Seamless Roaming and Total Wi-Fi Coverage for Large Manufacturing Company

Thai Mitsuwa gets a cutting-edge wireless network upgrade and simple management, with world-first technology from Allied Telesis.

**Customer: Thai Mitsuwa Public Company Limited**

- **Industry:** Manufacturing
- **Location:** Thailand
- **Website:** www.thaimitsuwa.com

**The customer**

Thai Mitsuwa Public Co. Ltd. manufactures, assembles, sells and trades plastic and magnesium products and molds. The company performs contract manufacturing, color printing, spray painting, and assembly of parts for various products, including plastic products for electrical appliances, cars and motorcycles, and magnesium products for cameras. It also provides services for repairing and improving molds.

**Thai Mitsuwa Production and Services**

![Circle Chart]

- 5% Mold Shop
- 28% Magnesium
- 43% Office and Home Appliances
- 24% Automotive

**Enhancing wireless access to enable smart systems**

First formed in Mitsuwa, Japan, Thai Mitsuwa today runs 3 manufacturing plants in Thailand. The company’s factories are fully integrated, and cover all production processes as well as repairs and quality control.

In 2019, Thai Mitsuwa decided to overhaul its wireless network across all three plants. They needed to solve some pressing wireless issues, such as sticky client problems with laptops and roaming devices, which caused lost connections and slow wireless performance as users moved around the premises. But they also had a much bigger change in mind. The plan? To save time and money by automating systems and utilizing data analysis. While previously they’d used a manual entry system for data, the company had just made the smart decision to implement handheld barcode readers, to allow them to easily check and record parts at each manufacturing station for tracking and analysis. As a result, improving wireless access in both the office and the factory areas had become crucial to production.
Finding a vendor that could supply the solution they needed wasn’t as easy as they hoped—until they met with Allied Telesis.

Finding a vendor that could provide a complete solution to Thai Mitsuwa’s wireless technology needs wasn’t simple. After fielding proposals from numerous industry-leading companies, including Cisco and HPE (Aruba), Thai Mitsuwa still hadn’t found the solution they needed. That was until they met with Allied Telesis.

The solution: Allied Telesis Channel Blanket wireless

When Thai Mitsuwa saw what Allied Telesis had to offer, they knew they had found not just the solution they needed, but something really ground-breaking. Allied Telesis Autonomous Wave Control (AWC) enables wireless solutions that are self-tuning, and automatically analyze traffic patterns to optimize the wireless network for maximum performance and reduced operating costs. Additionally, the world’s first hybrid Access Points (APs) simultaneously support single-channel and multi-channel wireless architectures, ensuring both seamless roaming and maximum throughput from a single design.

The AWC single-channel mode is called Channel Blanket, or AWC-CB. It provides seamless roaming for clients, as the entire wireless network acts as a single virtual AP, eliminating any lost connections or poor performance as users move around the offices or factory areas. Plus, the Allied Telesis Vista Manager™ EX network management and monitoring tool provides a single-pane-of-glass view of the entire wireless network, to help IT staff maximize the Wi-Fi user experience while also reducing infrastructure complexity and costs.

Thai Mitsuwa was so impressed with the Channel Blanket solution, the company was “sold” on Allied Telesis from then on. “Not only could the Allied Telesis technology solve our sticky client issue and provide far greater coverage, it also pre-emptively solved any and all potential issues that might have occurred with our new handheld barcode readers”, says Mr. Jakkadech Sooksawas, Sub Manager of the IT Department at Thai Mitsuwa. Allied Telesis engineers explained and clearly demonstrated the technology, and confidently answered all Thai Mitsuwa’s questions. Says Mr. Sooksawas, “Allied Telesis engineers have in-depth knowledge about Wi-Fi technology and were able to clearly explain the differences between single-channel and multi-channel operation.” No other vendor had been able to deliver this—both the technology, and the total confidence in it.

Installing a Channel Blanket Wi-Fi system

Installing the new network was far from simple, considering the scale of the installation. Across 3 plants, Thai Mitsuwa runs 13 separate factories—9 at Pathum Thani, 2 at Nahon Ratchasrima, and 2 at Navanakorn. The implementation went smoothly and to plan, and was completed across all sites within the planned timeframe.
The new network lets Thai Mitsuwa enjoy optimum use of the APs and their wireless capacity, while maximizing their return on investment. Timely support and training from on-call Allied Telesis engineers ensured a smooth installation and ongoing operation.

Says Mr. Sooksawas, “The Allied Telesis team supported us very well. We could always obtain timely support and help with any questions or issues we had.”

“Our service coverage is flawless, and operations are stable and non-stop. Channel Blanket works perfectly.”

Mr. Jakkadech Sooksawas
Sub Manager, IT Department, Thai Mitsuwa

Enhanced manufacturing efficiency and reduced operating costs
Channel Blanket now easily handles large numbers of mobile users, who view the network as one big AP with seamless roaming. Other benefits for the company include compatibility with a full range of wireless clients, interference-free wireless access, and the AWC Wi-Fi controller that analyzes traffic patterns and automatically reconfigures APs to meet demand. As Mr. Sooksawas says, “Our service coverage is flawless, and operations are stable and non-stop. Channel Blanket works perfectly. We can use all our wireless devices with continual access, including the handheld barcode readers. Now, we can move around as we please, without any connection issues, and we have no more issues with sticky clients—or indeed anything at all.”

Thai Mitsuwa now have enhanced manufacturing efficiency thanks to AWC Channel Blanket technology. Says Mr. Sooksawas, “Our manufacturing process has greatly improved. We experience far less human error and can easily track all parts of our production process. We are very happy.”

Simple Monitoring and Management with Vista Manager EX
Using Vista Manager EX has enabled a full view of the entire wireless network, with floor and heat-maps to visually monitor operation and performance. Easy graphical management has reduced the burden of network administration, as well as ongoing operating costs.

“We are so pleased with Vista Manager. None of our staff needed to be trained—the GUI is so easy to operate and gives all the necessary information,” says Mr. Sooksawas.

Thai Mitsuwa might not have known much about Allied Telesis before, but now? They’re totally sold on the company and its solutions. In the future, Thai Mitsuwa will migrate to a total Allied Telesis network solution, and thus gain a single, easy-to-manage platform for network operation and maintenance.
"If we were to do the project over, we would use nothing but Allied Telesis products for our entire network."

Mr. Jakkadech Sooksawas
Sub Manager, IT Department, Thai Mitsuwa

To assist with continued upgrades and improvements to their manufacturing operation, Allied Telesis looks forward to supporting Thai Mitsuwa with world-class products, solutions and training, for many years to come.