

Process Heating Solutions Worldwide

Pulp & Paper Industry Case History



Headbox Showers

Application

The headbox, located near the front end of the paper machine provides a uniform dispersion of stock across the paper machine wire. Rotary showers spray the inside surfaces of the headbox, preventing the build up of pulp fiber. Temperature control is critical and must match the temperature of the return whitewater to prevent thermal distortion of the headbox.

Process Conditions

White Water Flow Rate: 80-120 GPM Temperature Rise: 10-60°F

Temperature Rise: 10-60°F Steam Pressure: 90 PSIG Water Pressure: 50 PSIG

Required Steam Flow: 344-3096 lb/hr

Solution

Pick Model 6X50-3 Heater was selected for this application. A cascade temperature control system was incorporated to match heater outlet temperature with stock slurry supply temperature. Despite fluctuations in heat load, the Pick Heater provides precise temperature control.

Features and Benefits:

- Precise Temperature Control
- Instantaneous Supply of Hot Water
- Smooth, Stable Operation