DIRECT DRIVE
SINGLE SIGMA MIXER (DDM-S)

- Open Frame Design
- Direct Drive Agitator
- Z-Style or Sigma Blade for Mixing Cookies, Crackers, Buttermilk Biscuits, Corn Tortillas, Pie Doughs, Stiff Fillings, Pretzels and a Variety of Specialty Snacks

FEATURES AND BENEFITS

- Easy access open frame design allows easy access for routine maintenance and sanitation
- Heavy duty direct drive system with solid stainless steel sanitary agitator
- Most robust frame and bowl design in the industry
- Heavy duty mechanical tilt mechanism for up to 120° tilt
- Sanitary shaft seals designed for easy removal
### MECHANICAL FEATURES

#### Frame Assembly
- Heavy duty 304 stainless steel open frame design
- Lift lugs
- Anti-vibration pads

#### Bowl Assembly
- Mechanically tilted bowl 120° tilt towards the front
- Heavy duty 304 stainless steel
- Reinforcement bars added to bowl structure for maximum resistance to shock
- Bowl rest on Nylatron bushings

#### Agitator and Drive Assembly
- Solid SS Sigma or Z-style Agitator, welded on the shaft sleeves, split at main shaft
- Solid stainless steel Y-type spiders split at main shaft and agitator bars
- Stainless steel primary agitator bars mounted on lubrication free UHMW bushings
- Main shaft seals are easily removable and fabricated of polyethylene for exceptional durability and easy sanitation
- 5 1/2” diameter stainless steel main shaft
- Single end Direct Drive shaft mounted gearmotor
- Wash down duty gearmotor with thermistor overheat protection

#### Top Assembly
- Fabricated from 304 stainless steel
- 8” O.D. sliding four gate
- Canopy scraper
- Flour vent
- Option also available two (2) stainless steel liquid inlets

#### Tilting Assembly
- Mechanical tilting mechanism allowing 120° tilt towards the front
- Gearmotor with brake, chain and sprocket, air driven calliper disk brake mounted on tilting sprocket
**Main Electrical Panel**

Standard Control Panel is stainless steel machine mounted. Also available as a remote enclosure on legs, either painted or stainless steel.

- Main fused disconnect switch
- AC inverter plus line reactor for agitator drive motor
- Reversing fixed voltage contactor for bowl tilt motor
- Allen-Bradley programmable logic controller (PLC)
- Exhaust fan cooling, alternative options for cooling include air conditioner or EXAIR compressed air cooler (on remote enclosure)
- Main Voltage: 380 Volts/ 3PH /50Hz (other voltages available)
- Safety Switch on end door

**Operator Controls**

Standard is a stainless steel enclosure mounted on mixer front. Option also available to located operator control station on a remote pedestal.

- Allen-Bradley PanelView Plus color touch screen HMI which displays:
  - Mixing Time
  - Dough Temperature
  - Alarm Messages
  - Product Codes
  - Total Operation Time Clock
  - Amperes
  - Mixing (slow, fast, stop)
  - Tilting (lower, raise)
  - Emergency Stop
  - High/low speed jog operation with special anti-jog function
# DIRECT DRIVE

## SINGLE SIGMA MIXER (DDM-S)

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Batch Weight (Min/Max)</th>
<th>Motor kW (HP)</th>
<th>RPM Low/High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sigma 400</td>
<td>90/180</td>
<td>15 (20)</td>
<td>35/70</td>
</tr>
<tr>
<td>Sigma 600</td>
<td>136/272</td>
<td>22 (30)</td>
<td>35/70</td>
</tr>
<tr>
<td>Sigma 800</td>
<td>181/362</td>
<td>30 (40)</td>
<td>35/70</td>
</tr>
</tbody>
</table>

Standard agitator RPM: 35/70 (other RPM’s are available on request)

### MIXER WARRANTY

- 1 year standard warranty on all Mixer components except the mixer bowl which is 5 years
- Bowl warranty covers on site repair of leaks including labor and traveling expenses
- This warranty is valid only if the work is carried out by AMF. The customer must immediately advise AMF when a bowl jacket leak occurs so that AMF can take the necessary measures to resolve the issue. Should an urgent issue arise that does not allow AMF to get someone on site, the customer is authorized to “patch” the leak. AMF will quickly take proper actions to permanently fix the leak.
- It will be at the sole discretion of AMF to decide if the damage occurred to the mixer bowl jacket requires a complete replacement of bowl as opposed to on site repairs.
- Customer is responsible to operate and maintain the mixer according to the Operations Manual and specifications. Warranty is void if Mixer is sold to a third party
- **NOTE:** AMF reserves the right to review and approve all production requirements prior to acceptance of order.