REGULAR MAINTENANCE IS ESSENTIAL FOR PROPER OPERATION OF YOUR MIXED FLOW DRYER.

Performing an equipment pre-check is important to ensure proper start-up of the dryer.
Follow the steps below prior to filling the dryer to prevent issues that may arise during start-up.

⚠ WARNING

Failure to read, understand, and follow the safety instructions contained in the operator's manual may result in serious injury, death, structural damage or collapse of dryer.

IMPORTANT

It is important to follow all maintenance instructions. Failure to do so can affect performance and may void the warranty.

1 TURN OFF POWER

Turn off power to the main panel by turning the main disconnect handle to the OFF position.

Use LOCKOUT/TAGOUT procedures to lock out all power.

2 CHECK FOR OBSTRUCTIONS

1. Open the entry doors to the dryer and inspect the burner and the fans from the inside for foreign materials or obstructions. Close and latch doors when finished.
2. Open the discharge gate doors and make sure there are no obstructions that may impact the metering rolls. Close the discharge gates and make sure they are completely closed when finished.
3. Open the top of the 2-to-1 discharge and check to ensure that the grain diverters, collection box, and moisture sensor are clear of debris. Place the cover back on the 2-to-1 discharge.

3 INSPECT ALL FAN BELTS

Inspect the fan motor belts to make sure they are tight and not broken. Reinstall all guards when finished.

4 INSPECT THE GAS TRAIN

1. On the gas train, open the drip legs and drain anything that may have settled in the piping. Close the drip leg valves and replace the caps.
2. Make sure the liquid shut-off valve on LP models is open and the main and final vapor shut-off valves are open on all models.

5 CHECK THE DISCHARGE SYSTEM

1. Make sure all switches on the control panel are set to the OFF positions.
2. Turn the main disconnect handle to the ON position and turn the control power switch to ON.
3. Turn the main interlock switch to MANUAL.
4. Push the push to unload button to observe the discharge system.
5. Make sure the drag conveyors are both running and are rotating the bottom of the drag chain towards the discharge end of the dryer.
6. Observe the metering rolls and make sure they are rotating over the top towards the center of the discharge conveyor.
7. Turn the metering roll speed potentiometer all the way up and all the way down to make sure it reaches the max output and zero output.
8. Once the discharge system has been verified, turn the main interlock switch back to OFF.

6 CHECK THE FANS

1. Turn the main interlock switch back to MANUAL.
2. Push the fan start button and observe the fans.
3. Make sure all fans start and the indicator lights are lit on the panel.
4. Make sure the low air light is not lit after all fans have started.
5. Observe the rotation of the fans. The fans will have the correct direction of rotation listed on the identification label located on the fan. The fans should be rotating towards the center of the dryer.
6. Once the fans have been verified, push the red button on the fan switch to stop the fans.

7 CHECK THE BURNER SYSTEM

1. Make sure the liquid supply on LP systems or the main gas supply on NG systems is ON to the dryer.
2. On initial fire up of the burner, to prevent over pressure conditions in the gas train, turn the liquid regulator and the primary regulator to almost wide open. To do this turn the adjustment screw counterclockwise, turning the screw out. The pilot regulator should be turned all the way in for most applications and should not need further adjustment in most cases.
3. Set the temp controller to 150º F as an initial temperature setting.
4. Next, turn the main interlock switch to the AUTO position.
5. Push the fan start button and the push to unload button, then turn the metering roll speed potentiometer all the way down.
6. Turn the fuel switch to ON. The main liquid valve on LP models will open when the fuel switch is turned ON.
7. Adjust the liquid regulator to a pressure of around 20-25 PSI.

8 OBSERVE THE BURNER CONTROL

1. The burner controller will attempt to establish the pilot first. The system will go into a purge cycle which is preprogrammed and the burner control will display PURGE.
2. After the purge cycle, the pilot valve will open and the burner control will display PILOT IGN and will begin counting and displaying in seconds the timing of the pilot establishment. The display will also read the flame signal from the flame rod in 0-5 mV. A 5 mV signal indicates a strong pilot.
3. To verify the pilot is attempting to light, you can view the burner end plate through the sight glass. You should see the spark plug attempting to light the pilot and should see a flame at the end of the burner when the gas is flowing.
4. After 10 seconds, if the pilot is not established, the control will display *FLAME-OUT TIMER* indicating the pilot could not be established. On initial fire up, it may take several attempts to purge air from the system and get a strong gas flow to the pilot. If the attempt fails, push the reset button on the burner control to begin the pilot sequence again. If after 7-8 attempts the pilot did not light, turn all the control panel switches to OFF and inspect the pilot plate for obstructions.
5. Once the pilot is established, the burner control will open the main vapor valves and start to open the modulating valve allowing the main burner to light. The control will display MAIN IGN mm:ss. If the flame rod is reading over 3 mV and is holding, the control will switch to RUN and begin counting the time of main burner ignition.
6. To adjust the gas pressure to the burner, the pilot must be established and the main gas valves need to be on to adjust the regulators.
7. The primary regulator should be turned to approximately 4 PSI and the secondary regulator should be adjusted to approximately 15-20 WC pressure. When the pressures are set, the main burner should fire. Again, on initial fire up it may take several attempts to purge the air from the main line to establish a good solid flame across the burner.
8. If the pilot establishes and the main burner does not hold, and the burner control does not try to automatically try to restart, push the RESET button on the burner control to restart the sequence.
9. Once the main burner is established, observe the modulating valve to see that it is opening and closing as the burner is calling for heat.
10. With the main burner firing, verify the gas pressures on the liquid line for LP is at 20-25 PSI, the primary regulator is at 4 PSI, and the final pressure is at 15-20 WC.

9 SHUT DOWN DRYER

Once all pre-checks have been completed, turn the fuel switch to OFF and the main interlock switch to OFF.