

Case Study



Sodick

Sodick Co. Ltd.

Customer profile

Global manufacturer of EDM tools.

Industry

Manufacturing.

IT environment

300 employees and 29 subsidiary companies.

Challenge

Provide networked EDM solutions that comply with customers' internal security policies.

McAfee solutions

McAfee Embedded Control

Results

- Whitelist approach provides comprehensive security without affecting system performance.
- EDM systems can be confidently installed in customer sites with compliance and IT approval.
- Embedded security offers protection for today's highly efficient networked manufacturing environments.

Embedded Security Delivers Peace of Mind to Global EDM Provider's Customers

Sodick Co. Ltd. is a global manufacturer of electric discharge machining (EDM) tools, machine tools that use electrical energy to create molds and precision components for a wide variety of industries. The company is based in Yokohama, Japan and has more than 300 employees, with 29 subsidiary companies operating around the world.

Business Challenge: Protect Customers' Business Networks

Sodick's solutions have evolved to meet its customers' requirements as factories have become increasingly networked to accommodate the use of CAD and CAM systems and real-time production management. While machining programs were originally created in a stand-alone environment directly on the EDM device, networking has enabled the programs to be developed on PCs and then ported across the network to the EDM tool. This enables the tool to stay in production while the program is being developed. Also, real-time monitoring of the EDM tools' operation and production status is now done using PCs that are linked over the network to the tools.

Introducing any device into a network poses a potential security threat. Like many EDM systems, Sodick's machine tools use the Microsoft Windows Embedded operating system and, as such, are at risk for viruses and other malware. If infected, EDM solutions can malfunction and bring production to a standstill.

Sodick needed a solution that would give its customers peace of mind and ensure compliance with their internal security policies for connecting equipment to their business networks. Sodick also sought a security solution that would be cost effective to meet customers' budget requirements. "Our objective was to show our customers that we've created an environment in which antivirus measures are taken, and security is ensured as a matter of course," says Takashi Sawazaki, marketing manager at Sodick.

Our Solution: A Whitelist Approach to Embedded Security

To meet these requirements, Sodick chose McAfee® Embedded Control—a solution that secures embedded systems and the systems they contain while maximizing uptime, reducing support costs, and helping ensure compliance. "With McAfee Embedded Control, we're able to build security right into our manufacturing process, easily and cost effectively," Sawazaki says.

McAfee Embedded Control creates a dynamic whitelist of programs authorized for the Sodick EDM control systems and then blocks any programs or code snippets outside of the authorized set. No unauthorized changes, not even Microsoft patches, can be made, and an audit trail logs all access attempts.

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—Takashi Sawazaki, Marketing Manager

Unique Embedded Security

“We had considered many different antivirus software packages, but they were all designed for PCs and were not suited to machine tools,” Sawazaki says. “McAfee was the only vendor that could provide the fully embedded security solution we needed, and its whitelist approach strengthens security while placing a smaller burden on the network control device.”

Benefit: Security Behind the Scenes

With only authorized programs “whitelisted” to run on the Sodick EDM control systems, McAfee Embedded Control runs quietly in the background without having to slow the system down for a virus scan. In the rare event that a virus file is introduced via the network or recordable media, McAfee Embedded Control immediately blocks the threat and removes the risk of the machine tool becoming the source of infection.

“Our customers’ engineers can use the machine tools as they have always done, without having to think about security,” Sawazaki says. “Security is essential, but, ideally, the means used to ensure it should be almost imperceptible. McAfee Embedded Control has helped us achieve that ideal.”

