Pilkington Automotive Ylöjärvi Plant, Finland manufactures laminated and toughened safety glass, mainly for major car manufacturers but also for the replacement parts market. The factory aims at automating production through robotization, mainly in the area of material handling but also in some other processes, such as polishing, brushing and extrusion.

“After starting to use RobotStudio I have had the opportunity to find better solutions, and, at the same time, reduce the risk of design errors. RobotStudio makes it possible for me to work in a flexible way as I can test new objects and do quick start ups when shifting parts in production”, explains Mika Salminen.

Pilkington Automotive offers a complete range of glazing solutions, from initial design to final product with a comprehensive portfolio of glass products. Their major customers are truck manufacturers to whom they supply windscreens. The Ylöjärvi plant has 32 robots and produces about 6000 different models of safety glasses per work shift.

Hundreds of changes per shift
During a shift are several hundreds exchanges of parts taking place. This demands an exceptional flexible way of working. Mika Salminen, Project Engineer and responsible for robot programming at Pilkington explains: “I used to run around the shop floor and even travel from one factory to another. By investing in RobotStudio I can now spend more time in the office and work more efficiently on my computer by simulating and optimizing the movements and functions of our robots. With RobotStudio I can test various solutions and ideas and can also carry on with parallel designs reducing implementation and start-up times.”

Pilkington Automotive produces windscreens to major car manufacturers’ world wide.
Experienced programmer...
Mika Salminen has long experience of robot programming. He was one of the early adaptors of offline programming in the early 80's and has followed the evolution of offline programming software closely since then.

“By using RobotStudio I can start designing without having a concrete device. This is very useful and helps me reducing the start-up time”, explains Mika Salminen.

Mika Salminen asserts that the risk of design errors has been reduced by using RobotStudio: “With RobotStudio I can design better solutions that are faster and more optimized. The conclusion is that the productivity has improved as I have been able to simulate and optimize the movements and functions of the robots in RobotStudio.

“I have also taken two RobotStudio programming courses. They provided me with a good opportunity to focus solely on learning how to use the software and to obtain more in-depth background information on the subject”, declares Mika Salminen.

... lets RobotStudio do the night shift
It’s not only the production in the Ylöjärvi factory that has become more flexible but also the time table of Mika Salminen: “By working with RobotStudio I can now spend more time in my office and concentrate better in quiet surroundings without interruptions. I no longer have to leave my home and family for traveling around between the different plants. RobotStudio as well gives me the possibility to test my wild ideas knowing it want do any harm. When I go home after work RobotStudio takes over. I leave my computer on for the night to simulate and optimize certain production parameters”, says Mika Salminen.

VBA – a great tool
“The fact that RobotStudio has VBA offers a great possibility for upgrading RobotStudio’s features and the way of using it. “I use VBA to adapt and expand RobotStudio’s functionality. VBA enables me to create powerful add-on, macros or custom user interfaces, explains Mika Salminen.

FACTS PILKINGTON AUTOMOTIVE FINLAND:

<table>
<thead>
<tr>
<th>FACTS PILKINGTON AUTOMOTIVE FINLAND:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RobotStudio version:</td>
<td>3.0, PlusPac</td>
</tr>
<tr>
<td>No of copies of RobotStudio:</td>
<td>1</td>
</tr>
<tr>
<td>Robot models in use:</td>
<td>IRB 1400, 3400, 4400, 6400, 6400S</td>
</tr>
<tr>
<td>Payback time RobotStudio:</td>
<td>6 months</td>
</tr>
</tbody>
</table>

The plant in Ylöjärvi handles about 6000 different types of wind shields per shift.

www.abb.com/roboticssoftware