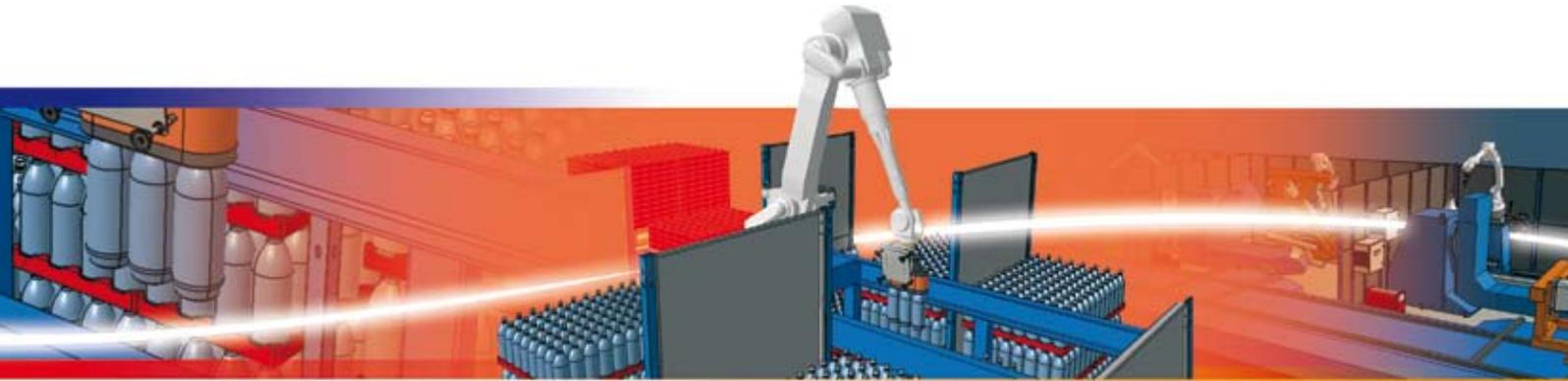


Danatec

Abolishes rework with DELMIA PLM Express



Overview

■ Challenge

Deliver first-time-right solutions to customers whose top priority is workable products

■ Solution

Adding DELMIA PLM Express to Danatec's existing DS PLM environment

■ Benefits

With DELMIA PLM Express, Danatec can foresee problems, avoid rework, and deliver flawless solutions right the first time



"Our investment in DELMIA PLM Express has given us unique possibilities to design, simulate and program production cells within the same tool."

Peter Hedlund
Project and Robotic manager
Danatec

DANATEC

Integrated engineering for medium-sized businesses

Danatec AB is a Swedish design engineering consultancy specializing in product and production development for the engineering, mining and process industries. An established CATIA and Solidworks user, Danatec, has the distinction of becoming the first user of DELMIA PLM Express and has already employed it on a wide variety of projects.

DELMIA PLM Express is especially formulated for the needs for medium-sized and smaller businesses. The individual tools contained within the package and their seamless integration with the DS PLM portfolio allow businesses who previously would never have contemplated PLM to make steps toward it.

"We recently deployed DELMIA PLM Express on some project analysis for a leading Swedish offroad vehicle company," says Peter Hedlund, Project and Robotic manager at Danatec. "The customer wanted a new

robotics line for its component welding workshop. As a fixed price contract, it was vital we understood the feasibility of the project very quickly. Thanks to DELMIA, we were able to give them answers to their questions because we were able to build a complete virtual factory, together with equipment and layout, allowing us to accurately calculate both timings and costs; all within the single DS PLM environment."

Optimal solution every time

Hedlund maintains that his customers are chiefly concerned with having a workable solution. "We pride ourselves on delivering a solution that will work first time," he explains. Since Danatec began working in the DELMIA environment, its clients have taken delivery of solutions that have worked without a hitch right from the beginning.

Previously, the Danatec team was able to design 90% of a project faultlessly straightaway. "Thanks to DELMIA simulation,



that elusive 10% of the job is also now delivered faultlessly,” says Hedlund. “This is because DELMIA gives you the information to show the client the individual welds that either require reengineering, or simply must be welded manually. We’ve noted this is especially true of gantry-mounted robots welding fixtures. In a recent project for BAE SYSTEMS, the CV90 combat vehicle, it quickly became apparent that the gantry would have crashed into the fixture had we gone with our first solution. This result gave us genuine surprise, as we hadn’t foreseen any problems with robot reachability, but we were able to redesign virtually with the DELMIA PLM Express toolset and the new set up worked absolutely perfectly for the client. DELMIA helps you keep your promises to the client.”

The welding fixtures for the vehicle proved to be so successful that Danatec has already been involved in some further pre-studies for the company. These have looked at how welding fixtures for chasses and bodies may look in two concept vehicles.

DELMIA PLM Express helps Danatec rise to the challenge

Danatec’s clients occasionally make unusual and challenging requests that test both the qualities of the project team and their

software. One such project began recently when a brewery approached Danatec for help with automating the picking process for soft drink bottles for retailers’ individual orders. Using a robot, and working closely with the software developer, Danatec was able to simulate customized picking tools. The team designed a clever tool that has two different grippers mounted onto it. When the bottle gripper has finished its work and the next container has to be handled, the last axis of the robot arm simply rotates and the container gripper is ready to begin work.

“Initially, we had the Motorman UP50 robot mounted on the roof trusses,” explains Hedlund. “However, our DELMIA simulation soon highlighted two separate problems; firstly with the robot’s inability to reach all the bottles and secondly, with actually moving the carriers from that location. Now, the robot travels between the containers and so is able to both carry them and reach all the bottles. It’s possible that had we not had DELMIA PLM Express, we’d have potentially wasted time by mocking up the roof-mounted version. Thanks to DELMIA, we soon knew this idea was not feasible.”

“DELMIA should help us to win business as our reputation grows as the consulting firm who has abolished the need for re-work!”

Peter Hedlund
Project and Robotic manager
Danatec



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