

NEW PLC CONTROL SYSTEM REGULATES PRODUCT FLOW AND TEMPERATURE LEVELS



The R.F. MacDonald Co. Analysis & Solution

While working on the steam boiler at the honey plant facility, R.F. MacDonald Co. discovered the company was struggling with product loss due to a restrictive honey tank control system. The company had previously researched off-the-shelf controls, but none offered product mapping with temperature regulation.

The R.F. MacDonald Co. Instrumentation & Controls Dept. customized a controls package, which included Allen-Bradley PLC, Wonderware software and touch screen controls. The fully automated system met all requirements and design requests.

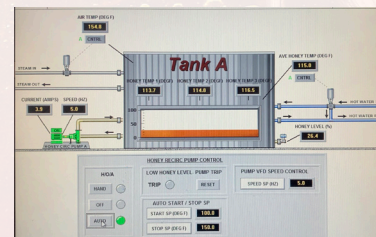
Control Upgrades

- Increased efficiency and production.
- Provided precise temperature for optimum flow.
- Reduced maintenance and operation.
- Provided alarm protections to prevent low/high honey temp and low/high honey level.

"The controls are easy to use and we can see all the important data on one screen."
— Maintenance Supervisor



Allen Bradley PLC Control System



Wonderware Monitoring Software



Honey Plant Facility

After successful implementation of the fully automated control system, the honey plant has increased production and profits.

RFMCO's customer relationship as well as the cost-effective solution provided allowed for quick turnaround and implementation.

Boiler Case Study

Honey Plant Food Processor
San Bernardino, CA
Controls Upgrade

Customer Application

The San Bernardino honey plant processes 100 percent all-natural honey in California and the Midwest.

Key Challenges

With existing controls, the honey plant was unable to adequately regulate honey flow due to fluctuating temperatures and honey levels.

The company reviewed many controllers, but none established the proper level of honey needed in each tank.

After designing and installing a new PLC system, R.F. MacDonald Co. overcame the tank-level-control challenge with flange-mounted level transmitters.

Installation of the Allen-Bradley PLC control system and configuration of WonderWare monitoring software improved performance and offered an effective measurement solution.



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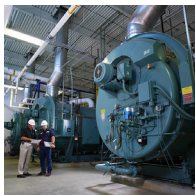
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