

SUCCESS STORY FACTORY AUTOMATION



"With Kontron AIS we had a real partner helping us to understand, to implement and to deliver SECS/GEM compliant interfaces on time and within cost."

Mitch Jacobs, CEO, V-TEK Inc.



FabLink

SUPPORT A CUSTOMER TO SELL SECS/GEM COMPLIANT EQUIPMENTS

Royce Instruments is a global leader in designing precision assembly tools and high-accuracy, low-force bond test equipment for the semiconductor industry. Now V-TEK/Royce is able to provide GEM-compliant equipments to their customers. During a custom training and hands-on session an Kontron AIS engineer explained the world of SECS/GEM to the customer and gave support during an initial implementation. As example we implemented **FabLink** on a Die Sorter while the training. After two weeks all GEM functionalities where implemented on the tool. After the detailed briefing V-TEK/Royce was able to implement a full SECS/GEM interface with only a very small amount of additional support.

The implemented base is useable for any kind of new SECS/GEM interface. The big outcome is, that now all customers of V-TEK/Royce are able to buy equipments with full capacity of SECS/GEM based on **FabLink** by Kontron AIS GmbH.

Platforms: C# controlled tool, FabLink V6.0

Services: Training for SECS/GEM standards, FabLink and C#



GOALS

- SEMI compliant SECS/GEM interface
- Explaining how to satisfy costumers SECS/GEM expectation



CHALLENGE

- Implementing a customizable FabLink integration
- First tool company wide with SECS/GEM



SOLUTION

- Implementation of a solution for a Die Sorter and future tools
- State of the art SECS/GEM interface

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GENERIC SEMI COMPLIANT SECS/GEM INTERFACE WITH FABLINK API

FabLink helps our customers to be SEMI compliant with little effort. Therefore, FabLink takes care of the standard communication. FabLink also offers many interfaces for an easy integration of the equipment software (C#, OPC, S7-Kommunikation, Profibus, TwinCAT ADS, CAN-Bus, Ethernet).

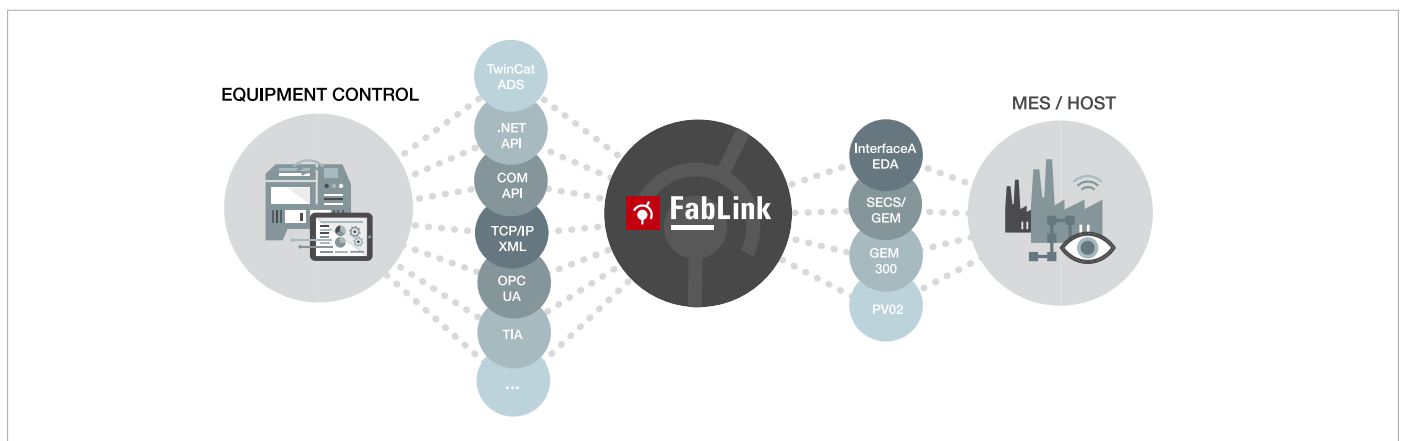


Figure 1: Intergration of production equipment in a factory

To configure the interface Kontron AIS provides the FabLink designer. With the FabLink designer, the customer is able to document the interface with only very small effort.

In this project, we implemented the interface between FabLink and the tool in C#. We not only implemented the standard functionalities like sending events and parameter. We have also extended the interface by additional Remote commands, Recipe Management, Terminal Services and customized stream functions. All those functionalities were directly added to the existing C# solution of the equipment. In order to maintain a high reusability for upcoming projects, we have also shown how these functionalities can be implemented.

Kontron AIS not only supports device suppliers by implementing the SECS/GEM interface, but also assists semiconductor manufacturing companies with new tools to integrate them into their corporate systems. With this experience, we are able to show the expectations of semiconductor factories on SECS/GEM interfaces and ensure that the customers of new developed tools are satisfied with the interface.

The training took place on-site at V-TEK and, like all of our trainings, it was customized to the customer's needs and requirements. During the initial SECS/GEM introduction software developers, management and salesforce learned the principles and ideas of a SEMI compliant interface. The additional hands-on session was realized agile to respond to open questions and to support an initial implementation.

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ABOUT V-TEK



V-TEK, Inc. through its V-TEK and Royce Instruments product lines is a leading manufacturer of precision packaging, inspection and bond testing equipment for the electronics, automotive, aerospace, medical, micro-molding and micro-stamping industries.

For over 30 years, V-TEK has been a major provider of precision packaging services, supplies and rework/inspection. With a high performing, dedicated and innovative team, V-TEK is known globally for its superior service, technical support, customer satisfaction and quality, with locations in Minnesota, California and Mexico. In 2013, V-TEK Incorporated purchased Royce Instruments. Royce's proficiency in the bond testing and die sorting industry made them a seamless addition to their semiconductor manufacturing processes.

ABOUT ROYCE



Going on more than three decades, Royce Instruments equipment continues to be utilized throughout the world by the leading semiconductor and photonics manufacturers, assembly subcontractors, computer manufacturers, aerospace companies, and by the world's largest auto and medical electronics device manufacturers. As customers' technology and product offerings evolve, Royce continues to expand and develop equipment to meet their needs.

Royce equipment provides outstanding accuracy to meet the full range of bond test and die sorting requirements and the team of engineers have a deep understanding of the real-world needs and technical challenges customers face. Because bond testing and die sorting are the sole focus, Royce is able to dedicate itself to developing and supplying advanced, high-precision solutions for customers' operation.

Aside from providing robust, accurate equipment, Royce is equally acknowledged for providing a high level of customer support that starts with initial installation and continues for the life of the instrument. Responsive service and support is provided worldwide by the network of authorized and highly trained distributors.

ABOUT KONTRON AIS GMBH



Being the benchmark for industrial software has been driving Kontron AIS GmbH with 160 employees for more than 30 years. With products and solutions, the company turns concepts from Industry 4.0 and Smart Manufacturing into reality. Kontron AIS supports machine and equipment suppliers as well as manufacturers reduce costs and break going new ways in automation.

In the field of equipment control, Kontron AIS provides innovative solutions for machines in the semiconductor, photovoltaic and secures sustainable system availability in the future with retrofits.

As part of Kontron in the S&T Group, Kontron AIS provides comprehensive service and support options for worldwide project execution and support and offers integrated concepts in the area of control and IoT hardware.

For more information, please visit www.kontron-ais.com