



Last Minute Grain Dryer Checks

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Proper dryer maintenance procedures are important to help insure successful operation. A final pre-season dryer maintenance check before getting into the field should include the following:

- check burners visually for debris, and make sure all the orifices are clean
- have gas pressure regulators and L.P. gas vaporizers checked by trained gas company personnel for proper operating pressures and for leaks
- check fan housing and fan blade for dirt accumulation; make sure drain holes in the bottom of the fan housing are kept clean
- check for wear on any belts, and adjust tension; make sure all guards are in place
- check all bearings to make sure the mounting bolts are tight and the collars are secured; lubricate if needed
- check electrical controls and switches; make sure thermostats are controlling air temperatures accurately
- clean out any left over grain and debris from last year's operation

Flame color is a good indicator for proper burner operation:

- blue flame - complete combustion
- blue flame which pops when gas is shut off - foreign material partially plugs orifices; check inlet air adjustment
- long yellow flame - poor combustion; clean burner; check pressure regulators and inlet air adjustment

Additionally for in-bin dryers, check the drying air temperature at several locations around the plenum by drilling several small holes into the sidewall and inserting a metal thermometer below the drying floor. If the drying air temperature is uneven, the flame around the burner ring may be uneven. Check for plugged or worn out holes, and make sure the burner ring is centered in the housing. Also make sure that there is no obstruction to airflow in the fan housing or in front of the transition.

The dryer operator plays an important role when it comes to the drying season and should be completely familiar with the dryer and all phases connected with it, including bucket elevators and screw conveyors.

Preventative maintenance is very important and should be considered as a daily function to reduce the chance of break-down. Nevertheless, have the dryer manual handy. Keep the area around the dryer clean. Place an appropriate fire extinguisher by the dryer, familiarize the dryer operator with its proper use, and place emergency telephone numbers on a nearby phone.

For additional tips, refer to Grain Quality Fact Sheets #14 "Proper Use of Moisture Meters" and #15 "Optimizing Dryer Operations".