

**Leading Chemical Processing Manufacture Commissions Regenerative Thermal Oxidizer**



**Main Objective:**

The purpose of this project was to provide the electrical drawings in EPLAN, electrical design support, controls programming, and commissioning for a packaging machine upgrade that included migrating from Mitsubishi to Siemens architecture. The objective was to assist customer in upgrading machine technology to Siemens newest suite of control hardware and software solutions for packaging industry as well as making the mechanical design of the machine more versatile.

**Customer Results:**

All systems controls performed as designed. The customer was satisfied with all work performed, and OTI’s engineering support was extended. OTI engineers received positive feedback from the customer on the post-project survey.

**Overview:**

- ❖ OTI provided the customer with a dedicated team of controls engineers to work on-site with their engineering team. OTI’s staff included a project manager, E-PLAN design engineer, and multiple controls engineers for the software programming. The customer, Outbound engineers, and Siemens engineers all worked together to implement the solution. Emphasis was placed on using standard hardware, software, network topology, and programming practices as well as modularity.
- ❖ PackML compliance was a focus. Siemens Scout was utilized as the primary integration platform. Siemens Step 7 and Simotion was utilized for the PLC programming, with Siemens WinCC Flexible utilized for the HMI programming. Motion on this system was accomplished with the Sinamics line from Siemens.
- ❖ The packaging line is an ultra-clean, industry-leading hygienic filling machine which comprises design features such as HEPA clean air system, automatic machine disinfection, carton decontamination, double diaphragm filler, dedicated CIP unit, and a sterile filling station.
- ❖ A function block was created for every mechanical function on the machine which could be realized with a servo motor, cylinders, or valves. The required function blocks were programmed in structured text or ladder logic.



*Every owner, manager, and key decision maker is an engineer. They have all been through the ranks and learned this business before they were given the responsibility to manage it. Diversity is also a key to our success. From a technical standpoint specific areas of expertise include: High Temperature applications, Automotive Paint Finishing, Pharmaceutical Automation, Web Handling Applications, Custom Software Solutions, and Safety. As a Systems Integrator, we are a 50/50 split between Continuous Process and Discrete Automation expertise.*

**Outbound Technologies Inc.**

30026 Research Drive, New Hudson, MI 48165, USA

Tel: (248)-735-5000 Fax: (248)-735-5001

[www.outboundtech.com](http://www.outboundtech.com)

Email: MI@outboundtech.com

