

Process Heating Solutions Worldwide

General Industrial Case History



Corn Oil Extraction

Application

A corn-to-ethanol and biodiesel production facility located in the Midwest needed to heat a solution of distillers grain after it has been diluted and passed through several screens. Heating is essential for extracting valuable nutrients and resources from the spent grain. The heater feeds an insulated holding tank, which supplies a centrifuge that separates oils, solids, and water from the slurry.

Process Conditions

Water Flow Rate: 20 - 40 GPM
Temperature Rise: 50 - 80°F
Water Pressure: 40 PSIG

Steam Pressure: 110 PSIG Saturated

Steam Flow: 1,400 lbs/hr

Solution

A Pick Model 6X25-3BX Heater with an I-P and RTD for the customer to control though their DCS. The customer was easily able to include the heater to their skid along with valving to increase back pressure on the slurry before it is deposited into the tank. With this system the process is fully automated for the production facility.

Learn more at www.pickheaters.com

Pick Heaters, Inc. — 730 S. Indiana Ave. — West Bend, WI 53095 USA Phone: (262) 338-1191 — Email: info1@pickheaters.com

Features and Benefits:

- Superior Heating of Liquid Medium Due to Rapid Response
- Low Pressure Drop on Viscous Fluids and Slurries Compared to Other Direct and Indirect Heat Exchange Methods
- Non-plugging Design
- Response to Flow Variations With No Upsets to Process