

RobotStudio™ Case Study: ProInvent A/S



Robot programming at your desk.

ProInvent A/S, a Danish system integrator that specializes in factory automation is well known for its innovative engineers and high tech approach. ABB turned to ProInvent and asked them to do an installation at their customer Alpharma HPI, a pharmaceutical manufacturer.

Gorm Lundén started at ProInvent two years ago. By that time he had no robot experience. "I had never seen a robot before. After a three days robot course at ABB I found robot programming really interesting and decided that I was going to be the best robot programmer in Denmark. The robot programming really pleased me", states Gorm Lundén.

Pharmaceutical manufacturing

Gorm's most recent project was to build up a robot station for Alpharma HPI, a pharmaceutical manufacturer. To achieve a

sterile production a robot should empty vials in connection with lyophilization. "I hadn't seen the equipment that should be installed at Alpharma HPI and anyway I could build up a complete layout of the system in RobotStudio", clarifies Gorm Lundén and carries on: "The client wasn't ready to install the equipment by then and the fact that we could build up the complete system in RobotStudio has saved us a lot of time. All preparations could be done in advance", explains Gorm Lundén.

Do more in less time

RobotStudio affects the time from project start to finish. This is because RobotStudio allows you to work with the robot and cell right from the moment when the order arrives until you start the implementation phase. RobotStudio makes it possible for you to do more in a shorter period of time. "It took me around 30 hours to build up the Alpharma HPI robot cell and 35 hours to adjust the program", says Gorm Lundén and continues: "By then I found out that RobotStudio really is a high quality product that I will use often in my work as a robot programmer from now on."

ProInvent A/S

The perfect tool

Robot automation is an important part in the process when producing antibiotics. RobotStudio is an essential tool for solving classical problems like where to place the robot and track, where to have reference positions in the cell and how to operate the robot. In the Alpharma case RobotStudio and its Virtual Teach Pendant was used for modifying and arranging the logics to be able to reach the vials in a sterile cleaning room. "Before anyone had started considering the tool that should be used for handling the vials – I could tell that the tool design was very important to avoid singularity. Different 3D models of the tool were tested in RobotStudio before the final design was decided. After testing the tool in RobotStudio I could send an outline to the tool production vendor that we knew should work. To test the tool and adjusting it on site would have taken us at least two extra weeks" states Gorm Lundén.

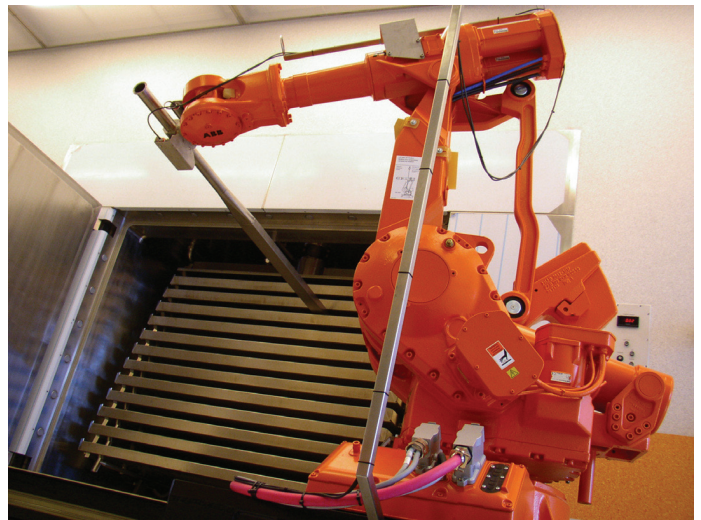


"ProInvent are working with solutions based on the latest technology".
Leif Dalum, Managing Director

RobotStudio also helped Gorm Lundén testing the operator control as the screen of the Virtual Teach Pendant is identical to the real operator panel. "The integrated IO simulator was of great value when finding out how my programmed logic for turning on valves and cameras would work. I programmed one plate and then easily copied the motion to the remaining eleven plates. RobotStudio has helped us to get a realistic simulation, it takes no less than two hours to empty the whole lyophilizer", explains Gorm Lundén.

Smooth and Smart Production

Alpharma HPI has experienced the project running very smoothly. Time spent at the site was remarkably reduced as the running phase was made in RobotStudio. Gorm Lundén states that his knowledge of robots has increased since starting to work with RobotStudio, because he has been able to test new solutions fast and without any risk. ProInvent works as with research companies needing designed machinery and help companies to develop process equipment. "We are working at the technical periphery and it is necessary for us to constantly be on the cutting edge of the technical possibilities. It is our ambition to make production more efficient. This is achieved by delivering advanced automation solutions based on the latest robot technology", states Leif Dalum, Managing Director of ProInvent.



Preparation of antibiotics at Alpharma HPI.

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