SELECTING THE RIGHT SUPRCOAT™ PRODUCT

BUILD UP -HANDLING

QLF SuprCoat™ enhances appearance, aroma, consistency, and palatability of texturized feeds. Though it may help, it may not mask concerns with dry ingredients, mix composition or equipment efficiency. It is essential to balance desired appearance, application and available handling equipment to optimize our customer's daily feed handling.

Influences on daily feed handling:

- Consistency and quality of dry ingredients
- Uniformity of particle size – Surface area and micron size are inversely related. Larger micron size (whole grains) usually have less surface area available for absorption of liquid coating product, creating a mix that may look darker and be stickier. Small micron size (meal type ingredients) have more surface area available for contact and absorption of coating product.
- Amount of fines – Fines absorb an inconsistent amount of coating product, resulting in 'molasses' balls which negatively affects finished feed moistness and uniformity.

Mix composition:

- Inclusion rates of meal type ingredients – High levels of meal type ingredients increases absorption of liquid coating product and reduces overall feed moistness. Dry fiber materials are often very absorptive to coating products due to surface area and low moisture content.
- Inclusion rates of various particle sizes – Larger particle size retains more molasses on the outside of the particle, resulting in a darker stickier feed.
- Grain Processing – Low bushel weight corn will be more prone to breakage and production of fines, causing finished feed to have inconsistent particle size for absorption of coating product. Highly processed grains have more surface area available for contact and absorption of coating product.
- Pellets – Pellets should be kept cool and free of fines. Limit handling to reduce fines. Monitor pellet durability index (PDI). Target and maintain PDI >90%.
- Preservative inclusion, type – Preservatives are necessary to extend shelf life. Preservative inclusion may slightly dry finished feed.

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Temperature

- Grain temperature – Uniform grain temperature helps with consistency of handling and absorption of coating product. Cold grains may 'shed' coating product, resulting in a dark sticky finished feed. Warm grains have greater absorption.

- Ambient temperature – Low temperature decreases absorption rate of liquid coating product resulting in sugar crystals forming between feed ingredients (caking, bricking). High temperature and humidity increase moisture evaporation from grains, causing feed mixes to dry out more quickly.

- Storage temperature of coating product – Warm product soaks into grain more quickly.

Liquid Coating Product Selection & Inclusion

- Lower dry matter coating products soak into grains more easily which helps finished feeds be less sticky.

- Increasing inclusion rate of coating product provides greater amount of color, conditioning and palatability to finished feeds. This may also result in molasses not being absorbed into grains as quickly, providing a stickier finished feed.

Mixing

- Over mixing may lead to reduced particle size and increased fines.

- Inadequate mixing can result in uneven absorption of coating product.

Handling/Delivery Equipment

- Poly tanks are recommended. Concrete or steel tanks may contribute debris which can build up in lines and pumps. Tank placement and design should give an indication of complete drainage. Storage tanks should be cleaned annually to aid in handling efficiency.

- Location of tank is important in product handling. Also the size and number of tanks regulate product turnover. 'At rest' product can lead to difficult handling.

- Distance from storage tank, mixer, load out augers etc. is important for flow and handling. Shorter distance reduces day to day wear and build up. Diameter of lines/hoses/augers affects flow ability. Insulate/heat tape lines and hoses to protect liquid from cold temperatures. This helps improve absorption rate and flow ability.