Extrusion Automation

BCI AUTOPILOT®

DAD'S Products Company

It's running fantastic! I

three production records

in a row. We've seen over

a 40-percent increase in

throughput on average,

and we've seen change-

over times drop by over

Jeff Lang

Vice President

65 percent.

love it! We've broken

Meadville, PA

Vice President

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Jeff Lang

Petfood Extrusion Process

Automated Ingredient Delivery

Project Summary

DAD'S Products Company — a \$60-million manufacturer of canned, dry, and soft-moist dog and cat food — looked to Bachelor Controls to minimize waste and reduce the load on the wastewater treatment facility.

Objectives / Requirements

Minimize slurry end-of-run waste to reduce the load on the wastewater treatment facility, including

- Handle the wet additive independently rather than in a batch slurry, so slurries can be more generic across products and the more specific flavor and preservative ingredients can be metered at the extruder
- Automate the ingredient feed system and meter ingredients into the dry feed system at the extruder pre-conditioner
- Integrate the extruder formula setup/management system so that each formula must be linked to a product that has been defined and resides in the batching SQL Server database
- Add two additional Readco/Bonnot units to the core *BCI AUTOPILOT*[®] configuration and control all three units from a single operator interface
- Monitor process performance and quality

Results / Benefits

The amount of waste material going to the water treatment facility during change-overs was reduced, producing

- 10 percent increase in yields
- More than 40 percent increase in production throughput
- 66 percent improvement in change-over times, from 90 minutes to 30 minutes
- "Enormous improvement" in product quality in terms of shape, color and consistency (Jeff Lang)
- Eliminated extruder set-up errors against the dry mix product to be run by synchronizing the batch systems' Batch Campaign Management and extruder's Formula Selection screens

Bachelor's ability to provide an installationfriendly panel should not be overlooked. The panel items were grouped, packaged and routed to enhance the installation effort. There are just a lot of little details that are a standard part of a Bachelor panel.

> Jeff Lang Vice President

BCIAUTOPILOT

Bachelor Controls, Inc.

- Equipment-independent master recipes, used across production lines, have increased manufacturing throughput and flexibility.
- Data for each step of the petfood production cycle are electronically collected, stored and displayed.
- The real-time link between the company's batch process and its business planning functions enables engineers to access information, release batches, and make on-line changes to recipes from workstations across the network.



