Chemineer™
Small Mixer
Solutions for Industrial Applications
Optimum Agitation Design… for Batch and Continuous Processing

Successful mixing applications come in a variety of sizes, from small lab scale to full size, multimillion gallon vessels. We offer a wide range of agitation equipment to serve any of your process needs. We are able to provide standard, off the shelf small mixers within 24–48 hours or to completely custom engineer smaller units specific to your process and mechanical requirements.

Industry leading, sophisticated process and mechanical design software quickly generates solutions complete with quotations, custom assembly/dimension drawings and design loads in paper or electronic formats. Computational Fluid Mixing and Laser Doppler Anemometry can also be used to address process challenges.

**Gear Reduced DT Mixer**

1. Industry standard, off the shelf, NEMA electric or air motor
2. Advanced, heat treated helical gearing
3. Gear drive is permanently lubricated with high performance, synthetic grease
4. Sealed gear drive prevents both product and lubricant contamination
5. Helical, AGMA quality gears provide smooth, quiet operation
6. Elastomeric lip seal
7. Heavy duty, permanently lubricated and sealed for life bearings
8. Chuck coupling with dual set screws or bolted flange coupling (also available), allow for shaft removal without disassembling the unit

**Sealed Tank Models**

- DTO models
- Flexible configurations to meet your requirements
- Easy installation
- Low maintenance
- Direct or gear drive capability
- Shaft attachment: chuck, flanged or threaded couplings
- Operating speed flexibility: ask for designs below first critical speed as they eliminate the need for programming speed avoidance ranges
- Right angle drives offer low head room for tight spaces
- Small footprint for minimum interference with nozzles and process piping

**Open Tank Models**

- DTNS, DTN, DTA, DTL models
- Mechanical seals
  - Dry or wet running
  - Single, double or gas lift off designs
  - Others available upon request
- Optional shaft drop collar to facilitate seal removal
- Lip seals and stuffing boxes
- Shaft attachment: Flanged or threaded couplings
- Operating speed flexibility: Request designs below the first critical speed as they eliminate the need for programming inverter speed lock outs
- Mounting flanges: ANSI, ferrule (tri-clamp), DIN, special

**Mechanical Spectrum**

- Continuous or batch mixing
- Flexible selection of output speeds
- Mixers up through 5 HP
- Shaft diameters 0.625”, 1”, 1.5”
- Positive shaft attachment eliminates inherent problems with grip spring designs
- 316/316L stainless as standard, high alloys, finishes and coatings available upon request
- Full range of impellers available
- Electric and air (dry or lubricated) motors
- Controls and monitoring devices available

Gear reduced mixers are available with clamp, cup plate, vibration insulation plate, or 10º angle riser.
Quick Selection Chart

<table>
<thead>
<tr>
<th>Typical Product</th>
<th>Viscosity (CP)</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>500</th>
<th>1,000</th>
<th>2,000</th>
<th>3,000</th>
<th>5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water, Kerosene</td>
<td>1</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>30XP-1.5</td>
<td>30XP-1.5</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>50DTC-2.0</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>100</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>30XP-1.5</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
</tr>
<tr>
<td>Glucose, Latex Paint</td>
<td>250</td>
<td>10XP-0.5</td>
<td>10XP-0.5</td>
<td>30XP-1.5</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
</tr>
<tr>
<td>Glycerin</td>
<td>500</td>
<td>10XP-0.5</td>
<td>30XP-1.5</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
</tr>
<tr>
<td>Castor Oil</td>
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<td>30XP-1.5</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>40XP-1.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
<td>50DTC-2.0</td>
</tr>
</tbody>
</table>
Dimensions

Dimensions Chart

<table>
<thead>
<tr>
<th>Dimensions in Inches</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>30XPC</td>
<td>30DTD</td>
</tr>
<tr>
<td>B</td>
<td>4.75”</td>
</tr>
<tr>
<td>C</td>
<td>7”</td>
</tr>
<tr>
<td>D</td>
<td>7”</td>
</tr>
</tbody>
</table>
Portable Models

- Rugged cast aluminum housing
  - High strength, low weight design
  - Integral handle for ease of positioning
- Multi-directional clamp for horizontal and vertical adjustment
- Optional mounts
  - Cup plate mounting for increased stability
  - Threaded bung mount for drum mixing with collapsible impeller that fits through a standard opening
- Shaft attachment: Chuck or flanged couplings
- All stainless housings and motors available for superior cleanliness and corrosion protection
- Standard designs available in 24 – 48 hours

Optional cup plate allows for periodic shaft angle adjustment while still permanently affixed

An optional 2” NPT bung mount is also available for mixing the contents of standard drums

Impeller Process Technology

Our impeller process technology is effectively applied across your spectrum of applications ensuring successful, repeatable results from lab scale to full scale operations.

Our mixing expertise includes low shear liquid-liquid/solids blending, gas dispersion, high shear blending and viscous mixing. Whether it is R&D or production phase, we have the expertise to solve your mixing challenges.

An impeller bulletin is available with additional information.