
CASE STUDY

Qisda

A win-win situation



ABB supports Qisda with robotic solution for the production lines

Quality and flexibility were two of the major benefits brought to Qisda's production lines by installing ABB robots to work hand in hand with their shopfloor staff.

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01 Qisda Employees working side by side with the Robots.

The Taiwan-headquartered electronics manufacturer is meeting the increased complexity of its production environment thanks to excellent collaboration with ABB.

Smart automation is the gateway to production progress at Qisda. Like many companies, the manufacturer is currently facing the challenge of adapting its production to greater diversity. Moving from high-volume series production to highly customized products manufactured in much smaller lots, the Taiwan-headquartered company is looking to increased flexibility and quality to underline its future production success.

Qisda is an original design and equipment manufacturer service provider for electronic products, with production lines all around the world. Its product offering includes commercial, consumer, industrial, and medical applications and its LCD monitors and projectors are leading products in the industry.

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As an example of the increased production complexity, its production line in Taiwan is designed to produce any LCD screen between 19 and 32 inches in size.

This need for increased variety, flexibility and quality has resulted in more complex automation for Qisda. For this reason, the company focuses on working in a smart way, and uses ABB robots to automate their complete production lines.

"Qisda designed the production line to allow people and ABB robots to collaborate so we have maximum flexibility," explains Ken SC Chao, Smart Factory Solution Senior Manager at Qisda.



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02 Ken SC Chao, Smart
Factory Solution
Senior Manager at
Qisda and Darren
Hung, Global Segment
Manager, 3C at ABB.

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03 The Robot precisely
positioning the
workpiece, while a
person is fixing it.

Precise positioning

ABB's robots perform several tasks on the line. These include assembling the parts provided by an operator, screwing the cover to the back of the monitors, testing the connection ports and performing a vision-based components check.

“Take the LCD monitor in Taiwan as an example. From the beginning of product assembly and testing to packing, ABB robots are involved.”

/Ken SC Chao, Smart Factory Solution Senior Manager at Qisda

In terms of boosting production quality, the robots provide stability and accuracy for device positioning. Depending on the product, the robot very accurately puts a part fed by an assembly line worker into place for the following production step, which will again be carried out by a member of staff. This helps to keep production flow high and makes the use of different positioning devices unnecessary.

Listening to and respecting the customer

The Smart Factory Solution team at Qisda had their own ideas as to how their future production concept should be set up, but no experience with robot automation. They were therefore looking for a partner who would respect both their ideas and needs, as well as having automation experience in the computing, communication and consumer electronics (3C) industry. Furthermore, the Taiwanese manufacturer had a very tight time schedule to install the application and ramp up production, meaning that smooth cooperation with a partner was essential.

Qisda selected ABB both for their experience in the 3C industry and their willingness to develop the solution together with Qisda and fully tailor it to their requirements.

As a result of bringing ABB's robots on board, Qisda has reduced low skill manual tasks by 51 percent. The staff who previously did this boring, repetitive work will now be trained to do more rewarding, professional tasks, while enhancing the management of manufacturing productivity by 74 percent. Occupational injury rates have also been greatly reduced and production per unit area boosted by 52 percent.

With such figures to reflect on, Qisda is now planning to further invest in smart robot automation across their various production sites. And they see their relationship with ABB as part of their bright future with their new production concept. “Within the trend of Industry 4.0, we look forward to a long-lasting partnership with ABB and to have a win-win situation,” Chao concludes.

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