



Process Heating Solutions Worldwide

Food Processing Industry Case History



Nitrogen Injection System

Application

Mayonnaise producer wanted a complete system to inject nitrogen into product, resulting in smoother product texture, increased product volume and extended shelf-life. The package was to include not only the nitrogen injection body, but also the pressure regulator, metering system and valves mounted at a control box. The flow meter, mounted inside the box was to receive a 4-20mA control signal from the customer PLC.

Process Conditions

Product Flow Rate: 35 GPM
Nitrogen Supply Pressure: 1500 PSIG regulated to 150 PSIG
Product Pressure: 40-60 PSIG
Nitrogen Flow Capacity: 33 SLPM

Solution

Pick Model SC25 Nitrogen Injection System with 3" sanitary mixing chamber, isolated from N2 supply by sanitary check valve. System includes mass flow controller and 2-way solenoid valve wired to customer 4-20 mA control signal from PLC, installed in stainless steel NEMA 4 enclosure. Customer N2 supply is installed prior to high-pressure regulating valve. Compression fittings for customer piping between control panel and mixing chamber were included.

Features and Benefits:

- Complete Packaged System
- Low Maintenance
- Thorough Mixing
- Quick, Simple 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