

Film Extrusion Line Controls

A Converting Case Study

The Application

A plastic film manufacturer needed a new control system on their existing blown film extrusion line. The line, which produces polypropylene and polyethylene plastics used for packaging, had a control system that had become outdated and unreliable.

The PCT Solution

PCT began by redesigning the existing control system to include Rockwell PLCs, drives, and operator interface terminals. The new system is now able to track and control essential variables of the extrusion and film blowing process including temperature, pressure, tension, speed, and film gauge. As a result of modifications to the intricate control scheme, the line has become more user friendly for operators and troubleshooting has become easier for maintenance and engineering.



The new system was completed with minimal downtime and has reduced the amount of inconsistencies previously found in the film produced on the customer's blown film line. Operators are now able to anticipate and quickly compensate for film blowouts and machine breakdowns. As a result, throughput on the line has increased and product quality has improved.



PCT's success rebuilding the existing system made us the integrator of choice to completely engineer two similar systems for the customer. These systems were needed to expand the total production of the plant and had to run concurrently with the plant's existing systems. PCT incorporated expertise in control systems, knowledge from past projects, and repeated project success to create a custom control system for the new lines that is innovative as well as easy to operate.