

Nitrogen Injection System

Features and Benefits:

- ◆ Complete Packaged System
- ◆ Low Maintenance
- ◆ Thorough Mixing
- ◆ Quick, Simple to Clean



Food Processing Industry Case History

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 SC25N 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 was included.