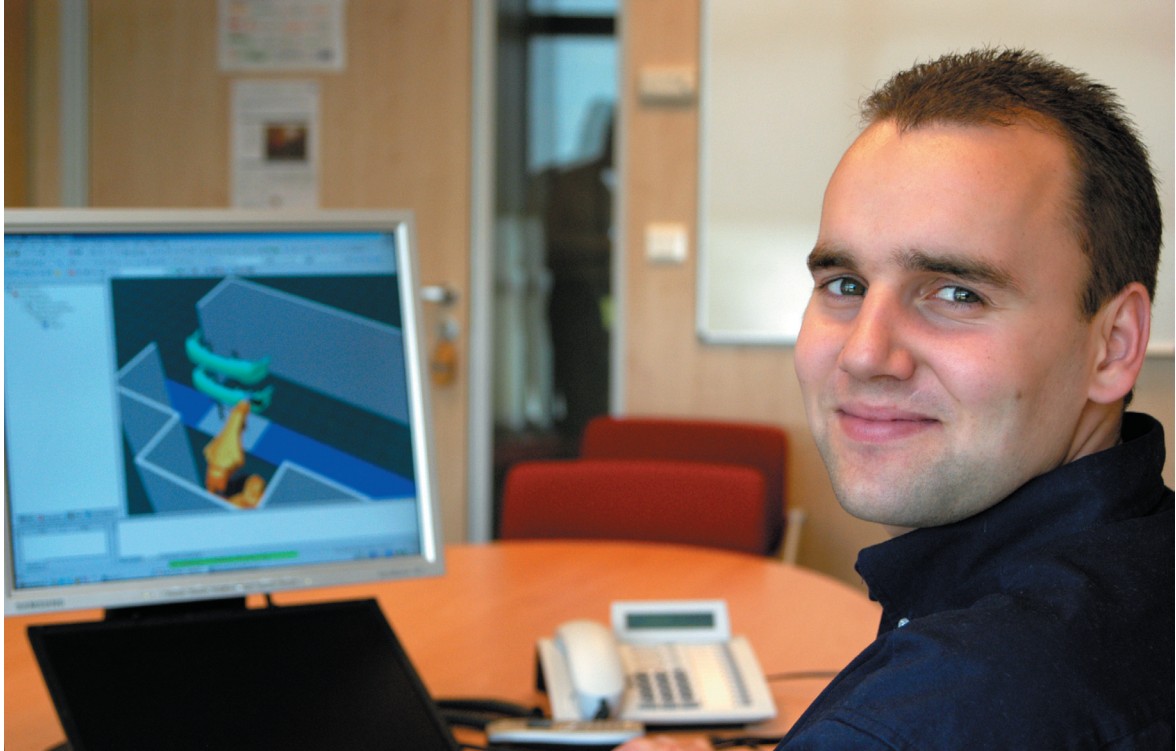


Plastic Omnium is a leading motor vehicle equipment manufacturer. They supply exterior plastic parts like bumpers, wings, tailgates and under frames to major car manufactures world wide.



Daimen Page programmes robots for the 22 Plastic Omnium plants world wide from his office at the Sigmatech center in Lyon.

RobotStudio plays important role in high-tech hub

Advanced R&D center

Plastic Omniums Sigmatech center in Lyon is one of the most advanced research and development centers in its field. Their mission is to create customer satisfaction through creativity, innovation and industrial competence. With the Sigmatech center Plastic Omnium has all the tools needed to strengthen its position as an expert in the architecture of auto body systems and modules.

Offline programming for 22 sites

Plastic Omnium has about one hundred ABB robots. Most of them are used in the painting process, including flame scarfing robots, priming robots, lacquering robots and also a few handling robots. Plastic Omnium has 22 production sites

spread in 11 countries, mainly in Europe, and South- and North America. Sigmatech is a R&D center for the Plastic Omnium production plants world wide. All ABB-robots are programmed offline in RobotStudio at the R&D center in Lyon before they are sent out to their local production plants.

Pilot painting line

Daimen Page is a robotics process and paint expert at the Sigmatech R&D center. He provides technical support for the 22 Plastic Omnium plants world wide. Daimen Page explains:

“Today we have a pilot painting line where we validate processes and develop customer projects for the local plants.

RobotStudio helps us when it comes to testing and validating of new processes, working methods and technical support for the production sites.”

Time consuming on-line programming

To Daimen Page RobotStudio is an efficient tool when it comes to feasibility studies. RobotStudio is used to check the reach ability and cycle time. “Before we programmed our robots using the programming teach pendant. This method was quite cumbersome to manage as all the equipment had to be set up before the programming could be done. This required a lot of time as all the equipment had to be set up in advance. The line was used both for programming and for developing processes, explains Daimen Page and continues:

“Because we are a research center, we have to adapt to the mechanical configuration of the different plants that don’t necessarily have the same conveyors or the same line adjustments. This is very time-consuming to do on-line.”

Increased productivity

The key advantage for the Sigmatech site is the ability to develop programmes outside the pilot line, without immobilizing the pilot line which is their development tool. Since the investment in RobotStudio Sigmatech can concentrate on the robot programming part and use the pilot line mainly for process development. This has led to an increased productivity.

“One of the good things about RobotStudio is that it operates under Windows, which most people know how to use. What is difficult to take on board is the use of a virtual robot. You have to make the difference between a virtual robot and a real robot. However, as soon as this difference is understood, it’s easy to reload the parameters from a real robot to a virtual robot and the other way around”, says Daimen Page.

RobotStudio reassured Smart

RobotStudio is appreciated among Plastic Omniums customers. By providing them with videos of simulations in RobotStudio and transfer the program directly to the production site Plastic Omnium demonstrates their expertise and ability to carry out paint application projects.



Daimen Page gives us an example:

“One of our customers is Smart. RobotStudio was used to show them the state of progress for each type of part. In this way Smart could follow the project in detail, the programming phase, the positioning of parts etc. The fact that we could show simulations and thus prove that production is possible with our equipment really reassured the customer.”

RobotStudio rolled out world wide

Daimen Page sees many future opportunities with RobotStudio:

“We would like to roll out RobotStudio to all our production sites so they can develop future projects themselves, instead of having everything done at the Sigmatech R&D center. Off-line programming has been carried out at the Plastic Omnium plant in Guichen. The plant operates in shifts of 3x8 hours and is very busy. Thanks to RobotStudio they can now avoid immobilizing production resources and don’t have to programme during the weekends anymore.”