

THE PROVEN WAY TO GAIN MORE OIL

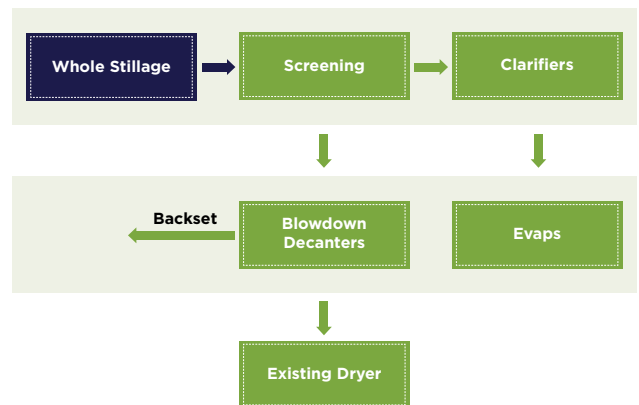
DCO Technology™ utilizes multiple washing and separation steps to liberate additional distillers corn oil typically left on the fiber fraction in the dried distillers grains. The DCO Technology was born from FQT's patented MSC™ protein separation system and is integral to the high corn oil yields obtained with MSC systems.

This technology has embedded Thin Stillage Clarification (TSC) on the thin stillage stream. This can result in reduced unfermentable solids, permitting the evaporator feed to have a higher solids ratio. This allows for a better heat transfer in the evaporators, potentially transferring energy from the dryers.

- Backset clarification (lower fermentable solids)
- Backset organic acid reduction (reduction on organic acids, glycerol, lactic acid levels)
- Healthier fermentation
- Multiple washing steps followed by thin stillage clarification
- Many stand-alone benefits today, a significant step toward the MSC protein system tomorrow
- Up to 40% oil gain*



FQT DCO FLOW CHART PROCESS



*Dependent on plant conditions and ability to recover liberated DCO



SHORT BUILD TIME, RAPID PAYBACK

Demonstrated performance through years of testing in our protein systems, this technology encompasses a multi-stage fiber washing with thin stillage clarification. A series of washing and clarification steps provide additional opportunities for the corn oil to be separated from the fiber for collection by the plant's existing oil recovery system. Centrate from the fiber washing is sent to a final separation step to partition free oil from residual solids, producing an evaporator feed high in oil and low in suspended solids.

PROJECT DETAILS

- Bolt-on proven technology and equipment
- Short construction and design time leads to faster return
- FQT-designed engineering reliability and performance
- New stand-alone building with a relatively short construction timeframe

FQT's proprietary designed equipment lowers maintenance time and labor. Featuring added flushing and backflows, the paddle screens are cleaned twice per month, and the clarifier bi-annually.

Plant Size	Building Footprint Size	ROI % Ranges	Construction Time
65mmgy Plant	-34' x 40'	-33% - 48%	-8 Months
130mmgy Plant	-64' x 40'	-25% - 44%	-8 Months

*Based on live data from existing plants and the FQT financial model forecast as of 8/22/2022



FULL PLANT BENEFITS

- Reduced enzyme cost/usage, saving millions per year
- Backset clarification, with potential lowered unfermented solids
- Potential backset organic acid reduction
- Healthier fermentation
- Lower suspended solids in evaporator stream
- Proven performance-technology running full-scale in multiple plants
- A significant step toward the MSC protein system
- Streamlined system operation and maintenance



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