Nettco S-Series Mixer
SANITARY STAINLESS STEEL - PORTABLE/FIXED MOUNT MIXERS
Introducing a new economical Portable and Fixed Mount Mixer System configured to meet your sanitary needs

MEETS 3A AND EC 1935:2004 STANDARDS FOR THE FOOD INDUSTRY

The Nettco S-Series sanitary mixer is available in a wide range of mixing and mounting configurations utilizing a unique modular assembly design. With one mixer it is possible to configure a clamp-on, open tank, or sealed mixer design. This mixer can be quickly converted from one mounting arrangement to another. Modifying the mounting configuration can be accomplished in less than two minutes.

- Highest quality at a competitive price
- For new and existing tank sizes: 0.1 - 20 m³ (25 - 5,000 U.S. gal.)
- Designed for Diary, Beverage, Oil, Prepared Foods and more
- Wide range of impellers and mounting options

UNIQUE MODULAR CONCEPT FEATURES:

- Sanitary, all stainless steel design
  - 304 SS housing
  - Washdown (IP55), inverter ready motor
  - Proven planetary gearing – robust and reliable
  - Food grade lubricant
  - Unique, innovative modular design
  - Reverse-taper shaft attachment for added safety
  - Stainless Steel Motor, 0.37 - 2.2 Kw (1/2 - 3 HP)
    - Optional air motor available
- Fully standardized product
- Direct and gear options for this global use mixer provides full range of shaft speeds (RPM)
  - 1450, 290, and 240 (50 Hz)
  - 1750, 350, and 280 (60 Hz)
- Shaft lengths up to 2100 mm (84”)
- Simple, compact design, 3A and EC 1935:2004 clean design available
- Economical
- Impellers from world’s mixing technology leader
  - Multiple style impellers available
    - Hydrofoil, PBT and FP 100 (Marine Props)
MODULAR DESIGN FEATURES:

Clamp Module (P):
- Bolted onto base module
- Clamps to vessel or stand
- 0° to 20° horizontal mounting
- 0° to 90° vertical adjustment
Adjustable mounting - controls vessel contents swirl for improved mixing

Fixed-Mount Open Tank Module (Q):
Open Tank Flange Module
- Attaches to base module
Use on open tanks where a seal is not required
- Vertical on center for baffled tanks
- Vertical offset for unbaflled tanks
- Can be angular mounted

Bung Adaptor
Allows for mixing in drums by fitting securely into the opening of the lid without the need for clamps or support brackets
- Attaches to base module
- For use on standard drum with a 2" NPT bung
- Stainless Steel construction to prevent corrosion

Fixed-Mount Closed Tank Lip Seal Module (L):
Closed Tank Sealed Module
- Attaches to base module
For closed tanks with seal requirements
- ANSI or DIN Flange Mount Lip Seal
- Food grade lip seal good for 0.3 BAR (5 PSI) (allowable tank pressure)

Sanitary Flange Lip Seal:
Clamps to sanitary tank flanges for a simple, clean connection when a low pressure sealing device is required.
- Attaches to base module
- 3", 4" and 6" Sanitary Flange designs available
- Food grade lip seal good for 0.3 BAR (5 PSI) (allowable tank pressure)
- Stainless Steel construction to prevent corrosion

Fixed-Mount Closed Tank Mechanical Seal Module (S):
Closed Tank Sealed Module
- Attaches to base module
For closed tanks with seal requirements
- ANSI or DIN Flange Mount
- Single dry-running mechanical seal good for 5 BAR (75 PSI) (allowable tank pressure)

Sanitary Flange Mechanical Seal Assembly:
Clamps to sanitary flanges for a simple, clean connection when a mechanical seal is required.
- Attaches to base module
- 3", 4" and 6" Sanitary Flange designs available
- Single dry-running mechanical seal good for 5 BAR (75 PSI) (allowable tank pressure)
- Stainless Steel construction to prevent corrosion
MODULAR MIXING SYSTEM:

- Base Module
  - 0° Clamp Module
  - 20° Clamp Module
  - Flange Module
  - Lip Seal Module
  - Mechanical Seal Module
  - Bung Adaptor
  - Sanitary Flange
  - Mechanical Seal
  - Sanitary Flange
  - Lip Seal
  - Base with 20° Clamp
  - Base with Flange Module
  - Base with Lip Seal Module
  - Base with Mechanical Seal Module
  - Base with Bung Adaptor
  - Base with Sanitary Flange
  - Mechanical Seal
  - Base with Sanitary Flange
  - Lip Seal
### MIXER “BLEND TIME SELECTION TABLE”
#### 60 HZ SELECTIONS

**TANK VOLUME/U.S. GALLONS**

<table>
<thead>
<tr>
<th>VISCOSITY/cP or mPa·s</th>
<th>1</th>
<th>100</th>
<th>250</th>
<th>500</th>
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<th>2500</th>
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<td></td>
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<td>FP</td>
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<td>FP</td>
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<td>FP</td>
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<td>FP</td>
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<td>11.2</td>
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<tr>
<td></td>
<td>3.8</td>
<td>H</td>
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<td>15.1</td>
<td>H</td>
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**Legend:**
- **Series:** Nettco MS
- **Drive Ratio:** 1, 5, 6, S*, 8**, 9**, 10**
- **Mounting:** P, Q, L
- **Motor Code:** 1, 2, 3, 4, 5, 6
- **HP/kW:** (0.5/0.37), (0.75/.055), (1.0/0.75), (1.5/1.1), (2/1.5), (3/2.2), (0.5/.37), (0.75-2/.55-1.5), (3/2.2)

**Chart Reference:**

<table>
<thead>
<tr>
<th>Model Design</th>
<th>Blend Time (min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Impeller</td>
</tr>
<tr>
<td>FP = FP-100, H = Hydrofoil</td>
<td><strong>Example: Mi1Q2</strong></td>
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- **Tank height to diameter ratio 0.8 - 1.2**
- **Liquids with Newtonian viscosity characteristics**
- **S.G. difference of liquids <0.1**
- **Use for mild blending applications**
- **Maximum density 1.10 g/cm³**
- **Maximum viscosity ratio - 10:1 (>250cP)**
- **Mixer in operation during filling and emptying**
## Mixer "Blend Time Selection Table"

### 50 Hz Selections

<table>
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<tr>
<th>Viscosity/cP or mPa-s</th>
<th>1</th>
<th>100</th>
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**Model Design**

<table>
<thead>
<tr>
<th>Blend Time (min.)</th>
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<tbody>
<tr>
<td>No. Impeller</td>
</tr>
<tr>
<td>FP = FP-100, H = Hydrofoil</td>
</tr>
</tbody>
</table>
**Multiple Impeller Styles:**

- **PBT Impeller:**
  For low-to-medium viscosity flow controlled applications. Although superseded by the Hydrofoil, the PBT still has a specific role in applications where a degree of fluid shear is beneficial to the overall process result.

- **FP 100 Impeller (Marine Prop):**
  Recommended for applications requiring moderate pumping action and powder-wetting capabilities.

- **Hydrofoil Impeller:**
  For low viscosity flow controlled applications. Combines performance and high flow efficiency not found in other axial flow impellers.

**Gear Drive Mixer Repair Kit:**
- Service kits available for rapid replacement of routine service items.

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E: lightnin@spxflow.com • www.spxflow.com/lightnin

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