Enabling Smart Automotive and Electrical Manufacturing

Allied Telesis

GS Yuasa underpins its new factory in Hungary with a robust and intelligent Allied Telesis network—delivering performance, reliability and high security.

Customer: GS Yuasa International Ltd.

Industry: Manufacturing
Location: Kyoto, Japan
Website: www.gs-yuasa.com

GS YUASA

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Mr. Shunsuke Mizutani

Group Manager, Business Promotion Dept.'s IT Promotion Group, Lithium-Ion Battery Business Unit, GS Yuasa International Ltd.

The customer

In 2004, Japan Storage Battery, with the GS trademark and Yuasa Battery Co., Ltd. merged to form GS Yuasa International Ltd. Today, the company develops, manufactures and sells automotive and industrial batteries, power supply systems, lighting equipment and other electrical supplies to a global market.

GS Yuasa Hungary Ltd. is a group company established in October 2017 in Miskolc, Hungary. In October 2019, the new factory began operations, producing automotive 12-volt lithium-ion batteries and shipping them to European automobile manufacturers. The new factory transforms lithium-ion cells produced in Japan into batteries, on the latest automated production lines.

Introducing ERP and a new network

Coinciding with the factory construction, GS Yuasa International decided to introduce smart systems in Hungary to achieve mission-critical tasks and production management.

The company needed a cutting-edge Enterprise Resource Planning (ERP) system to allow management collaboration between Japan and Hungary, and to seamlessly integrate with the manufacturing system, drawing on production data to inform continual improvement decisions and efficient operation.

To underpin these new systems, GS Yuasa needed a brand-new network capable of supporting the smart factory with advanced technology capabilities to enable digital transformation.

"We had quite a few requirements, including multi-lingual and multi-currency support, and compatibility with Hungary's taxation system. Plus, we needed to facilitate Electronic Data Interchange (EDI) and collaboration with our team in Japan," says Mr. Shunsuke Mizutani, Group Manager of the IT Promotion Group at GS Yuasa.

Security was also a top priority. As Mr. Mizutani explains, "Many people, including visitors from Japan on business trips, will visit the factory."

Why Allied Telesis?

To select a provider for the new advanced network GS Yuasa looked at numerous options. "We decided quickly that the Allied Telesis proposal was the best. It not only satisfied all of our technology and security requirements, but it also focused on maintaining stability and global support during implementation, which was really important," says Mr. Mizutani. "Allied Telesis proposed a network that would allow us to maintain strict security in the factory and the office area, and to control access rights while still ensuring accessibility for guests."
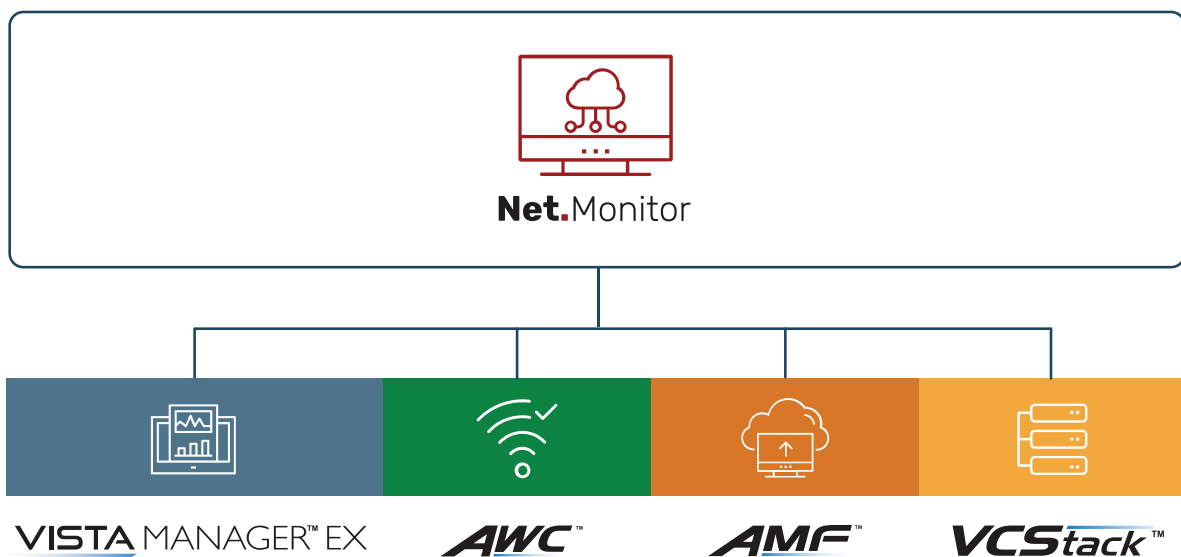
The products have proven reliability, too. Mr. Mizutani continues, "Allied Telesis network equipment has long been used by GS Yuasa at many of our international locations. So, we had solid proof of its excellent durability and reliability, both of which are key to maintaining factory operation."

