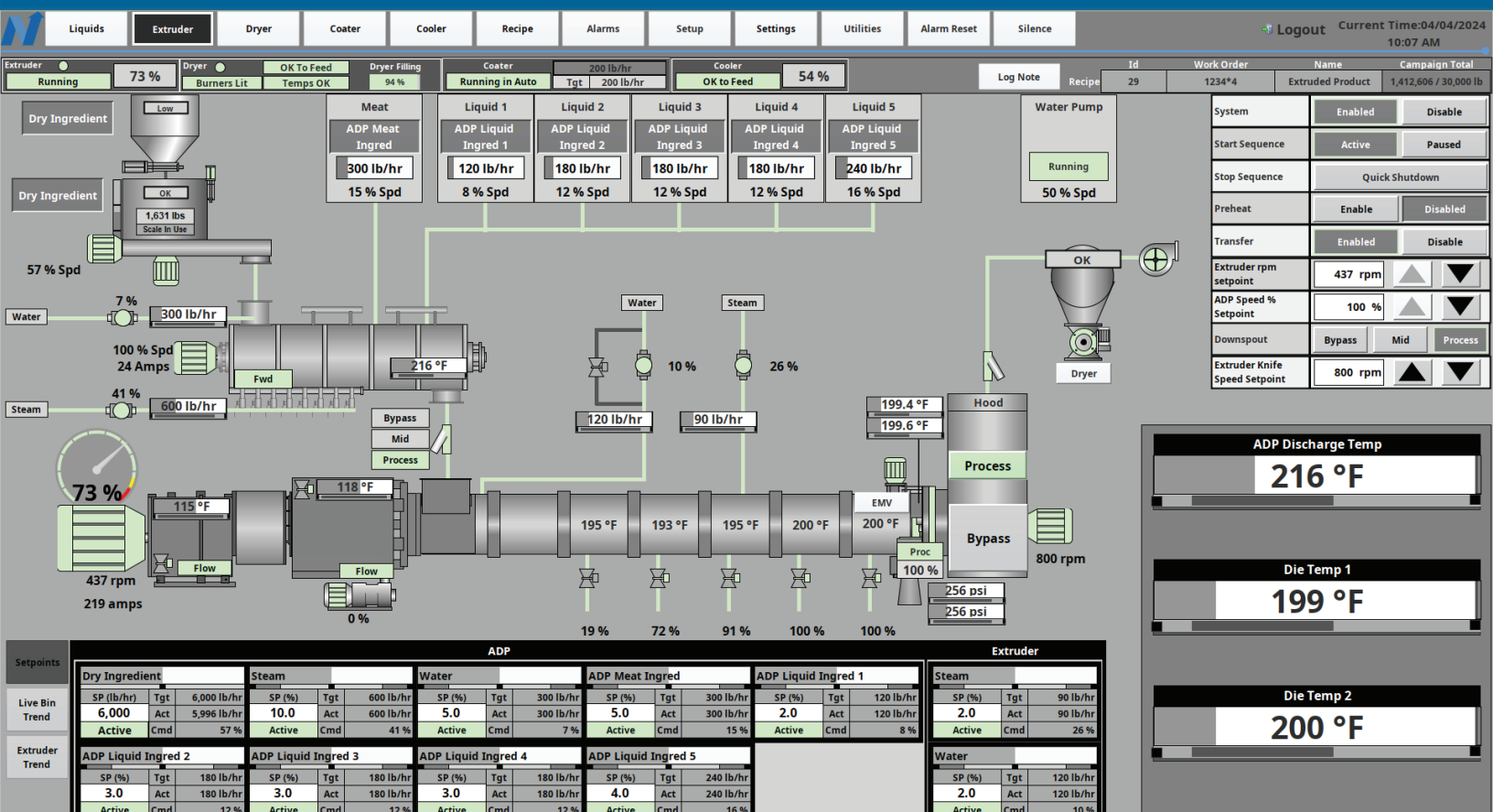


Pet Food Automation



Industry Experts in Pet Food Automation

NorthWind has the expertise to make your manufacturing equipment run as efficiently, productively, and profitably as possible.

Process Knowledge

With thorough knowledge of the pet food manufacturing industry and food safety regulations, a pet food automation solution by NorthWind optimizes your facility in everything from the batching & recipe management systems to continuous extrusion, coating & quality control.

A NorthWind control solution can ensure optimization of your system through implementation of specific sequencing during the startup and shutdown of your equipment. This is in combination with critical alarms and notifications, will help **keep your extruders running** and **minimize wasted product**.

