTIAL PRESSURE:** 100 psi (6.9 Bar)
- **MAX SYSTEM PRESSURE:** 1500 psi (103 Bar)
- **WETTED MATERIALS:** 316SS and PTFE
- **DRIVES:** NEMA, IEC, drive mounts

This chart indicates optimal operating ranges for recommended products.

The unparalleled quality, performance record, reliability and long operating life of Micropump pumps and our extensive engineering expertise make Micropump a vital partner in this demanding market.