



RobotStudio™

Case Study: Foxconn

Foxconn manufactures enclosures, primarily for desktop PCs and PC servers. The Shenzhen plant, with its more than 80 000 employees is the biggest industry in China, having such prestigious customers as Dell, Apple, HP, Cisco, Symaco and Nokia.



RobotStudio helps Foxconn shorten time to market, an essential factor at the Chinese market.

Time to market, time to volume, time to money

Time is essential when it comes to introducing new products to the market, especially in the highly competitive segment in which Foxconn and their customers are playing. Yuan Xiao Yun is responsible for research and study of automated technology applications at Foxconn Network System Group:

“Foxconn is a product manufacturer. Our management strategy is time to market, time to volume and time to money. With RobotStudio we can limit evaluation time and shorten development time. This helps us achieve our strategy goal and satisfy our customers”, explains Yuan Xiao Yun when we meet him in the robot laboratory at Foxconn Plant in Shenzhen.

Foxconn started using ABB robots in year 2000, four years ago.

Now there are about 110 ABB robots at the Shenzhen plant. Initially all robots were programmed online, which meant a lot of work re-positioning things in order to program. Foxconn saw potential for improving productivity with offline programming.

“Since the introduction of RobotStudio we don’t have to process on-site debugging and programming when introducing new products to our production line. Now we can simulate and debug the production process, optimize the programming path and reduce cycle time in RobotStudio before starting production. This has changed our workflow and improved our productivity. Production time has been cut down, especially when it comes to the introduction of new products. With RobotStudio new products are introduced on time.

This is essential for survival in this business”, says Yuan Xiao Yun, giving an example: “One of our clients needed to mass-manufacture a product in a very short time. His requirements put us under a lot of pressure. With RobotStudio we could shorten our programming time and thereby achieve our clients productivity goals, enabling him to market his product at the right time.”



Department Supervisor Jun Nan follows the development of RobotStudio with high interest.

Mutual understanding

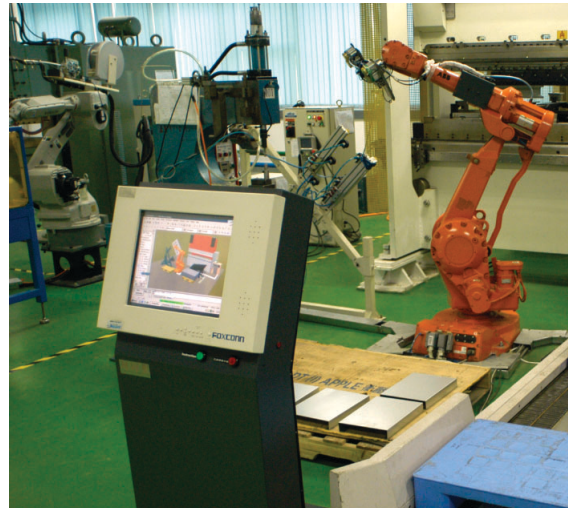
Jun Nan is Department Supervisor in charge of technology development at Foxconn Network Engineering Department: “With RobotStudio we can easily simulate on-site production processes in the office. Without further investments in expensive equipment, we can clearly let our clients and supervisors understand how we develop and program production processes. Basically, all our clients are on-site factory users. After getting a solution presented in RobotStudio they can choose what they like directly without having to imagine our ideas out of the blue. They just choose the program they need from our blueprint.”

The perfect debugging assistant

Foxconn uses RobotStudio for efficiency evaluation. By importing 3D models of new equipment into RobotStudio they minimize the risk as they can evaluate and find the right equipment from the very beginning, thereby avoiding the problems that would occur by purchasing the wrong equipment. RobotStudio helps to secure the

investment. Thanks to reduced debugging time and damage during debugging the maintenance costs at Foxconn has also been cut down.

“The debugging assistant function in RobotStudio is powerful and does a better debugging job than when debugging manually. This also gives us improved product quality”, says Yuan Xiao Yun.



Bending components in the Foxconn Shenzhen facilities.

Parallel training and production

RobotStudio is also used for educational and training issues. Foxconn finds the interface of RobotStudio very user friendly and easy to use: “Before we had RobotStudio it was hard for us to focus on both training and production. Now we can keep normal production running and at the same time use RobotStudio for educating and training our people”, explains Yuan Xiao Yun.

Makes the job easier

“In the future we would like to further utilize RobotStudio. The plan is to simulate multiple robots co-operating together to handle jobs such as folding and welding. RobotStudio will be a great programming tool for all kinds of different applications at Foxconn, declares Yuan Xiao Yun. Jun Nan agrees:

“We need RobotStudio for developing new robot programs, especially when it comes to the welding and folding robots. We love to share the progress of new RobotStudio versions and PowerPacs. RobotStudio makes our job easier!”