A standard for Cleanability, Durability and Performance - MagMixer MBI

The Lightnin MagMixer™ MBI sets the standard for cleanability, durability and performance in food, pharmaceutical, biotech and personal care applications. Features include a dry-running Hyper-Flo™ bearing design, one-piece tank plate and flow-through channels, totally eliminating contamination concerns. These technologically-advanced mixers are fast-becoming the critic’s choice for sanitary processing and storage applications – including plasma fractions, vaccines, injectables, media suspensions, buffer prep, cell culture and beverage blending.

DESIGNED FOR DURABILITY AND SUPERIOR PERFORMANCE

- Suitable for up to 30,000 liters (7,925 gal.) and viscosities up to 1,000 cp. (Viscosity limits depend on tank volume)
- Available CE Marked.
- Comes with Lightnin’s 100% process guarantee.

DESIGNED FOR EASY MAINTENANCE

- Unlike sleeve bearings, which must be sent back to the factory for replacement, Hyper-Flo bearings can be replaced on-site using only a pair of snap-ring pliers.
- Motors and drive assemblies weigh from 12-24 kgs (25-51 lbs.), depending on size, for easier handling.
- Drive can be rotated through 360º for easy maintenance access and to minimize interference with other external tank components.
- Common spare parts and same bearing design used in all four sizes of MBI.
- Easily maintained on-site, in seconds.

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader with approximately $5 billion in annual revenue, operations in more than 35 countries and over 14,000 employees. The company’s highly-specialized, engineered products and technologies are concentrated in Flow Technology and energy infrastructure. Many of SPX’s innovative solutions are playing a role in helping to meet rising global demand for electricity and processed foods and beverages, particularly in emerging markets. The company’s products include food processing systems for the food and beverage industry, critical Flow components for oil and gas processing, power transformers for utility companies, and cooling systems for power plants. For more information, please visit www.spx.com.
**MAGMIXER MBI 205**

The Lightnin MagMixer MBI 205 is an extension of the MagMixer MBI family. This small footprint design further establishes the series for its benchmark cleanability, durability and performance in pharmaceutical and biotechnology applications. This exceptionally versatile mixer is suitable for solutions in open and closed tanks from 20 liters (5 gal.)

---

**CLEANING TO A GREATER DEGREE...**

The cleanability of Lightnin’s MagMixer MBI impeller is proven - validated both in factory acceptance tests and in actual process performance in hundreds of installations.

**Designed for Maximum Cleanability**

- The patented Hyper-Flo™ bearing design has been proven more cleanable than sleeve bearing designs. Independent tests comparing the newer MagMixer MBI to an older design and the leading competitive product concluded that the MagMixer MBI is easier to clean, especially in applications involving sticky, hard-to-clean soils.

- Can be Cleaned in Place (CIP) using spray-only or immersion protocols.
- Can be run dry to permit complete draining during CIP cycles.
- Impeller assembly can be autoclaved – magnets designed to withstand temperatures up to 300°F.
- Bearings can be removed easily for Cleaning Out of Place (COP) or maintenance.
- The Hyper-Flo bearings are constructed of either Zirconium Oxide, Silicon Nitrite, or MP35N for corrosion resistance, strength and bio-compatibility.
**SPECIFICATIONS**

**Impeller**
- 3 bladed 316L Stainless Steel
- Hyper-Flo™ bearing design
- 20 μ-inch Ra finish with EP® standard (optional 10 μ-inch Ra finish with EP®)

**Tank Plate**
- 316L SS one-piece tank plate
- Certificate of Compliance and Mill Certificate shipped with each tank plate
- Surface finish per customer specification (32 μ-inch Ra minimum)

**Drive Assembly**
- .25 - .75 kW (1/3 - 1 HP)
- Lightweight aluminum alloy IP56 reducer with integral motor
- Washdown duty drive, with FDA approved lubricant 1.25 AGMA SF
- Severe-duty washdown motor
- 316SS pedestal with Tri-Clamp fitting
- Optional: 300-Series stainless steel drive available

**Motor Options**
- IP55 (washdown), 56C TEFC, Single-phase, 115V, 50 or 60 Hz, DC
- AC washdown duty, TENV stainless motor with inverter
- All stainless steel motor
- XP C&D inverter duty motor
- NEMA 4/12 SCR controller

**Custom Options**
- High alloy, non-ferrous tank plate and impeller
- Tank plates for jacketed vessels
- Tachometer
- White epoxy or stainless steel paint

---

**MagMixer MBI 205 (Dim. in inches)**

<table>
<thead>
<tr>
<th>Model</th>
<th>HP</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Opt.</th>
<th>5:1 ratio (nominal 350 rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBI 205</td>
<td>.33</td>
<td>3</td>
<td>3.5</td>
<td>3.3</td>
<td>6.3</td>
<td>2.4</td>
<td>8.4</td>
<td>13</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**MagMixer MBI 410, 610, 810 (Dim. in inches)**

<table>
<thead>
<tr>
<th>Model</th>
<th>HP</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Opt.</th>
<th>9.25:1 ratio (nominal 175 rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBI 410</td>
<td>.50</td>
<td>6</td>
<td>5</td>
<td>2.5</td>
<td>6.5</td>
<td>2.4</td>
<td>8.4</td>
<td>13</td>
<td>6.25</td>
</tr>
<tr>
<td>MBI 610</td>
<td>.75</td>
<td>8</td>
<td>5.1</td>
<td>3.4</td>
<td>6.5</td>
<td>2.4</td>
<td>9.1</td>
<td>15</td>
<td>8.75</td>
</tr>
<tr>
<td>MBI 810</td>
<td>1.0</td>
<td>11.75</td>
<td>5.2</td>
<td>3.9</td>
<td>7.2</td>
<td>2.4</td>
<td>9.1</td>
<td>16.5</td>
<td>11.25</td>
</tr>
</tbody>
</table>

---

SPX reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com. The green “>” is a trademark of SPX Corporation, Inc. ISSUED 12/2013 B-953 COPYRIGHT © 2013 SPX Corporation