



*“Patti Engineering was a pleasure to work with. They have a vast knowledge of control systems and platforms making them a value added resource in the advancing world of technology. In addition to their knowledge of control systems, Patti Engineering makes every effort to be flexible with the always-changing customer production schedules.”*

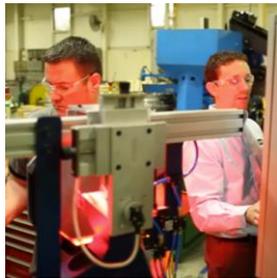
**Jeremy Roberts** Production Engineer, Oetiker

## Challenge:

Oetiker a global leader in automotive and industrial clamping and connection solutions, had equipment running on Siemens S5 PLCs, which were discontinued over 10 years ago. Oetiker’s engineering team knew continuing with the obsolete control system could lead to increased costs and downtime as parts and support become more difficult to find. Oetiker had been thinking about proactively upgrading to Siemens S7 PLCs both to reduce the risk of downtime and to increase plant efficiency. Converting to the newer S7 system would also expand functionality and scalability. However, converting machines to the new platform can be tricky without the right expertise.

## Solution:

Patti Engineering met with Oetiker’s team to establish goals for the conversion to maximize the upgrade to the new technology. To take advantage of the increased functionality of the S7 PLCs, Patti Engineering suggested a new user friendly Human Machine Interface (HMI). This would eliminate the 1970’s style operator interface with push buttons, timers, panel meters and thumb wheel controls and allow for faster troubleshooting.



Before installation, Patti Engineering’s Siemens experts broke down the old code to properly convert it to the S7 code, and also added the new HMI. With the programming complete, Patti Engineering collaborated with Oetiker’s team to install the converted software and hardware. Patti’s engineers verified the operational functionality of the entire conversion. The first installation became the template for future conversions of the same equipment. Patti Engineering also provided updated electrical documentation for future reference.

## Customer Benefits:

Upgrading Oetiker’s PLCs from Siemens S5 to S7 eliminated the inevitable downtime and costs associated with using obsolete equipment controls. Spare parts are readily available. Equipment operation is more efficient. In addition, the upgrade significantly increased the system’s future potential. For example, the added HMI cuts down on troubleshooting time now, but can also add visualization or control functionality in the future.



The clunky old 1970’s interface is replaced by a user-friendly HMI interface



## 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. Patti Engineering is Siemens Automation Solution Partner with engineers who have achieved Siemens Global Technical Certification in the SIMATIC Technology areas of S7 PLCs, SIMATIC HMIs, and SIMATIC Networking.