

Automated Management and Seamless Wi-Fi Transform Networking for World's Largest Glass Manufacturer

Allied Telesis improves efficiency and reduces operational costs for AGC Inc.'s Sagamihara plant.

Customer: AGC Inc.

Industry: Manufacturing

Location: Tokyo, Japan

Website: www.agc.com



The customer

Founded in 1907, AGC Inc. is a global glass manufacturing company with headquarters in Tokyo, Japan. Today the company trades globally in four domains: glass, electronics, chemicals, and ceramics. The company was renamed to AGC Inc. in 2018.

A core Mitsubishi company with world-leading technologies and expertise, AGC Inc. provides a wide range of industries with a variety of products, including architectural glass, automotive glass, and high-function materials such as glass substrates for displays, electronic materials, chemicals and ceramics. The company also designs unique solutions for individual manufacturers.

Simplifying network management and harnessing the power of data

The AGC Group operates in over 30 countries and regions, with three regional pillars in Japan/Asia, Europe and the Americas.

"At the Sagamihara Plant, we manufacture all types of automotive glass, from windshields to side windows and backlites," says Mr. Hisanori Kodama, the Chief of the Electricity Maintenance Unit in the Facility Engineering Section at AGC Inc. The plant's control system networks were divided across three buildings, and had become difficult to manage. Mr. Kodama says, "We had networks that were specific to each line, but we couldn't manage them easily or effectively. We had heard much about big data and IoT in recent years, but utilizing these technologies was impossible with our previous networks. So, our first goal was to enable comprehensive management of our networks."

AGC Inc. also wanted to harness the power of its data. The Sagamihara plant's network had to constantly monitor product data, such as the levels of heat and pressure required in glass production. As Mr. Kodama says, "As data grew more and more important, we needed to find ways to manage and utilize it."

Why Allied Telesis?

"We looked at proposals from other companies before we chose Allied Telesis. It was very clear that the advanced Allied Telesis technologies, in particular AMF and AWC, would provide the network we needed. We were particularly pleased with AMF's automatic recovery capability, as keeping the production network up and running was key to our manufacturing operation," says Mr. Kodama.

Allied Telesis equipment had already been introduced to the company's Office Automation (OA) system network, so AGC Inc. staff had experience with the products and shared positive feedback—another factor in the decision to build the new network with Allied Telesis' cutting-edge products and solutions.

AMF™ AWC™ VISTA MANAGER™ EX

Autonomous networking with AMF, AWC and Vista Manager EX

AGC Inc. built a brand new network, featuring Allied Telesis devices centrally controlled by Allied Telesis Autonomous Management Framework™ (AMF). AMF helped to significantly reduce IT administration, as well as providing the all-important automatic recovery from failures that AGC Inc. needed to ensure maximum production efficiency.

The new network spans the three buildings, and features integrated management of the core, distribution and edge switches, which use PoE to connect and power the Wi-Fi Access Points (APs) and other production devices—like the heat and pressure sensors that are critical for successful glass manufacture. To provide a single-pane-of-glass view of the entire network, AGC Inc. adopted Vista Manager™ EX, Allied Telesis' state-of-the-art network monitoring and management tool. Its intuitive usability puts comprehensive network information just a click away, easing the burden of network management for the plant.

The Autonomous Wave Controller (AWC) wireless manager integrated into Vista Manager EX provides superior wireless connectivity throughout the facility, including all production lines, warehousing, distribution and office spaces. AWC regularly collects data about the plant's network, analyzes radio wave output and channels, and applies this information to APs throughout the plant, creating a self-tuning wireless network with the best possible performance.

"Previously, we had very little Wi-Fi at the Sagamihara plant because reliability was our top priority for the production network. But the Allied Telesis AWC solution was proven globally, so we installed it with confidence, and we are very happy with the results," says Mr. Kodama.

Enhanced efficiency—reduced costs

AGC Inc. staff now enjoy a highly reliable network—automated management with AMF, high-performing wireless connectivity with AWC, and a window into the network thanks to Vista Manager EX providing a centralized view of all wired and wireless devices.

AWC wireless connectivity provides seamless roaming for all, including for staff using handheld devices on production lines. This allows AGC Inc. to capture real-time manufacturing data to improve efficiency, and immediately react to any stoppage issues—maximizing production uptime and reducing wastage. Managing and utilizing data has become easy, and has opened further doors for the company to improve their business operation, and maintain their position at the forefront of the industry.

"AWC has provided easy management of all our wireless APs, and its automated optimization means minimal coverage gaps and very little interference. Plus, installing the Wi-Fi network was so simple, thanks to AWC's self-tuning capabilities," says Mr. Kodama.

With the new network up and running very smoothly for over a year, Mr. Kodama can say with the utmost confidence that it has been a very successful overhaul for AGC Inc. "AMF and AWC have given us an integrated wired and wireless network that is both reliable and simple to manage," he says. The company also highly rates the hands-on support provided by Allied Telesis at all stages of the redesign. As Mr. Kodama says, "Allied Telesis listened to our needs very carefully, which was key to building the network we had envisioned. They gave us all the information we needed to gain a thorough understanding of their products and solutions."



We have established a very reliable network that lets us comprehensively manage both the wired and wireless LANs. We have full network visibility, and total confidence in the network's ability to autonomously manage itself.

Mr. Hisanori Kodama

Chief of the Electricity Maintenance Unit, Facility Engineering Section, AGC Inc.

Allied Telesis looks forward to supporting AGC Inc. with world-class products, solutions and support, for many years to come.

About Allied Telesis

For over 30 years, Allied Telesis has been delivering reliable, intelligent connectivity for everything from enterprise organizations to complex, critical infrastructure projects around the globe.

In a world moving toward Smart Cities and the Internet of Things, networks must evolve rapidly to meet new challenges. Allied Telesis smart technologies, such as Allied Telesis Autonomous Management Framework™ (AMF) and Enterprise SDN, ensure that network evolution can keep pace, and deliver efficient and secure solutions for people, organizations, and “things”—both now and into the future.

Allied Telesis is recognized for innovating the way in which services and applications are delivered and managed, resulting in increased value and lower operating costs.

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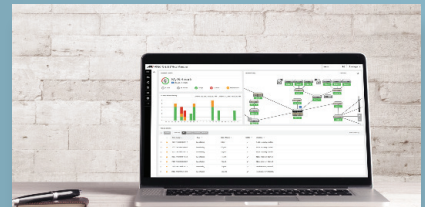
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