Allied Telesis were able to manage the entire project, selecting the right ERP system as well as providing the network infrastructure. This was possible thanks to the company's large number of IT specialists, and their ample experience operating business systems across the globe.

Smart technology builds a smart factory

GS Yuasa selected numerous Allied Telesis smart technologies that work together seamlessly as an integrated solution, including Vista Manager™ EX, Allied Telesis Autonomous Management Framework™ (AMF), Autonomous Wave Control (AWC), VCStack™—all supported by Allied Telesis' network monitoring service, Net.Monitor™ .

Providing visual network management, Vista Manager EX enables easy monitoring and proactive IT administration by brilliantly combining a complete network overview with intuitive access to detailed information. Vista Manager EX provides the graphical interface for Allied Telesis network automation

tools: AMF to simplify management of wired network devices, and AWC to centrally manage and optimize the wireless APs—by regularly analyzing signal coverage gaps and interference, and then automatically adjusting the Wi-Fi network for the best possible performance. These three tools work seamlessly together to reduce the cost and complexity of network management.

VCStack is used in the network core to create a single virtual chassis out of multiple switches, removing any single point of failure. Other clever features, like Loop Guard at the edge of the network, combine to maximize network uptime and support smart and efficient manufacturing.

Security is assured, with configurable access rights for individual users, so staff have appropriate access to online resources, the ERP system, and other business applications, while visitors are catered for with wireless Internet access as required.

Finally, Net.Monitor lets GS Yuasa employ Allied Telesis knowledge and experience to support their smart factory via ongoing remote monitoring services. More than simple support, it provides a comprehensive solution with full monitoring and management. Allied Telesis engineers are ready to immediately visit if a failure occurs, so factory staff can relax, knowing expert help is always available.

Stability, security, success

GS Yuasa's factory in Hungary was completed in October 2019, and the new ERP system and Allied Telesis network began operation at the same time. Mr. Mizutani says, "Everything went according to plan. We are really pleased with the network—it's very stable and operates smoothly. Staff visiting the factory have even commented on how fast the wireless is."

Allied Telesis intelligent network technologies work together to support smart manufacturing at GS Yuasa's new factory, and the secure infrastructure ensures always-on access to the ERP system and other critical online business data—all backed up with Net.Monitor to provide access to Allied Telesis' years of knowledge and experience in managing and monitoring the network. "We had a power outage at the factory. Thanks to Net.Monitor, Allied Telesis contacted us immediately and provided follow-up service. It's given us excellent peace of mind about our network operation," says Mr. Mizutani.

Allied Telesis will continue providing cutting-edge products, services and support for GS Yuasa International.

Looking to the future

GS Yuasa is considering future expansions of both the ERP system and the network as production needs dictate. Mr. Mizutani explains, "Our production volume will increase, and so will the variety of products that we handle. This means that the system and network will also need to expand. We are counting on Allied Telesis's continuing close support."
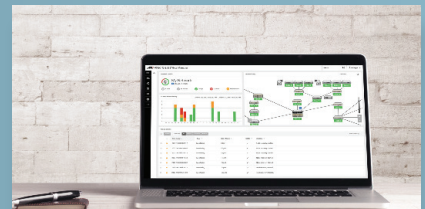
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