

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.



Allen Bradley PLC Control System

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



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.

YOUR SINGLE SOURCE PARTNER

CORPORATE

25920 Eden Landing Road
Hayward, CA 94545
510.784.0110

BAKERSFIELD

3001 Antonino Avenue
Bakersfield, CA 93308
661.325.5057

FRESNO

4912 West Jacquelyn Avenue
Fresno, CA 93722
559.498.6949

LAS VEGAS

3111 S. Valley View Blvd., Suite E-120
Las Vegas, NV 89102
702.220.6680

LOS ANGELES

10261 Matern Place
Santa Fe Springs, CA 90670
714.257.0900

MODESTO

1549 Cummins Drive
Modesto, CA 95358
209.576.0726

RENO

8565 White Fir Street, Unit B2
Reno, NV 89523
775.356.0300

SACRAMENTO

1016 N. Market Blvd., Suite 10
Sacramento, CA 95834
916.696.6758

SAN DIEGO

7320 Convoy Court
San Diego, CA 92111
858.538.5877

SONOMA/NAPA

642 Martin Avenue, Suite B
Rohnert Park, CA 94928
707.586.9234

CONTRACTOR LICENSE

CA: #220117

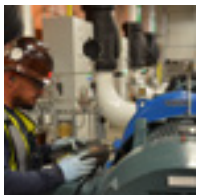
NV: #0042816

rfmacdonald.com



BOILERS AND SYSTEMS

- Full range of commercial boilers from 60,000 to 12 million Btu/hr
- Full range of industrial boilers from 4 to 400 million Btu/hr
- SCR and control system solutions
- Engineering and design support



PUMPS AND SYSTEMS

- High pressure condensate return systems
- Complete range of process pumps
- Water reduction via alternate seal flush plans and coolers
- i-Alert 2 Performance Monitoring



SERVICES AND INSTALLATION

- Rental equipment and mobile boiler rooms
- Full aftermarket service and parts support
- Instrumentation and controls



BOILER AND PUMP TRAINING

- AFE Certified
- CWEA Certified
- Visit rfmacdonald.com/training



R.F. MacDonald Co.
your boiler & pump solutions team
— since 1956