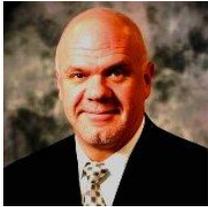




Kawasaki Robotics (USA), Inc.



"Patti Engineering has the experience to provide system engineering resources for tightly scheduled projects working under, at times, extreme conditions. In our industry, you need to surround yourself with reliable, team oriented engineers who know what needs to be done and are willing to stretch some limits to achieve success. You can do that with Patti Engineering."

Ed Minch Director of Sales & Engineering – Automotive, at Kawasaki Robotics (USA), Inc.

Problem:

Kawasaki Robotics (USA), Inc. had secured a job providing the robotics underbody sealer system job for the Toyota Camry's paint line for Subaru of Indiana Automotive (SIA). The existing system installed 14 years ago included 2 Kawasaki robots and 4 discontinued Kobelco robots with obsolete parts, which were causing significant downtime issues. The existing technology also lagged behind in accuracy, speed, and effectiveness. SIA uses Mitsubishi control technology; to upgrade this system, Kawasaki needed top-notch Mitsubishi integration expertise to keep SIA running with as little downtime as possible.

Solution:

Ed Minch, Director of Sales & Engineering for Kawasaki, knew that Patti Engineering is a Mitsubishi Authorized Integrator with extensive expertise in Mitsubishi automation technology.

The upgrade included replacing Kobelco robots with Kawasaki robots, and upgrading the older Kawasaki robots to Mitsubishi's Q Series PLC. In addition an outdated vision system was replaced a Liberty Reach vision system. These upgrades eliminated obsolete parts and increased accuracy, speed, and effectiveness. The system consisted of a Mitsubishi QnU CPU with integrated Ethernet, a Mitsubishi MELSEC-QS Safety PLC, MELSECNET, CC-Link (for I/O) and Ethernet (for data), integrated Ethernet port on the booth control PLC, and a separate Ethernet card in the booth control PLC rack. Patti Engineering's scope of work was developing, debugging and commissioning PLC software for all PLCs.

Customer Benefits:

The project at SIA has been a great success. Implementation was completed with very little downtime. The new system requires reduced maintenance and reduced operator intervention. The dramatic advances in vision and PLC technologies created substantial gains in efficiency, accuracy and overall quality for SIA.



About Patti Engineering, Inc.:

Founded in 1991, the CSIA Certified control systems integration company based in Auburn Hills, MI provides technical expertise and turnkey control systems integration services for design, upgrade/retrofit and asset/energy management projects.