

This product is represented in Australia, New Zealand, and PNG by:

InKorr Pty Ltd

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Contact us with any enquiries related to:



Heat Transfer Equipment

- Shell & Tube Heat Exchangers Standard, Custom, Corrugated Tubes.
- Plate Heat Exchangers Brazed, Gasketed, Semi-Welded, & Welded.
- Graphite Heat Exchangers.
- Plate & Shell Heat Exchangers.
- Spiral Heat Exchangers.
- Crossflow Welded Heat Exchangers.
- Direct Steam Injection Heaters.
- Air Coolers.



Corrosion Resistant Equipment - Valves, Piping, Vessels & Systems

- Polymer-Lined Valves, Piping, and Pressure Vessels.
- Exotic Metal (Ta, Zr, Ti) Fabricated Piping and Pressure Vessels.
- Glass-Lined Vessels.
- Graphite Equipment and System Packages.



Service Maintenance

- Plate Heat Exchangers Refurbishment, Gas Testing, UV Crack Testing.
- Graphite Equipment Installation, Refurbishment, Repairs.
- Glass-Lined Vessels Spark Testing, Lining Repair.
- Quality Spare Parts, both OEM and Aftermarket.

InKorr Pty Ltd Unit 12, 103 Lewis Road, Knoxfield, VIC 3180, Australia ABN: 48 159 224 996



Food Processing Industry Case History



Pasteurization of Liquid Cheese

Application

Dairy customer wanted an improved method for pasteurization of liquid cheese prior to a spray drying process. The 40% solids cheese slurry was being heated in a batch method with jacketed tanks. Problems with poor temperature control and product burn-on were common.

Process Conditions

Product Flow Rate: Specific Heat: Specific Gravity: Inlet Temperature: Discharge Temperature: 165°F Steam Pressure: Liquid Pressure:

50 GPM .85 1.14 125°F **100 PSIG** 20 PSIG

Solution

Pick Model SC10-3 Sanitary Heater was specified to convert process to continuous, in-line method. The customer was able to triple production while maintaining precise temperature control. Product burn-on was eliminated, thereby improving product quality and reducing maintenance.

Features and **Benefits:**

- Increased Production
- Instantaneous • **Response to Temperature** Demands
- Precise **Temperature** Control
- **Quick and Easy to** Clean

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



Food Processing Industry Case History



Pickle Pasteurizer

Application

Manufacturer of tunnel conveyor pasteurizer required several efficient and responsive instantaneous heaters for their 9-zone conveyor to pasteurize pickles.

Water is recirculated through each zone in the pasteurizer and sprayed on the jars of pickles. However, each zone must be operated at a different temperature so as not to shock the glass jar. Therefore, each zone required a separate heater to maintain the circulation water temperature. Accurate water temperature was paramount.

Process Conditions

Model 6X25-1 heater for the beginning zone operated at 33 GPM at a 69°F temperature rise.

Model 6X50-1 heaters each at 180 GPM for the middle zones.

33°F temperature rise per zone

70-100 PSIG steam pressure

17-21 PSIG water pressure

Model 6X10-1 heaters on the last zones operated at 30 GPM at a 40°F temperature rise.

Solution

All Pick Heaters provide instantaneous injection of steam into the circulating water zones, and respond instantly to changes when the conveyor is slowed or stopped due to production changes. Pick steam injection heaters use all available BTU's in the steam so energy efficiency is maximized.

Features and Benefits:

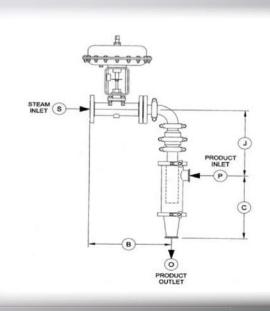
- Low Maintenance
- Instantaneous Supply of Hot Water
- Compact Design

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Food Processing Industry Case History



Pasteurization of Soy Milk and CIP

Application

Dairy operation wanted to use steam injection for in-line pasteurization of soy milk. The requirement of the heater was two-fold in that hot water, at the same load, was required during sterilization and CIP runs.

Process Conditions

Liquid Flow Rate: Specific Gravity: Specific Heat: Inlet Temperature: Discharge Temperature: Steam Pressure: Product Pressure: Steam Flow Required: 1,600-2,500 GPH 1.07-1.09 .96 165°F 290°F 100 PSIG 65 PSIG 1,717-2,684 lbs/hr

Solution

Pick Model SC25-3 with 2" connections was selected. Pick Heater scope of supply was limited to steam valve, check valve and heater body to satisfy customer requirements.

Features and Benefits:

- Achieve High Process
 Temperatures
- In-line Heating
 Speeds up
 Production
- Wide Liquid Flow
 Rate Turn Down
- Exceptional Temperature Control

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Food Processing Industry Case History

Make-Up Water For Belt Pasteurizer

Application

A seafood processor required hot water supply for aseptic pasteurization of artificial crab product. The product, sealed in plastic bags, passed through a three-stage belt pasteurizer. This is the first stage requiring hot water be held at 205°F, heated by internal steam coils. The packets then go through two chilling sections before refrigeration and boxing.

A heating system was required to heat the cold make-up water supplied to the system as water is lost through evaporation, spills and carryover. Maintaining a minimum pasteurization temperature was critical to the process.

Process Conditions

Water Flow Rate: Inlet Temperature: Discharge Temperature: Steam Pressure: Liquid Pressure: Steam Flow Required:

15 GPM 40°F 205°F 60 PSIG 20 PSIG 1,065 lbs./hr.

Solution

Pick Model 6X10-3 Constant Flow Heater, cast iron

construction with threaded fittings. The Pick system provides accurate temperature control and quickly reaches set point as soon as make-up water is called for.

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Features and Benefits:

- Precise
 Temperature
 Control
- Instantaneous
 Supply of Hot
 Water
- Ease of Installation on Existing System



Food Processing Industry Case History

Pasteurizing with DSI

Application

Plate and frame heat exchangers used in pasteurizing operations are better heated by hot water sets using direct steam injection. Although many dairy and fruit juice processors have traditionally used indirect heating systems, many cost-conscious, quality oriented companies are turning to Pick Direct Steam Injection Heaters for more accurate, energy efficient heating for pasteurizing.

Indirect heating systems face many challenges. They require steam traps and expansion tanks, along with added maintenance. They often result in fluctuations in temperature that can result in hot spots and burn on, or off flavored product. The inability to hold precise temperature control can result in costly product loss. Additionally, the indirect heating systems do not offer the 100% heat transfer provided by direct steam injection.

Solution

When used as a hot water set in a closed loop pasteurizing system, the Pick DSI Heater injects steam directly into the circulating water, raising the temperature instantly. Precise temperature control is maintained regardless of variations in product flow rate or incoming temperature.

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

Features and Benefits:

- Accurate
 Temperature
 Control
- Compact
- No Product Burn-On
- 100% Heat Transfer
- No Expansion
 Tanks Needed

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