Following the world’s first successful hacker attack on a safety controller, HIMA elucidates the new cyberthreat

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In late 2017 the ICS cybersecurity specialist Dragos announced that a safety controller (SIS) of a HIMA competitor in a process facility in the Middle East had been targeted by a new malware attack and successfully hacked. The SIS was compromised, leading to a shutdown of the facility. The professional execution of the attack again clearly shows that facility operators need to take the subject of cybersecurity very seriously. HIMA, a leading global independent vendor of smart safety solutions for the process industry, therefore offers to provide expert consulting on the subject of cybersecurity in safety-critical systems.

The above-mentioned cyberattack represents a new dimension of cyberthreats to critical infrastructure. According to current knowledge, it was specifically planned and designed to target the SIS of a particular manufacturer. This sort of attack on a SIS, the first ever seen worldwide, is very sophisticated and only possible with significant effort.

Dr Alexander Horch, Vice President Research, Development & Product Management at HIMA, comments: “The incident with our competitor should serve as a wake-up call for all of us and further enhance awareness of the subject of cybersecurity in the industry. Work processes and organizational deficiencies are by far the most common areas of vulnerability for successful cyberattacks. System interfaces that remain open during operation and can be used to program the systems concerned, for example, give attackers a potential point of access. We urgently advise facility operators to not rely solely on cybersafe components, but instead to establish a comprehensive security concept for their own facilities.”

To achieve maximum safety and security, it is especially important for facility operators to implement the requirements of the standards for functional safety and automation security
(IEC 61511 and IEC 62443) for physical separation between process control systems and safety and security systems.

In addition to providing automation solutions conforming to relevant national and international standards, HIMA supports plant engineers and operators in developing security concepts for the entire life cycle.

“For facility operators it is important to constantly keep an eye on potential forms of manipulation. In this regard, safety-critical applications are fundamentally different from other industrial PLC or Office applications. Considerable expertise is necessary to ensure cybersecurity in safety applications. Maintaining and constantly refining security often poses a challenge to facility operators. It is therefore advisable to draw on the services of experienced safety and security experts in order to jointly develop and implement effective concepts”, says Heiko Schween, a security expert at HIMA.
**About HIMA**

The HIMA Group is the world's leading independent provider of smart safety solutions for industrial applications. With more than 35,000 installed TÜV-certified safety systems worldwide, HIMA qualifies as the technology leader in this sector. Its expert engineers develop customized solutions that help increase safety, cyber security and profitability of plants and factories in the digital age.

For over 45 years, HIMA has been a trusted partner to the world's largest oil, gas, chemical, and energy-producing companies. These rely on HIMA solutions, services and consultancy for uninterrupted plant operation and protection of assets, people and the environment. HIMA's offering includes smart safety solutions that help increase safety and uptime by turning data into business-relevant information. HIMA also provides comprehensive solutions for the efficient control and monitoring of turbomachinery (TMC), burners and boilers (BMC) and pipelines (PMC). In the global rail industry, HIMA's CENELEC-certified SIL4 COTS safety controllers are leading the way to increased safety, security and profitability.

Founded in 1908, the family-owned company operates from over 50 locations worldwide with its headquarters in Bruehl, Germany. With a workforce of approximately 800 employees, HIMA generated a turnover of approximately €126 million in 2016.

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