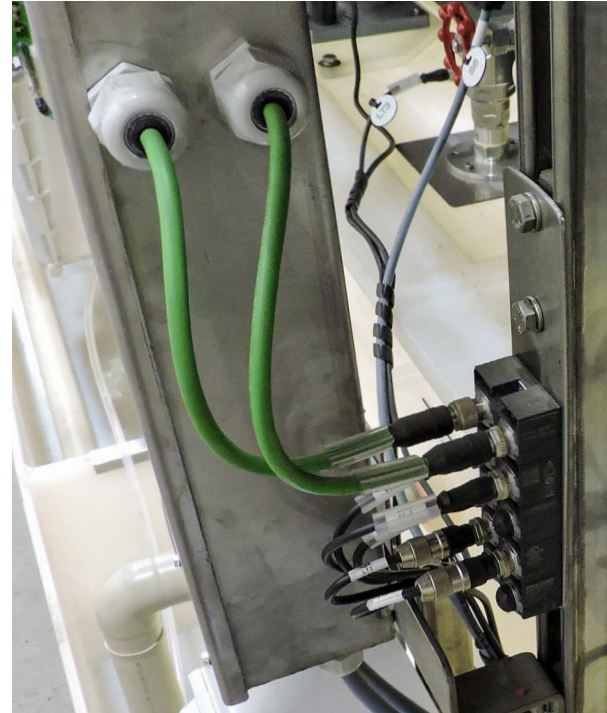**Murrelektronik IO-Link Solutions**

Proceco Integrated Cleaning Systems Gains Powerful Results with Cube67 and IO-Link

Location: Montréal, Québec, Canada

Industry: Machine builder specializing in aqueous cleaning systems

We chose to work with Murrelektronik because they were able to supply the best I/O system for the type of machine we were building. Their Cube67 system with IO-Link made it much easier for us to integrate different types of I/O devices while reducing the amount of wiring we needed to do.

PROCECO®
Integrated Cleaning Systems

CHALLENGE

Proceco was commissioned to build an automated 13 station washing system for the aerospace industry running an Allen Bradley PLC with EtherNet/IP.

• Combination of digital and analog I/O signals with some stations required to go offline while the machine process continued.

• IP address limitations due to PLC CPU

30% LESS INSTALLATION TIME

25% MATERIAL COST REDUCTION

SOLUTION

Proceco's original I/O system concept was to use junction boxes. This would have required running power and communication cables to every station. We proposed a Cube67 fieldbus system because the one-cable technology packs data and signal into one main cable. Then we suggested one IO-Link extension module per station for the 12 DIO and 4 IO-Link connections.

• Analog and RTD sensor were replaced with IO-Link versions

• IO-Link to Analog Converter used to convert an IO-Link signal to a 4-20mA output for the valve

• Extra digital signals were handled with an IO-Link Hub

RESULTS

- Substantial savings in hardware costs and installation time due to eliminating analog PLC cards and the ability to use a single system cable from station to station.

- Increased productivity due to Machine Option Management function allowing the rest of the stations to continue running when a station needed to go offline for a tank refill.

- Major reduction in wiring due to the IO-Link Module providing the capability of connecting three types of devices to one module.

THE POWER OF MURRELEKTRONIK'S IO-LINK SOLUTIONS

- The wide range of field bus modules: with MVK Metal, MVK Fusion, Impact67, Solid67, and Cube67 make IO-Link devices easy to implement in any application.

- IODD on Board saves GSDML files for the IO-Link Devices so that customers don't need to use additional software from different manufacturers.

- Expansion modules like IO-Link hubs make it easy to increase the amount of digital IO-Ports. The IO-Link to Analog Converter and IO-Link inductive coupler enable customer's to create the right solution for their installation concepts. Even our IP67 power supply Emparro67 Hybrid can be controlled with IO-Link.

OVERALL IMPACT

- Although Proceco had used our Impact67 modules before, this was their first Cube67 project. Murrelektronik Canada provided constant support throughout the project and there were no major problems.

- Murrelektronik proved to be a perfect partner for creating an IO-Link solution.

Our customer is more than happy with the machine and all those excellent Cube67 modules!