

# Case Study: Machine Logic Backup System



# Quad Plus®



Polyethene manufacturer needs backup systems to prevent data loss if a controller fails.

## Objective

- Obtain, catalog, and store a backup of machine logic data.

## Solutions

- Cataloged equipment, including all controllers and HMIs.
- Retrieved machine logic data from equipment.
- Created backup copies to keep this data safe.

## Results/Benefits

- Future controller failures will not result in the loss of line logic, preventing extended downtime in the event of a failure.
- A detailed catalog of each device helps the customer better understand the plant's overall health, including which devices are likely to need replacement soon.
- Using this data, Quad Plus experts can advise the customer when they are ready to upgrade old equipment.

## Background

Prior to engaging with Quad Plus, this polyethene manufacturer experienced a controller failure on their plastic bag production line. When this type of failure occurs, not only must the controller be replaced, but the machine must also be reprogrammed from scratch.

A better plan is to preserve the machine logic encoded in the machines using a redundant backup system. This is especially critical for manufacturers using old controllers that are more prone to failure.

## Quad Plus Solution

The Quad Plus team was first tasked with cataloging each of the customer's devices, including controllers and operator displays so that we could create an effective backup and documentation scheme.

We then created a suite of software and cabling to interface with the controllers and HMIs to download data. We were also able to provide some software and hardware for older systems that the customer no longer had access to.

Lastly, we made a backup of each controller. To provide redundancy for safety, one copy of the backups is stored at the customer's location, and another is hosted on our servers. This data will also help expedite the upgrade process when the customer is ready to replace old equipment.