

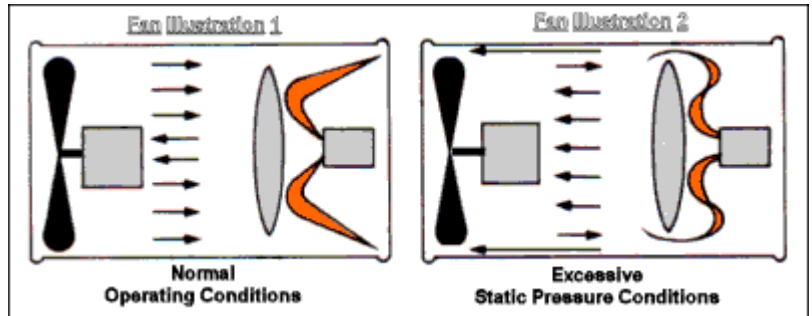
Drying Flax or Canola

- Static Pressure Reduction
- Cool High Moisture Flax and Canola

Coping with Static Pressure

Both flax and canola are very dense products so the resistance to airflow through these commodities is considerably higher than in corn or cereal grains. Resistance is known as static pressure.

Static pressure in some dryers, particularly in high airflow dryers, is occasionally so high that air is literally forced back past the fan through the fan housing. This backpressure can also force the burner flame toward the front of the fan housing. This can result in the burner or other components in the fan housing to be damaged. In order to alleviate back pressure prop the back door open with something like a 2X4 or open some other vent on the dryer. There will be some heat loss but the grain will get dried and the possibility of dryer damage will be reduced.



To dry cool high moisture flax or canola try the following:

Reduce the air temperature at the beginning of the drying cycle.

At a lower air temperature in the dryer the flax or canola is warmed up and some of the higher moisture is removed slowly near the plenum. In a multi-heat dryer the normal course of drying products like corn or cereals is to start with higher heat in order to remove as much moisture as possible and then reduce the heat as the grain gets dryer to avoid grain damage. By reversing the process for flax or canola moisture condensing near the outside screen of the dryer is greatly reduced. When using higher temperatures considerable moisture is removed from the grain near the plenum of the dryer. This moisture migrates toward the outside of the dryer and condenses due to the low airflow and contacting the cool grain. The grain near the outside gets wetter, further sealing the dryer, and increasing the airflow resistance. Eventually, the moisture in the form of water will begin to run out the bottom of the dryer rather than go through the screens as vapor. The drying process time is increased and the operator becomes frustrated. The temperature reduction procedure should allow operators to dry the grain the first time through the dryer and thereby reduce total drying time and frustration.

Another helpful tip:

Adjust the gas pressure in a dryer that has a Hi/Lo burner for air temperature control, i.e. **Farm Fans / GSI**, so when the burner goes to low flame that the flame is as low as possible creating a pulsating effect as it oscillates from high to low flame. Care must be taken to adjust the gas pressure so the flame sensing device is still in the flame and also that the flame is not igniting in the burner cup causing back firing and burner damage.

The **SuperB / GSI** dryers have an On/Off burner for air temperature control. On/Off refers to the flame igniting and then shutting off causing a pulsating effect.

The **GSI dryers** have the option of either the Hi/Lo or On/Off burner system for air temperature control. Selecting the option is simply moving a switch to set the desired method of heat control. This allows the operator the best choice for his/her needs.