OPTIMAL PERFORMANCE ALL YEAR LONG

WINTER HANDLING CONSIDERATIONS

Regular review of your customer's coating program helps to ensure optimal performance of the mill product throughout the year. The approach of cooler weather is a great opportunity to evaluate product selection, storage and handling equipment to ensure maximum handling efficiency during winter months.

It is essential to balance the desired appearance, application and available handling equipment to optimize our customer's daily feed handling. Some of the items to evaluate are:

QLF MILL PRODUCT SELECTION

- During the winter months, texturized feeds tend to brick due to low temperatures. A liquid coating product with a lower dry matter and/or higher fat content can help minimize this concern. Bricking is caused by sugar crystals forming between feeds. Reducing the mill product dry matter reduces the amount of sugar offered. Increasing fat content of the mill product offers lubrication to the feedstuffs.
- Lower dry matter liquid coating products have a lower density/viscosity which provides easier handling in the cooler weather. Lower dry matter coating products also soak in more easily to cold grains, which helps finished feed mixes be less sticky.
- Additives that help reduce stickiness of the coating product such as sulfuric acid and surfactant can aid flow in cold weather.

LIQUID STORAGE & HANDLING

Storage tank

- Poly tanks are recommended for most efficient storage and handling. Concrete or steel tanks may contribute debris which can build up in lines or pumps and affect product flow, especially in cold weather.
- The tank placement and design also should give an indication of complete drainage. Storage tanks should be emptied annually to evaluate condition and cleanliness to aid handling efficiency.

- The size or number of storage tanks regulates product turnover. Extended inventory turnover time (usually >90 days) can lead to difficult handling due to “at-rest” product becoming cold over time.
- Location of the tank is important in product handling and flowability. Protecting the storage tank from the cold weather and reducing the distance traveled for the product improves product handling.
- Tank agitation/recirculation aids in flowability in colder weather.

Pump

- Distance from storage tank and mixer is important for consistent flow and handling. Locating pumps close to storage tanks improves handling efficiency. Shorter distance to the mixer reduces pumping times and day-to-day wear and tear.
- Gear pumps are recommended for mill products due to the high cane molasses content and natural flow characteristics. Gear pumps can reverse to clear the product lines to aid in product handling in cold weather.
- If customer is utilizing a centrifugal pump and product is left in lines daily, lines might need to be disconnected and flushed monthly or quarterly to maintain handling efficiency.
- Pumps should be protected from the cold air temperature.

Lines/Hoses

- Insulate/Heat tape lines/hoses to protect liquid from exposure to cold air temperature.
- Diameter of lines/hoses affects product flow ability. Be sure lines/hoses are the correct diameter based on product utilized, pump size, and needed output. A 2-3 inch line is typical for mill products. Lines too small in diameter may reduce pump efficiency and flow rates.

System Maintenance

- Check electrical connections, outlets and power supply
- Inspect pump and perform maintenance and repairs
- Disconnect hoses/lines and connectors
- Inspect and flush lines/hoses
- Check, clean and/or replace connectors
- Be sure to check ALL connectors

Continue to monitor handling performance