

Support a Customer to Sell SECS/GEM-Compliant Equipments with FabLink®



"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.



V-TEK/Royce
Minnesota, USA

Platform:
C# controlled tool,
FabLink® V6.0

Project:
Training for SECS/GEM, implementation of the interface between
FabLink® and the equipment in C#

Kontron AIS services:
Training for SECS/GEM standards, FabLink® and C#



Goals

- SEMI-compliant SECS/GEM interface
- Explaining how to fulfill customers SECS/GEM expectations



Challenge

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



Result

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

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 during the training. After two weeks all GEM functionalities were 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.

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. It also offers many interfaces for an easy integration of the equipment software (C#, OPC, S7 communication, Profibus, TwinCAT ADS, CAN-Bus, Ethernet).

To configure the interface, Kontron AIS provides the FabLink® Designer, which helps the customer to document the interface with only very little 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 pleased with the interface.

The training took place on-site at V-TEK and, like all of our trainings, it was customized to the customers 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.

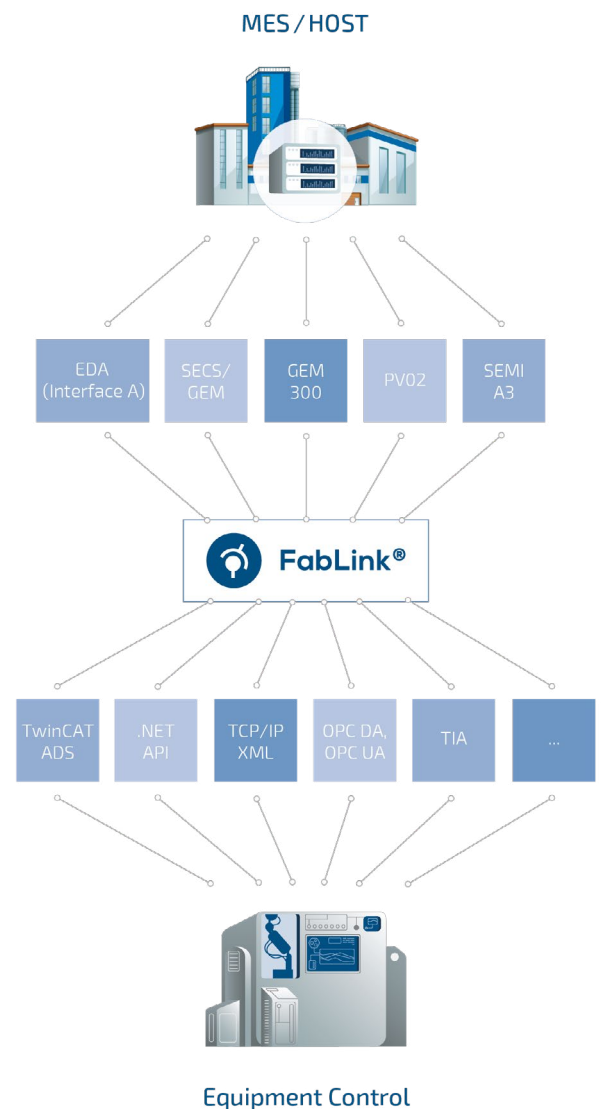


Figure: Intergration of production equipment in a factory

About V-TEK, Inc.

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.

For more information please visit: www.vtekusa.com

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. 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.

For more information please visit: www.royceinstruments.com

About Kontron AIS GmbH

We set the benchmark in industrial software – for more than 30 years and with an experienced team of over 200 employees. Our proven software products and customized digitalization solutions enable machine and equipment builders as well as factory operators to break new ground in automation and secure long-term competitive advantages. Together with our customers we implement worldwide cross-industry, intelligent digitalization strategies and solutions for the smart manufacturing of tomorrow.

As a subsidiary of the Kontron AG, we offer integrated, end-to-end IoT concepts consisting of hardware and software as well as worldwide project management, service, and support thanks to a global network.

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