

CVC Technologies - Taichung, Taiwan

Perfect integration of applying industrial augmented reality technology on pharmaceutical packaging machine

Optimizing production and maintenance efficiency with digitization

Life Is On Schnei



With COVID-19 an ever-present in many countries and regions around the world, it has never been more pressing to have safe, reliable and efficient processes in the medical sector. From reaching consumers to producing the machines that manufacture the life-saving treatments, efficiency and safety are the foundations of trust. A survey conducted by Pharma Manufacturing found that 65% of pharma manufacturers specifically believe that the pandemic will increase the industry's use of technology to collect and analyze data in real time. #1

The Challenge

CVC Technologies, founded in 1979, needed to introduce digitization into their production processes to ensure that they provided the best manufacturing equipment for customers. They wanted to increase their solutions to customers, while finding a new way to reduce downtime, increase efficiency and minimize human errors.

CVC stands for challenge, value and change. The upscaling is at the heart of the company's future plans, and they were focused on looking at how to introduce new packaging equipment to meet the changing needs of their customers. Their customers needed a fast and reliable way to contact CVC or the plant technicians if there is any issue with machinery or general problems.

The Solution

- EcoStruxure Augmented Operator Advisor
- Modicon M262 PLC
- EcoStruxure Machine SCADA Expert
- Lexium 32 Servo

EcoStruxure Augmented Operator Advisor to offer solutions whenever, wherever

A key requirement for CVC was improving operating efficiency and removing human error during maintenance. Another of CVC's key aims was offering their customers in the pharmaceutical industry a quick way to solve issues if the pharmaceutical packaging equipment has problems. The solution? Schneider Electric's EcoStruxure Augmented Operator Advisor (AOA).

AOA offers real-time diagnosis with augmented reality to ensure instant diagnosis and contactless maintenance that allows machinery and teams to get back to work as quickly as possible. AOA's digital features allow for a step-by-step guide to quickly

Goal

- Improve maintenance efficiency and quality.
- Create an integrated network of 100% digitized machines.
- Ensure that machine status can be viewed anywhere, anytime.

Story

Leading pharmaceutical packaging machine company CVC Technologies wanted to improve safety, optimize production and create a digitized machine network. They selected Schneider Electric's EcoStruxure Augmented Operator Advisor to provide customers with new ways to develop, repair and maintain networks.

Solution

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Results

- 100% digitized machines for increased efficiency and production output
- Improved maintenance thanks to digital service capabilities that significantly improve safety and reduce human error

#1: https://www.pharmamanufacturing.com/articles/2020/pharma-finds-its-digital-groove/

repairing or maintaining machines. No longer do CVC engineers or their customers need to study paper guides or online instructions.

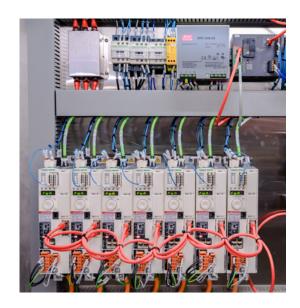
When faced with issues, the AOA system overlays the entire network onto the machine they're working on, allow for rapid troubleshooting and repair. Defaults are highlighted by various colors on the display, and customers can recognize a scene by tabs or 2D images for fast detection of faults. Not only that, by AOA allows for images to be frozen on the tablet. This means it can be put on a table and the engineer's hands are now free to fix the issue. Additionally, operators can now use augmented reality to enable operators to superimpose the current data and virtual objects onto a machine and contact CVC engineers and experienced technicians for quick support and response.

IIoT Ready PLC M262 opens up new product lines

The Modicon M262 logic & motion controllers embed Industrial Internet of Things (IIoT) protocols and encryption which, alongside Lexium 32s, provides precise simultaneous actions on the factory floor and allows CVC to open new areas of development. The M262 uses direct cloud connectivity & digital services to work in harmony with other hardware. For



CVC, where they have equipment moving in multiple directions at the same time – such as equipment that adds the caps to medicine bottles – ensuring that extremely precise movements are all perfectly aligned is crucial. The M262 with Lexium 32s allow for synchronized movement, and have allowed CVC to open up a new product line for liquid filling that leverages the system and reduce errors on the line. This not only benefits CVC, but means their customers are ensuring life-saving medicine is being produced, packaged and sent to those in need more quickly and efficiently.



EcoStruxure Machine SCADA Expert to ensure smooth management

EcoStruxure Machine SCADA Expert is a powerful software for developing HMI, SCADA, OEE and Dashboard projects dedicated to Line Management. It allows CVC to run the line more smoothly and increase efficiency.





"To provide the best to customers, we chose the leading global technology to partner with. Schneider Electric solutions allow us to achieve a new level of innovation. For us, we needed a partner who could take us from good to great. For me, that partner is Schneider Electric."

> - Kevin Chang, General Manager, CVC Technologies





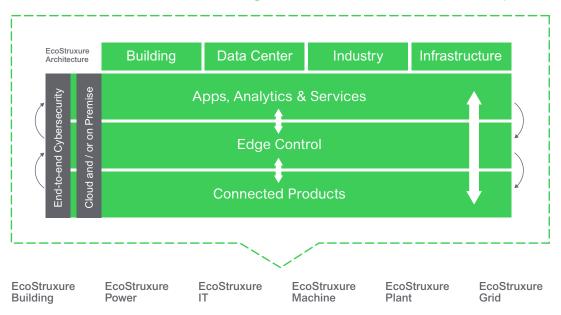


loT-enabled solutions that drive operational and energy efficiency

EcoStruxure is our open, interoperable, IoT-enabled system architecture and platform. EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level.

This includes Connected Products, Edge Control, and Apps, Analytics & Services which are supported by Customer Lifecycle Software. EcoStruxure has been deployed in almost 500,000 sites with the support of 20,000+ developers, 650,000 service providers and partners, 3,000 utilities and connects over 2 million assets under management.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Find out more about EcoStruxure

se.com/ecostruxure

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Learn More



Discover EcoStruxure



of the Future



EcoStruxure Machine



Automation





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