• Thorough “corner-over-corner” mixing action
• Saves time, labor and money
• Use a separate drum for each batch
• No container to purge between batches
• Common drums make economical vessels

Mixing in a Closed Drum Means Less Hazards
Enjoy the benefits of mixing inside closed shipping drums. Eliminate worker exposure to dangerous ingredients, spills and risk of contamination. Mix right inside a sealed drum with a Morse Drum Tumbler™.

Mix products inside a drum
29” to 37” (74 to 94 cm) tall
18” to 23.5” (46 to 60 cm) diameter

Capacity:
800 Lb. (363 kg) Full Drum
400 Lb. (181 kg) Half-Full Drum

Half-full Capacity is an indication of the capacity for tilting an unbalanced, bottom-heavy drum. A partially full drum with an unbalanced and shifting load is harder to tilt than a full drum.

Tumble a Closed Plastic, Steel or Fiber Drum
Load an upright drum with your hoist or crane
Secure your drum in holder with web strap and two top clamps

Open the hinged ratchet plate and two top clamps, then load a drum into the tumbler with model 92 Below-Hook Drum Lifter and your hoist or crane. Or with your forklift, model 284 Fork Hook, and model 92 Below-Hook Drum Lifter (inset).

Secure the drum in the tumbler using the web strap and ratchet around the drum, and tightening the two top clamps. Then turn the motor on to begin drum tumbling.
Control Mast and AC Control Box for Model 309-1 NEMA 4/12 for NON-Hazardous Areas
Includes Control Mast and Control Box with:
- Fixed Drum Rotation Speed at 14 RPM
- Timer adjusts from a few seconds to 16 hours
- Start and Stop Buttons
- Red Emergency Stop Button
- Lockable Main Disconnect to shut off and lock out power to the unit
- Wire terminals for external connection of safety interlock switch

Control Mast and AC Control Box for Model 309-3 NEMA 4/12 for NON-Hazardous Areas
Includes Control Box with:
- Variable Speed Drum Rotation from 2 to 20 RPM
- Timer adjusts from a few seconds to 16 hours
- Start and Stop Buttons
- Red Emergency Stop Button
- Lockable Main Disconnect to shut off and lock out power to the unit
- Wire terminals for external connection of safety interlock switch

Control Mast and Explosion Proof AC Control Box NEMA 7/9 for Hazardous Areas
Includes Control Mast and Explosion-Proof Control Box with:
- Fixed Drum Rotation Speed at 14 RPM (12 RPM on 50Hz models)
- Start and Stop Buttons
- Run / Jog Selector Switch
- Wire terminals for external connection of safety interlock switch

Guard Enclosure Kits (Sold Separately)
Enclosures with Safety Interlock to Meet OSHA Requirements
Install all Morse Rotators in accordance with local requirements for enclosure and safety interlock, etc. One way to accomplish this is with a Morse enclosure with safety interlock, so the rotator automatically turns off when enclosure door is opened. Power connections and motor controls must also comply with applicable local codes.
For OSHA compliance in the USA, see OSHA subpart O.1910.212(a)(4) “Barrels, containers, and drums. Revolving drums, barrels, and containers shall be guarded by an enclosure which is interlocked with the drive mechanism, so that the barrel, drum, or container cannot revolve unless the guard enclosure is in place.”
Enclosure outside post-to-post dimensions: L76” x W52” x H63.25” (193 x 132 x 161 cm)

Control Mast and Air Controls Included with Model 309-A
Air Controls Include:
- Filter, Regulator and Lubricator (FRL)
- On / Off Valve

Website: morsedrum.com
## Drum Tumbler™ Model Numbers

<table>
<thead>
<tr>
<th>Model #</th>
<th>Motor Style</th>
<th>HP</th>
<th>Phase</th>
<th>Motor Voltage</th>
<th>Hertz</th>
<th>Amp Draw</th>
<th>Drum RPM</th>
<th>Control Package</th>
<th>Option #</th>
<th>Guard Enclosure Kit #</th>
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<tbody>
<tr>
<td>309-1</td>
<td>TEFC</td>
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<td>115</td>
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<td>14 RPM</td>
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<td>14 (Vary with air flow &amp; pressure)</td>
<td>On/Off Air Valve, Filter, regulator, lubricator included with 309-A ***</td>
<td>GEK-309-A</td>
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### Models for Countries with 50Hz Power Supply

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<th>Model #</th>
<th>Motor Style</th>
<th>HP</th>
<th>Phase</th>
<th>Motor Voltage</th>
<th>Hertz</th>
<th>Amp Draw</th>
<th>Drum RPM</th>
<th>Control Package</th>
<th>Option #</th>
<th>Guard Enclosure Kit #</th>
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<td>GEK-309-E3</td>
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</table>

** ONLY NON-Explosion Proof ** AC Control Packages include a pre-wired control box. Models with explosion proof Control Packages have no wiring from the NEMA 7/9 control box to the motor. Please consult an electrician to complete the wiring in accordance to your local code.

** Explosion Proof motors on models 309-E1 and 309-E1-50 are rated for Class 1 Group D. Other Explosion Proof motors are rated for Class I Group D, and Class II Groups F and G.

### Air Controls included with model 309-A

** Includes: On / Off Air Valve, and Filter, Regulator, Lubricator (FRL)**

Air powered model requires plant air at 40 to 60 psi and flowing at a rate of 40 scfm. Air Powered Drum Tumbler (model 309-A) rotates a drum at 14 RPM and allows you to vary RPM with air flow and pressure. Sound level during operation is about 75 db.

### Crates for Export

<table>
<thead>
<tr>
<th>Model #</th>
<th>Fully Enclosed Crates for Export - Heat Treated and IPPC Compliant</th>
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</thead>
<tbody>
<tr>
<td>5979X-P</td>
<td>Export Drum Tumbler (with or without Control Package)</td>
</tr>
<tr>
<td>5980X-P</td>
<td>Export Drum Tumbler, Control Package and Guard Enclosure Kit</td>
</tr>
</tbody>
</table>

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Spec Sheet F309 (Updated 23 Jul, 2020)