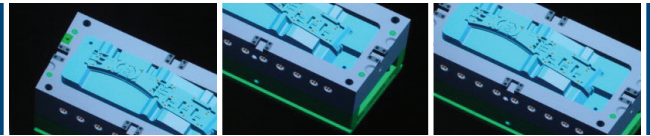


## Integrated global teams meet rising customer expectations

Guadalajara facility sets corporate-wide example for quality, shorter lead times and effective implementation of new technologies

FLEXTRONICS INTERNATIONAL –  
INDUSTRIAL PARK IN GUADALAJARA,  
MEXICO



Siemens PLM Software

[www.siemens.com/plm](http://www.siemens.com/plm)

### ▶ Business initiatives

Production efficiency  
System engineering

### ▶ Business challenges

Increasing global competition creates the need to stay ahead of other providers in order to attract more customers

Provide high-quality end-products in shorter lead times

### ▶ Keys to success

Advanced design and CAM software

Capability to develop complicated molds in an efficient and precise manner

Possibility of capacity to share information with other tool shops around the world

### ▶ Results

Production time reduced from 4 months to 5 weeks

Ability to carry out work of added complexity

Effective implementation of new techniques such as in-mold labeling (IML)

Increased global sourcing

New business opportunities realized

Corporate recognition as tool shop with highest quality standards

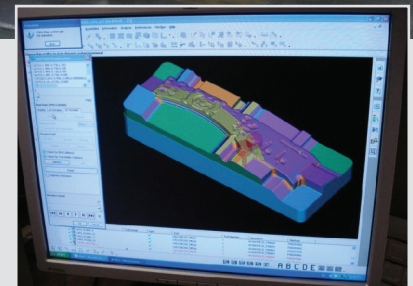
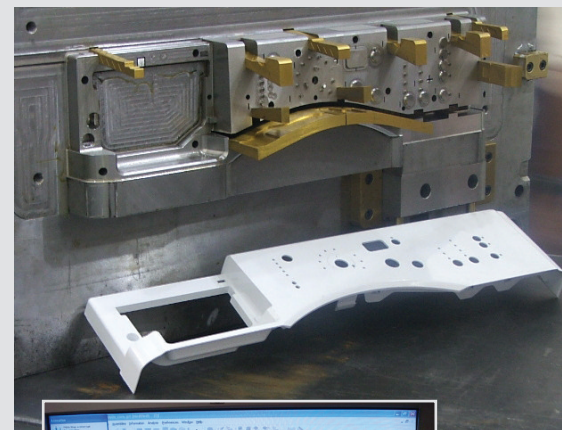
### Meeting increasing industry demands

Headquartered in Singapore, Flextronics is a leading Electronics Manufacturing Services (EMS) provider focused on delivering complete design, engineering and manufacturing services to a variety of OEM markets, including automotive, computing, consumer digital, industrial, infrastructure, medical and mobile. Flextronics has been operating in Mexico since 1997 and currently has various facilities located throughout the country. The Guadalajara site is one of Flextronics' nine global integrated Industrial Parks that provide complete end-to-end product services across all segments and customer categories.

According to Everardo Esquivel, tool room manager for Flextronics Guadalajara, the original role of the tool room in Guadalajara was just to offer maintenance services to the injection molding industry. However, several years ago, when the company acquired the NX™ product development solution from Siemens PLM Software, the tool room expanded its services and began to offer integrated solutions to its clients – ranging from design, repair and maintenance to actual production. This enabled the company to grow at an even faster rate, given that it now had the capacity to pursue a variety of new projects.

Because of the industry's fast-paced evolution in the last few decades, customers' expectations keep increasing. A clear example of changes in expectations is related to lead-time. According to Esquivel, the average lead-time for a project used to be around 16 weeks. Today customers expect their order ready in about five weeks.

The tool room in Guadalajara relies on four designers. Using NX, these designers have been able to translate the conceptual tooling ideas presented by customers into workable molds and in effect, transform them into final parts and products in a very timely manner. NX gives designers the flexibility and adaptability to experiment and evaluate virtually, which means different mold concepts can be tested before going to the actual layout stage. This reduces lead-time significantly. Moreover, it provides Flextronics with the advantage of being out in front of its competitors. In



SIEMENS

Solutions/Services

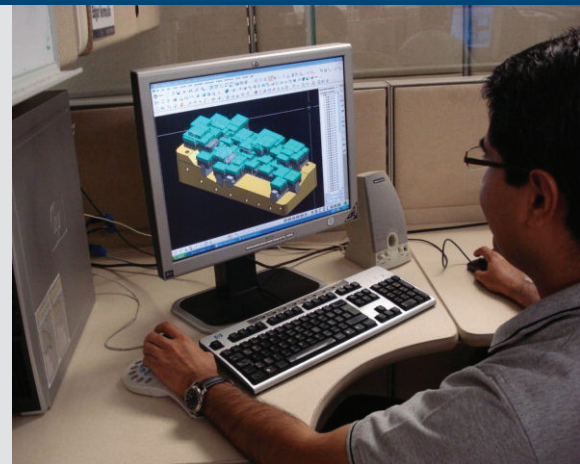
NX  
NX CAM  
NX Mold Design

Client's primary business

Flextronics is an electronics manufacturing services (EMS) provider to the automotive, computing, consumer digital, industrial, infrastructure, medical and mobile industries.  
[www.flextronics.com](http://www.flextronics.com)

Client location

Guadalajara  
Mexico



***“We are proud to say that we have mastered the IML technique and in part we did it thanks to the effort and the possibilities that NX provides us with. Molds that we have developed are now being used in Europe, China and USA, to name a few countries.”***

Everardo Esquivel  
Tool Room Manager  
Flextronics

In addition, using NX, the company is continually reducing costs and improving quality. For example, Flextronics Tool Shop Guadalajara invested in cutting-edge machinery to continue its legacy of high-quality deliverables. Using NX CAM, the facility is able to fully leverage its investment by maximizing the throughput of its highly advanced machine tools.

The efficiency and quality demonstrated by the tool shop has put it in a position to attract orders from clients based outside of the region, which specifically request to have their molds developed by the Guadalajara facility.

Setting new trends

Flextronics Guadalajara is one of the first plants to be able to effectively manage the in-mold labeling (IML) process, meeting customers' new demands of shorter time and bigger orders. IML applies a static charge to hold the label in the injection mold and eliminates the need for vacuum ports that add significantly to the cost of making and maintaining the tool. Applying the label during molding eliminates a secondary step for pad or screen-printing or label application, as well as corona or flame treating. More importantly, the end result is permanent. IML is also cleaner and more sanitary because there is less handling of the product.

“We are proud to say that we have mastered the IML technique and in part we did it thanks to the effort and the possibilities that NX provides us with,” says Esquivel. “Molds that we have developed are now being used in Europe, China and USA, to name a few countries.”

NX is helping Flextronics Guadalajara to expand its service portfolio from just maintenance to fully integrated design, engineering and manufacturing solutions. The facility has gone on to become an industry leader in the areas of lead time and quality and it continues to set an excellent example of how to incorporate new technologies into its service portfolio.



Contact

Siemens PLM Software  
Americas 800 498 5351  
Europe 44 (0) 1276 702000  
Asia-Pacific 852 2230 3333  
[www.siemens.com/plm](http://www.siemens.com/plm)

