

CASE STUDY

Oleochemicals

COUNTRY: USA

PRODUCT: Two LCI Thin-Film Lecithin Dryers with major components

KEY BENEFIT: Product Quality, Known Solution



Dry Lecithin with Thin-Film Evaporation



Background:

LCI Corporation has supplied over 30 units for lecithin drying since our beginnings as LUWA Corporation. In addition to our units supplied since the 1960's, LCI also supports and services lecithin dryers sold under the Cherry Burrell brand name.

Problem:

LCI's client needed to dry soy lecithin gums from ~30% moisture to <1.0% residual moisture. The client wanted to expand their plant production while delivering a higher-value lecithin product to their customers.

LCI Solution:

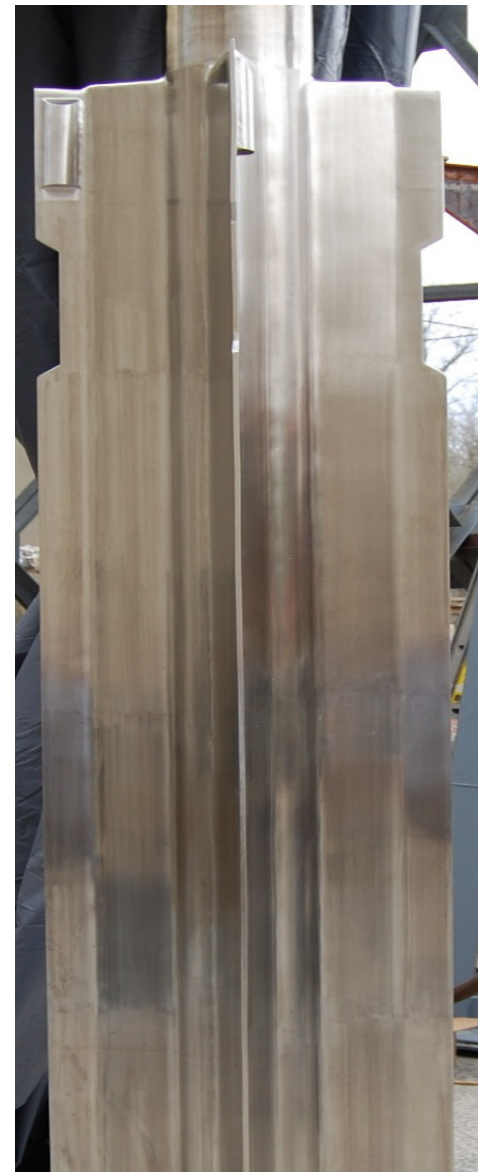
LCI Corporation's 50+ years of experience designing, supplying, and troubleshooting lecithin dryers and systems was utilized to develop a tailored solution. LCI process engineers met with plant operations and corporate project engineers to design a dual-train system to provide turndown flexibility for reaction to market demand.

LCI assisted the Client throughout design, procurement and installation. During start-up, LCI provided around the clock assistance and training.

Results and Comments:

The LCI Thin Film Lecithin Dryers, coupled with the LCI designed and supplied major components (vapor condensing system, vacuum system, dry lecithin cooler, etc.) allowed the plant to realize final lecithin moisture content in the 0.26 - 0.32% range with a Gardner color of ~13.

The plant has been in successful operation since July 2013. The LCI Thin Film Lecithin Drying system allows the plant to run at the maximum capacity of the installed centrifuges while meeting the dry lecithin moisture and color specifications. LCI has subsequently been contracted to supply another system to one of the client's other oil processing facilities due to success of the first system.



LCI Thin Film Lecithin Dryer Rotor

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