Nettco S-Series Mixer
Sanitary Stainless Steel
Portable and Fixed Mount Mixers
Introducing A New Economical Portable and Fixed Mount Mixer System Configured To Meet Your Sanitary Needs.

Meets 3A 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 or existing tank sizes: 0.1 - 20 m³ (25 - 5,000 gal.)
- Designed for Dairy, Beverage, Oils, 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)
  - 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, 3A clean design available
- Economical
- Impellers from world’s mixing technology leader
  - Multiple style impellers available
    - Hydrofoil, PBT and FP 100 (Marine Prop)

Typical Product Applications

- Dairy
- Prepared Foods
- Beverage
- Pharma
- Personal Care
Modular Design Features:

**Clamp Module (P):**
- Bolted onto base module
- Clamps to vessel
- Clamps to stand
- 0° or 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 unbaffled tanks
- Can be angular mounted

**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 340 kPa (50 PSI) (allowable tank pressure)

**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 170 kPa (25 PSI) (allowable tank pressure)

Modular Mixing System:
## Sanitary Mixer “Blend Time Selection Table”
### 60 HZ Selections

<table>
<thead>
<tr>
<th>TANK VOLUME/GALLONS</th>
<th>VISCOSITY/cP or mPa-s</th>
<th>1</th>
<th>100</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2500</th>
<th>5000</th>
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</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>MS1_1 (1)</td>
<td>1</td>
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<td>FP</td>
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<td></td>
</tr>
<tr>
<td>&lt;100</td>
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<td>3.6</td>
<td>FP</td>
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<tr>
<td>&lt;500</td>
<td>MS1_1 (6)</td>
<td>1</td>
<td>3.8</td>
<td>FP</td>
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<tr>
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<td>11.2</td>
<td>H</td>
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<tr>
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<tr>
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<td>12.8</td>
<td>H</td>
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</tbody>
</table>

**Legend:**
- **Series:** Nettco MS
- **Drive Ratio:** Nottco MS 0.5/0.37, 0.75/0.55, 1/0.75, 1.5/1.1, 2/1.5, 3/2.2
- **Mounting:** P, Q, L, S*  
- **Motor Code:** 1, 2, 3, 4
- **Motor HP/kW:** 0.5/0.37, 0.75/0.55, 1/0.75, 1.5/1.1, 2/1.5, 3/2.2

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**Chart Reference:**
- **Model Design**
  - **No. Impeller:** P, Q, L, S*
  - **Imp. Dia.:** 1, 2, 3, 4
  - **Imp. Type:** H

**Blend Time:**
- FP = FP-100, H = Hydrofoil

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- **Example:** MS1Q2

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**Notes:**
- 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

*Direct Drive not available with seal.*
Sanitary Mixer “Blend Time Selection Table”

50 HZ

<table>
<thead>
<tr>
<th>VISCOSITY/cP or mPa-s</th>
<th>1</th>
<th>100</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2500</th>
<th>5000</th>
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<tr>
<td>&lt;100</td>
<td>MS1_1 (1)</td>
<td>1 104 FP</td>
<td>MS1_1 (1)</td>
<td>1 104 FP</td>
<td>MS1_1 (1)</td>
<td>1 97 FP</td>
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<td>1 104 FP</td>
<td>MS1_1 (1)</td>
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<td>MS5_1 (2)</td>
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<td>MS1_1 (2)</td>
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<td>MS5_1 (1)</td>
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<tr>
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<td>MS1_1 (4)</td>
<td>1 104 FP</td>
<td>MS5_1 (2)</td>
<td>1 325 H</td>
<td>MS5_1 (1)</td>
<td>1 325 H</td>
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<td>1 325 H</td>
<td>MS5_1 (3)</td>
<td>1 325 H</td>
<td>MS5_3 (9)</td>
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<tr>
<td>&lt;2000</td>
<td>MS1_1 (7)</td>
<td>1 104 FP</td>
<td>MS5_1 (4)</td>
<td>1 325 H</td>
<td>MS5_1 (5)</td>
<td>1 325 H</td>
<td>MS5_3 (11)</td>
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<tr>
<td>&lt;2500</td>
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<td>1 325 H</td>
<td>MS5_2 (7)</td>
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<td>MS5_3 (15)</td>
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<td>&lt;3750</td>
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<td>MS5_1 (6)</td>
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<tr>
<td>&lt;5000</td>
<td>MS5_1 (5)</td>
<td>1 325 H</td>
<td>MS5_1 (9)</td>
<td>1 325 H</td>
<td>MS5_2 (13)</td>
<td>2 325 H</td>
<td>MS5_4 (27)</td>
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<td>&lt;7500</td>
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<td>MS5_4 (37)</td>
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<td>&lt;10000</td>
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<td>MS5_3 (18)</td>
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<td>MS5_5 (32)</td>
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<td>&lt;20000</td>
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<td>MS5_5 (32)</td>
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### Multiple Impeller Styles:

<table>
<thead>
<tr>
<th>Impeller Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hydrofoil Impeller:</strong></td>
<td>For low viscosity flow controlled applications. Combines performance and high flow efficiency not found in other axial flow impellers.</td>
</tr>
<tr>
<td><strong>FP 100 Impeller (Marine Prop):</strong></td>
<td>Recommended for applications requiring moderate pumping action and powder-wetting capabilities.</td>
</tr>
<tr>
<td><strong>PBT Impeller:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Service kits available for rapid replacement of routine service items:

- Helical Coupling
- Sun Gear
- Planetary Gear Set
- Retaining Ring
- Ring Gear
- Snap Ring
- Snap Ring
- Upper Bearing
- Lip Seal
- Snap Ring
- Lower Bearing
- Lip Seal (3A Listed)
### L Unit

#### Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Weight (lb)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1.25</td>
<td>1.5</td>
<td>22.1</td>
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<td>12</td>
<td>47</td>
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<td>24.0</td>
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<tr>
<td>L2.5</td>
<td>3.75</td>
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<td>38</td>
<td>13</td>
<td>77</td>
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<td>33.3</td>
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<td>L5</td>
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<td>99.0</td>
<td>54</td>
<td>15</td>
<td>131</td>
<td>23</td>
<td>45.0</td>
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</tbody>
</table>

#### Notes:
1. Dimensions are for reference only unless certified.
2. Lower impeller is equipped with stainless steel when required.
3. Mower/Belt Drive is less than 1 HP and inverter.
4. Different upon specific application.
5. Standard mounting flange data.
6. Mower/Belt Drive is less than 1 HP and inverter.
7. Mower/Belt Drive is less than 1 HP and inverter.
8. Mower/Belt Drive is less than 1 HP and inverter.

### P Unit

#### Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Weight (lb)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tbody>
<tr>
<td>P1.25</td>
<td>1.5</td>
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<td>47</td>
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<tr>
<td>P2.5</td>
<td>3.75</td>
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<td>131</td>
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</tr>
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</table>

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### Q Unit

#### Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Weight (lb)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<tbody>
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<tr>
<td>Q2.5</td>
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<td>54.0</td>
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<td>13</td>
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<td>33.3</td>
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<tr>
<td>Q5</td>
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<td>99.0</td>
<td>54</td>
<td>15</td>
<td>131</td>
<td>23</td>
<td>45.0</td>
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</tbody>
</table>

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### S Unit

#### Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Weight (lb)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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<td>24.0</td>
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<tr>
<td>S2.5</td>
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<td>13</td>
<td>77</td>
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<td>S5</td>
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<td>54</td>
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