



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.



— Sysmac Automation Bundles

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Explore detailed information on each bundle to find the perfect fit for your business. These bundles are designed to simplify automation, improve efficiency, and empower your operations with reliable and scalable solutions.



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One Connection Bundle

Streamline your data collection and visualization processes with this bundle. Perfect for businesses focused on real-time data insights and operational efficiency.

Bundle Category	Product
Integrated Development Environment	SYSMACLE201L
CPU	NX1029020
Power Supply	S8VKG06024
IPC	NYB6540530

Benefits:

- Accelerates data collection and processing.
- Integrates seamlessly with existing systems using MQTT, OPC UA, and SQL.
- Includes high-performance components like the NX102 controller and NYB IPC for reliability.

One Controller Bundle

Unify your safety, motion, and data operations with an all-in-one solution. Ideal for businesses looking to simplify control systems and centralize automation.

Bundle Category	Product
Integrated Development Environment	SYSMACBA201L
Pick One CPU	NX1029020
	NX1021020
Power Supply	S8VKG06024
	NXPF0630
Safety Device	NXSL5500
Pick One Safety IO	NXSID800
	NXSOD400
Pick Two Local IO	NXID4442
	NXOD4256
	NXAD3603
	NXDA3603
Coupler	NXECC202

Benefits:

- Accelerates data collection and processing.
- Integrates seamlessly with existing systems using MQTT, OPC UA, and SQL.
- Includes high-performance components like the NX102 controller and NYB IPC for reliability.

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One Software Bundle

Design the next generation of automation with this comprehensive, turnkey solution. Perfect for a wide range of applications and industries.

Bundle Category	Product
Integrated Development Environment	SYSMACAD201L
CPU	NX5021300
Power Supply	S8VKG06024

Benefits:

- Accelerates data collection and processing.
- Integrates seamlessly with existing systems using MQTT, OPC UA, and SQL.
- Includes high-performance components like the NX102 controller and NYB IPC for reliability.

The Power of One Bundle

Enhance your automation capabilities with powerful design and commissioning tools. Ideal for businesses that require flexibility and precise control.

Bundle Category	Product
Integrated Development Environment	SYSMACLE201L
Pick One CPU	NX1P29024DT
	NX1P29024DT1
	NX1P21040DT
	NX1P21040DT1
Power Supply	S8VKX12024EIP
	NXPF0630
Pick Two Local IO	NXID4442
	NXOD4256
	NXAD3603
	NXDA3603
Remote IO	NXRILM08CECT
Cables and Supplies	XS5FD421D80F
	XS5WT421DMCSS
	21349700495020

Benefits:

- Includes Sysmac Studio for seamless design and simulation.
- Features advanced tools like 3D simulation and data playback.
- Built for scaling automation programs with ease.