MAXIMIZING PLANT EFFICIENCY
with innovative automation solutions

Plant Integration

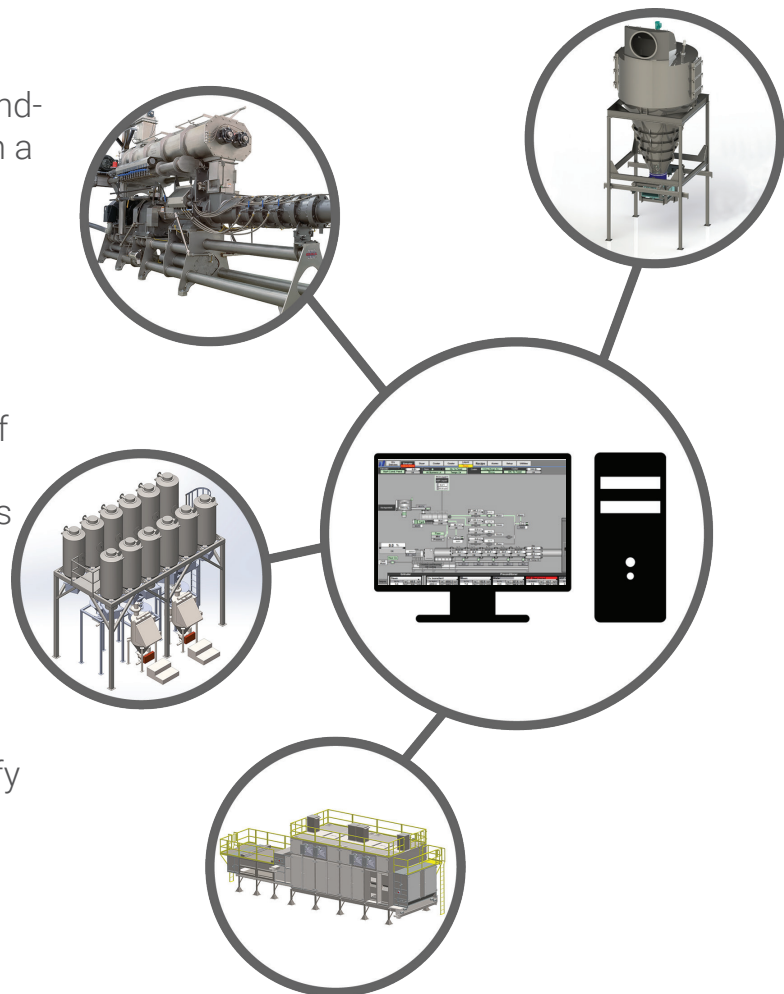
Learning and maintaining 5 or 10 different systems can be difficult. NorthWind gives you end-to-end control and visibility of your plant through a fully integrated automation system.

Continuous Optimization

NorthWind's control systems are self-tuning to ensure quick, accurate, and consistent control of adjustments to fluctuations in ingredients and conditions. This provides quality control, reduces waste, and cuts time off each process startup.

User Friendly Control

Our automated system sequences allow operators to quickly reach full production, identify critical status conditions, and make necessary adjustments with minimal training.



| Dry Delivery | Liquids | Extruder | Dryer | Coater/Cooler | Storage |
|-------------------------|---------------------|----------------------|----------|---------------|---------|
| Extruder ● | 83.3% | Dryer ● | Ok To Fe | | |
| Running | OK | All Burners Lit | Temps C | | |
| Preconditioner | Extruder | Dryer | Coater | | |
| Name | Ingredient | Recipe SP | | | |
| Dry | Dry Ingredient 2 | 4000.0 kg/hr | | | |
| Steam | Steam | 5.00 % | | | |
| Water | Water | 3.00 % | | | |
| Slurry | Slurry for Cat Food | 20.00 % | | | |
| Fat | Fat | 3.00 % | | | |
| Meat Mixer | Meat | 10.00 % | | | |
| Name | Value | | | | |
| Preconditioner Speed | 75.00 % | | | | |

Formula Management

NorthWind systems allow for ease of use and flexibility in management. Keep one formula database for both batching and continuous processes. Product formulas can include process variables and scalable ingredients that will adjust automatically with a change in rate.

Traceability

New food safety protocols require more visibility and monitoring of ingredients used in petfood manufacturing. Users can trace ingredients through the entire manufacturing process with lot number tracking, storage, and reporting capabilities.

Manufacturing Execution Systems (MES)

This powerful system can be everything from Overall Equipment Efficiency (OEE) for one area of a plant to a fully integrated solution with a paperless plant floor and everything in between. Implementing these features takes deep process and control system knowledge and because every plant has different processes, machinery, KPIs, and process targets the best solution is going to be a tailored fit. At NorthWind we utilize production and process data for plant optimization with a manufacturing execution system developed for you, with you.



PlantIQ™

PlantIQ is an AI platform that helps manufacturers reach and exceed their production goals. This scalable solution can be implemented on a single process area or encompass the entire business, connecting the plant floor to the rest of the business operations.



The AI Platform helping Manufacturers reach and exceed their production goals.

PlantIQ Agent

PlantIQ Agent is a digital expert powered by generative AI and manufacturing-specific LLMs, offering solutions and recommendations to help operators and support engineers solve problems.

Knowledge Base

The knowledge base compiles SOPs, manuals, training materials, transcriptions, process data, service tickets, and more. It continuously evolves through user interactions and feedback, improving the quality of answers over time.

Alarm Module

The Alarms module leverages generative AI to interpret PLC and SCADA alerts, offering focused insights into system faults. It accelerates resolution through historical analysis, process data, and service ticket context.



How Can AI Help Your Business?

PlantIQ is a buildable, customizable platform designed to fit your needs. Its modular design allows additional tools like intelligent scheduling, logistics management, and machine learning to be developed for and tailored to your operation.



Thank you for your interest in NorthWind. We are committed to helping our customers improve their process through automation & cutting edge design. For more information please call or visit us on the web at:

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