Success story

Omron Sysmac platform simplifies spooling and molding machine upgrade for fishing industry customer

A global leader in the fishing tackle industry with a portfolio of iconic brands sought to standardize its spooling and molding machines on a single automation supplier. The company had been successfully using the Omron CQM1 controller. Introduced in 1993, the CQM1 was being discontinued and a higher performance Sysmac series controller was available from Omron.

The CQM1s were in place on the machines responsible for the spooling process. After the fishing line is produced on an extrusion production line and placed onto large spools, the spooling line puts it on smaller spools for packaging and shipping. Although the manufacturer considered switching this line's controls to those of a competing automation supplier, they were beginning to dislike that supplier's software and wish that it had better support.

Omron reached out for an opportunity to demonstrate the Sysmac platform, and the customer's engineers were pleased with what they saw. They decided to implement Sysmac instead of standardizing on the Omron competitor, and they also purchased servos, variable-frequency drives (VFDs) and other automation technologies from Omron. Omron worked with a channel partner, while the customer's internal team took care of the integration.

Business need

A company in the fishing gear industry sought to upgrade discontinued controls on spooling and molding machines and standardize on a single supplier.

Unique solution

Omron provided multiple elements of an automation solution under the umbrella of its Sysmac platform which improves integration and supports code reuse.

Customer benefits

The customer was very happy with the ease of use of Omron's technologies and appreciated the fact that Sysmac lets them do everything in a single development environment.

The solution
A fully integrated system under Sysmac

The need

The manufacturer had been unhappy with what they saw with the software provided by the Omron competitor for several reasons. For one thing, it was challenging to maintain, and the version changes were messy. They were also displeased with the high support costs and were looking for a new software that would make maintenance easy and require minimal support.

Forward and backward compatibility was a major issue. If numerous elements would need to be manually updated every time a part of the system went into redesign, then the manufacturer would have to do quite a bit of extra work. The company also wanted to be able to reuse as much of their previously developed process code as possible.

The solution

Omron was able to leverage the popularity of the Sysmac integrated development environment (IDE) – including the ability of existing Omron customers to reuse code from the CQM platform with automation engineer assistance – to win the project. Tags are very transportable in Omron's software, so a large amount of the customer's original code translated directly over to the new system and didn't require engineers to rewrite much of it from scratch.

In addition to the Sysmac NX102 machine automation controller, Omron provided NA Series touchscreen human-machine interfaces (HMIs), 1S Series servos, safety programmable logic controllers (PLCs), 0S32 laser scanners, NX Series I/O, MX2 VFDs, InduSoft software and E3AS-HL CMOS photoelectric sensors.

The outcome

The customer is quite pleased with the elements of the system in operation. The customer appreciates how easy it is to add all devices on the EtherCAT network and have everything under the Sysmac umbrella.

In particular, the customer likes the way that Sysmac allows them to do everything within a single development environment and gives them a comprehensive library of predesigned functions. The drag-and-drop feature makes it easy to automatically create buttons on the HMI by dropping tags from the controller over to the touchscreen.