

Manual Control Panel

The Mixer Controls will be a Manual/Semi-Automatic Panel.

Running Mixer Motor

- A selector switch will let the motor run either in Auto or Manual Mode. A Timer controls the run time of the Mixer when it is in Auto Mode. When the Mixer is in Manual mode the Mixer Motor starts when Start Push Button is pressed; the Mixer Motor stops when the Stop Push Button is pressed. Prior to running, The Lid, Discharge Access Cover, and Discharge Air Cylinder Swing Gate should be in the closed position. In addition, the Discharge Plug should be closed prior to loading material. If discharging material, the Discharge Plug can be in the open position to run.
 - **Auto Mode:** Timer will run when Start Push Button is selected. When the Timer runs down and the motor stops, the operator can again push Start PB and the motor will start based on the timer. When the timer runs down the Motor comes to a stop. If the operator hits the STOP PB then the motor will stop. If they hit the START PB again then the motor will start and timer will reset.
 - **Manual Mode:** When the selector switch is in Manual Mode, the operator can push the Start PB and the Mixer will run indefinitely until the operator selects the Stop PB or the Temperature reaches the High Temp cut off that is programmed into the Temperature Meter (See page 2)
 - **Discharge Mode:** After the batch is finished, the material is discharged through the discharge opening. Open the discharge plug and run the motor at high speed for a thorough discharge of material. This can be done in Auto or Manual mode. In Auto mode the motor will run until time elapses. It is advisable to discharge in Manual mode so operator can control run time of mixer. Discharging of Material is recommended at 20M/S (30Hz) or less depending on the Fluidity of the material.

Interlocks

- The motor should not start when the Lid Limit Switch is in the open position.
- The motor should not start when the Access Cover Limit Switch is in the open position.
- The motor should not start when the Discharge Chute Swing Away Limit Switch is in the open position.
- The motor should not start when the E-Stop is pushed.
- The Discharge should not open/close when the Access Cover is in the open position.
- The Discharge and Lid should not open/close when the E-Stop is pushed.
- The Starter should not allow the motor to start when the E-Stop is pushed.
- The Lid should not close when the Safety Pin is Engaged (Feedback is from Switch at Pin)
- The Lid should not open when the motor is running.

Hardware on Front of Panel

- Selector Switch – Select between Manual, Off, and Auto Mode
- Green Ready LED Light – Indicates all permissive and interlocks are met and Mixer is ready to Mix (Green should be illuminated for Mixer Ready indication).
- Estop – Remove power from Mixer
- Timer – Sets Run time for Auto Mode
- Temperature Meter – Indicates Temperature of Material (Fill Level of Material should reach temperature sensor when mixing in order for the to accurately read material temperature)
- Breaker – Disconnect for Power to Mixer and Panel
- Start PB – Starts Motor
- Stop PB – Stop Motor
- Discharge Open PB – Opens Discharge Plug
- Discharge Close PB – Closes Discharge Plug
- Lid Open PB – Opens Lid
- Lid Close PB – Closes Lid

Automatic Temperature Cut-Off

The mixer controls come with an automatic temperature shut-off. If the temperature ever reaches the set point the Mixer Motor will shut off. To adjust the set point follow the listed steps:

1. From the display screen, press the Enter Button 3 times on the Temperature Meter until “AL 1H” is displayed.
2. Use the up/down arrows until the new set point is reached.
3. Press the Set button twice to save and return to the display screen