

# Pressure Drift from Radiant Heat Eliminated

## RESULTS

- \$4800 saved per season by eliminating maintenance on pressure measurements for the cooker
- Reduced regulatory paperwork caused by pressure reading error



## APPLICATION

Continuous retort vegetable cooker pressure control

## CUSTOMER

Vegetable processing plant in the U.S.

## CHALLENGE

A vegetable processing plant in the U.S. was having trouble with pressure measurements on multiple FMC continuous cookers. The pressure measurement on these cookers is critical to processing safe, bacteria-free food. They must cook the vegetables for a specific length of time at a high enough temperature and pressure to ensure the food is safe, and their documentation must reflect the proper time, temperature and pressure readings. Unfortunately, the high performance pressure devices were recording false pressure readings. "The units had no repeatability; they would drift continuously," stated the plant's Project Engineer. "We had to maintain them daily. The only thing I can attribute to the problem is the radiant heat from the cookers."

Each time a device drifted, the operator had to go out to the cooker and record the actual pressure from a manual pressure gauge. Then they had to manually amend the documentation that is used for regulatory compliance. The customer needed a reliable, repeatable pressure device that could withstand the radiant heat from the continuous cookers to ensure regulatory compliance and save maintenance costs.

*"We have had the Rosemount pressure devices installed for two years and have not had any problems with drift. We just wired them up and we were done."*

**Vegetable Processing Plant Customer**

### SOLUTION

All seven high performance pressure devices from a major instrumentation and control supplier were replaced with the industry-proven Rosemount 1151 pressure transmitter. "We have had the Rosemount pressure devices installed for two years and have not had any problems with drift," said the customer. "We just wired them up and we were done." Now their charts do not list inconsistent pressure readings, and the operators do not have to continually go to the manual gauges to read the "true" pressure. They completely eliminated maintenance on those pressure devices, which they estimated saves \$4800 per season. Even more important, they no longer have charts with inconsistent pressure readings, which has significantly improved their regulatory compliance process. "The guys who had to clerk the cooker and write down the pressure readings every half hour are a lot happier," the customer concluded.

### RESOURCES

#### Emerson Process Management Food and Beverage Industry

<http://www.emersonprocess.com/foodandbeverage/>

#### Rosemount 1151 Pressure Transmitter

<http://www.emersonprocess.com/rosemount/products/pressure/m1151.html>

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