



CUSTOMER SUCCESS STORY

R2D AUTOMATION

SEMICONDUCTORS • SOFTWARE DEVELOPMENT • AUTOMATION



"In addition to helping us ultimately reach complete software development autonomy, Agileo Automation has saved us two to three years of development time overall."



Robust framework designed to help semiconductor equipment OEMs accelerate software development for their manufacturing equipment



Full compliance of semiconductor manufacturing equipment with SEMI connectivity standards before customer shipment and fab commissioning



Successful training and transfer of field-proven expertise to internal client teams, ultimately fostering client's software development independence

The client: R2D Automation

Founded in 1990, [R2D Automation](#) is a leading developer and manufacturer of wafer handling equipment as well as automation solutions for furnaces. Customers include global chip makers, end-users, furnace manufacturers, and research laboratories. The company headquartered in Clapiers, east of Montpellier in the southeast of France employs approximately 30 people, supported by an extensive global network of agents and distributors.

R2D Automation started collaborating with Agileo Automation in 2013. Back then, the company was using outdated, in-house developed software. What R2D Automation really needed was a solid software foundation to start developing advanced software platforms for controlling and integrating their fab equipment. They integrated Agileo Automation's [A²ECF-SEMI](#) framework and continued building on that collaboration in the years to come to help reposition the company and foster the development of a new product line.

Let's take a look back at this successful collaboration with the testimonial from **Dr. Paul Ivaldi, R&D Director at R2D Automation.**

Company turnaround

2019 was a key turning point for R2D Automation and the start of a new milestone in its collaboration with Agileo. After concentrating its efforts on the solar industry for many years, the company decided to refocus its business on the global semiconductor industry. However during that time, R2D had been left behind the competition and development timeframes were still a challenge. To solve this, R2D integrated SECS/GEM with [Agil'GEM300](#) on top of the Agileo's A²ECF-SEMI software framework with significant support from Agileo software engineers who partially developed R2D's products to make up for lost time, with the goal of releasing a variety of different tools to their customers.

"Thanks to Agileo, we have improved machine usability, we produce more user-friendly and efficient software, we have a more robust code structure as well as enhanced user interface ergonomics, and over the longer term a technological leap with the use of more modern and advanced software," explains Dr. Paul Ivaldi. ***"For the past two years, we have been able to build on top of Agileo's platform and develop GEM300 machine control software that is compatible with SEMI standards and that we can validate."***

Increased productivity gains

Today, R2D Automation's standardized control systems and efficient development framework have greatly helped accelerate time to market and ensure that its products offer a higher level of performance than the market average.

"What started as a pure time-saver turned into a major productivity gain for us – it used to take us four to six months to develop machine software – now it is only two months, representing productivity gains of up to 150%," continues Dr. Paul Ivaldi.

Benefits

- Reduce software investment costs
- Gain strategic independence
- Ensure a long-term vision for software development
- Accelerate time to market
- Reduced deployment risks
- Full compliance with SEMI standards
- On-time manufacturing equipment deliveries
- Long-standing strategic partnership with Agileo's technical team

About Agile Automation

Agileo Automation is a trusted partner for equipment manufacturers, helping them build smarter, automated, and more connected machines that integrate seamlessly into advanced semiconductor fabs. Founded in 2010 in Poitiers, France, Agileo Automation helps OEMs implement control, connectivity, data acquisition, and testing across their tools through proven software frameworks, applications, and expert support. Its flagship [A²ECF-SEMI](#) framework provides a solid foundation for developing equipment controllers fully aligned with SEMI SECS/GEM, GEM300, and EDA standards. As an active member of [SEMI](#) and the [OPC Foundation](#), Agileo Automation contributes directly to shaping the standards that drive Industry 4.0 manufacturing.

"We have improved the profitability of our machines and gained access to 300mm semiconductor markets. This has saved us two to three years of development time in total. The completeness and performance of Agileo's framework, which fully meets our GEM300 needs, along with the quality of support and Agileo's expertise, set Agileo apart from the competition in all these areas."



Full software development autonomy

Thanks to Agileo's A²ECF-SEMI framework and ongoing engineering support, the R2D Automation team has managed to achieve complete software development autonomy which has turned into a major competitive advantage for the company.

"The training, support, and internal skills development we have received from the Agileo Automation team has been invaluable in achieving our goals," concludes Dr. Paul Ivaldi. ***"We truly believe that Agileo's software expertise is second to none in this market and we look forward to continuing our partnership in the future."***