

Deutsche Edelstahlwerke Secures Production Systems and Overall IT Environment with McAfee

IT team manages security ecosystem through a single, centralized console



Deutsche Edelstahlwerke

Customer Profile

Leading producer of specialty stainless steel products

Industry

Manufacturing

IT Environment

More than 2,200 desktops across four manufacturing sites

By leveraging McAfee ePO and integrating additional McAfee solutions Deutsche Edelstahlwerke is able to keep production systems available and protect data

CASE STUDY

Deutsche Edelstahlwerke GmbH is a leading manufacturer of specialty stainless steel products used in the automotive industry, aerospace, mechanical engineering, energy management, and systems engineering. With headquarters in Witten, Germany, the company operates four manufacturing sites and has 4,000 employees who produce more than a million tons of stainless steel products every year.

Building a Strong Defense Against Cybercrime

To maintain and improve its quality standards for both production and customer service, Deutsche Edelstahlwerke depends on a mature IT environment to drive its production systems and keep them continually available. "The financial calculations for production systems are made with great precision, and any disruption can have a serious impact on our business," says Klaus Thiehoff, head of IT Infrastructure/Special Applications at Deutsche Edelstahlwerke. "Unplanned downtime can result in technical faults and can also make our network, servers, databases, and control systems vulnerable to attacks by cybercriminals."

Particularly critical are those moments when changes to IT systems cause holes in security that are not detected quickly, and, therefore, cannot be corrected quickly. The aim of the criminals' activities is to harm IT systems or to destroy or steal data. Cybercriminals' most valuable currency is data, as it can be sold to various interested parties at a high price.

"The threat of hacking and malware attacks is basically a fact of life for large companies. As one of the most established companies in Germany, we are a favorite

target for attacks," Thiehoff notes. "Therefore, we place top priority on protecting our IT systems and our valuable data, including the production environment."

A Comprehensive Solution

Deutsche Edelstahlwerke's first line of defense against malware attacks is a suite of solutions from McAfee for protecting endpoints at all company locations. McAfee® Endpoint Protection Suite has been deployed to more than 2,200 desktops, and McAfee Web Protection software and appliances provide web filtering and anti-malware scanning to protect 1,500 nodes from unauthorized access. McAfee Integrity Control has recently been installed to protect the integrity of quality data stored on production systems.

Problem Found, Threat Eliminated

In industrial operations like Deutsche Edelstahlwerke, the production systems are a long-term investment. Continually updating these systems is not feasible because the control components linked to them are precisely tailored to the hardware and the relevant operating system. Most of Deutsche Edelstahlwerke's steel production control systems run in a stable and self-contained manner on Microsoft Windows XP machines, with no connections to the company network. However, in 2013, the company chose to integrate two of its key quality measuring systems into the network to facilitate continual updating of comparative databases and speed production of work progress reports.

"When the measuring systems were integrated into the network, McAfee ePO immediately issued a warning that the company network was threatened by malware. We

Challenges

- Keep production systems available and protect high-value data.

McAfee Solution

- McAfee Endpoint Protection Suite
- McAfee® ePolicy Orchestrator® (McAfee ePO™) software
- McAfee Integrity Control
- McAfee Web Protection

Results

- Protects critical production systems as they are added to corporate network
- Detects and stops malware introduced through USB drives
- Enables IT team to manage entire security ecosystem from single, centralized console

CASE STUDY

were puzzled; why would systems that had previously been self-contained pose a risk to the network?" Thiehoff relates. "A re-check produced the same result: McAfee ePO immediately detected that our production systems were infected by a variety of malware. Further, many of the threats were by no means recent."

Thanks to McAfee ePO software's real-time detection, the IT specialists at Deutsche Edelstahlwerke were able to discover and eliminate the malware threats within seconds. When investigating the causes, the team realized that the Microsoft Windows XP platforms running the measuring systems were often tested and maintained by external technicians, who uploaded occasional updates from USB drives. "We hadn't noticed the infections because these systems were previously self-contained and couldn't spread malware to other components," Thiehoff explains.

Safeguarding Critical Data

To protect the production systems that were newly integrated into the network, Deutsche Edelstahlwerke installed McAfee Integrity Control. This specialized security solution uses whitelisting to protect components that are particularly sensitive, such as systems with a fixed function. Depending on the

configuration, only authorized services and processes are permitted to access these systems, while all other network traffic is blocked. Deutsche Edelstahlwerke is assured of maximum security for these systems without the need for scanning or .DAT file updates that could impact performance. As with all of the other security components, Deutsche Edelstahlwerke uses McAfee ePO software to monitor and manage McAfee Integrity Control easily and efficiently.

Deutsche Edelstahlwerke is gradually equipping more than 300 production systems with McAfee Integrity Control, which is able to "freeze" the systems during regular maintenance windows for integration into the company network. McAfee Integrity Control also protects the systems during lengthier patch pauses, which occur only twice a year.

"McAfee Integrity Control is the ideal solution for us. It has absolutely no impact on the performance of our production systems, and it blocks any network traffic that we do not explicitly allow," Thiehoff notes. "Plus, the whitelisting frees us from dependence on .DAT files, installation is extremely rapid, and we can, at the same time, be certain that attacks from the Internet will never bring our production systems to a standstill."

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—Klaus Thiehoff, Head of IT Infrastructure/Special Applications



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