

## Case Study:

# Extrusion Controls for Rubber & Plastic Manufacturer



OEM Requested Automation System for their Rubber & Plastics Customer

## Objective

- Supply Automation System for OEM Installation

## Solutions

- Supplied a complete Allen Bradley solution.
- Utilized Control Logix L83S Safety PLC and Point I/O in remote enclosures.
- Included Power Flex 755 drives and FactoryTalk View Site Edition SCADA.
- Developed software to control machines.
- Delivered hands-on training during startup.
- Provided several weeks of maintenance training.

## Results/Benefits

- End customer's machine was commissioned and placed into service on time.
- Projected production rates achieved.
- End customer enjoys a complete solution and the necessary training to maintain their new systems.
- Our relationship with the OEM was strengthened by supplying a solution that met both their needs and the customer's expectations.

## Background

The Quad Plus team was contacted by one of our OEM partners performing an installation for their customer. The OEM requested an automation system to control the extruder and material feed sections of new equipment for their rubber and plastics customer. The OEM previously presented design criteria to the end customer, and our team was tasked with designing a solution that would meet these expectations.

## Quad Plus Solution

To meet the end customer's criteria, the OEM provided Quad Plus with a components list and interlocking scheme, and we used our existing control scheme previously developed for this OEM and their machine. The Quad Plus team provided the drawings and hardware, built the panels, and developed the PLC/HMI software, along with commissioning and training.

Our solution included a complete electrical package with several enclosures to house VFDs and PLC I/O. We utilized a Control Logix L83S Safety PLC and Point I/O in remote enclosures. We also included Power Flex 755 drives and a FactoryTalk View Site Edition SCADA. Quad Plus engineers then developed software to control the machines based on design reviews with the OEM and the end customer.

Once the installation was complete, the Quad Plus team provided hands-on operational training during startup. We also presented formal maintenance training classes for PLC, SCADA, and drives. These classes onsite over the course of several weeks to meet the plant's production needs with maintenance and engineering personnel.



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