

Case Study

Die Cast Lubrication Mixing and Monitoring

Company Profile

A manufacturer of die cast aluminum components serving the automotive manufacturing industry.

Challenge

To meet state environmental requirements the ratio of die lubricant to water must be monitored and recorded. The existing control system did not record this information or provide even control of this ratio thus causing quality problems. The existing system required weekly monitoring and preventative maintenance to be performed on the lubricant feed pump resulting in lost production and downtime.

Solution

Rawson/Industrial Controls provided the correct type and size of pumps, flowmeters, VFD's, and a Red Lion touchscreen controller to optimize the system based on the customers actual flow demand. All electrical and mechanical components were replaced except for two stainless steel holding tanks and their mounting platform. New components were piped, wired, programmed, and tested to ensure proper operation as a system.

Results

The redesigned system now requires no maintenance. All required data is automatically gathered for environmental compliance and is available on the plant network. Die lubricant to water ratio control has dramatically improved and is consistently more accurate than can be measured with the plants testing equipment.



Before



After