Brackish Water Heater

Application
An oil company needed a brackish water heater for their site in Alberta, Canada. It was to satisfy both start up and design process loads, using 3.5 kg/cm² saturated steam. Water pressure is 1 kg/cm².

Start Up: 316,000 kg/hr @ 43°C DT
Design: 958,600 kg/hr @ 13.5°C DT

The heater was to be of carbon steel construction and designed for installation in 16” diameter brackish water piping system.

Solution
Pick Model 6X500-1 FAB Steam Heater. Rated steam capacity = 22,700 kg/hr. Heater is mounted horizontally in piping system with brackish water entering at long radius elbow. It flows through mixing chamber with minimal obstruction. This provides low pressure drop-within 30 kPa specified limit at 958,600 kg/hr design flow.

Within the Pick Heater, steam is injected into brackish water through thousands of small orifices in an injection tube assembly. By breaking the steam flow into small “bubbles,” the steam condenses instantly and quietly.

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:
- Fabricated Housing, Designed to Fit in 16” Diameter Piping System
- Elbow Design, Allows Removal of Injector Without Disturbing Water Piping Connections
- Low Pressure Drop
- Compact Size