

Polyquark for perfect trim

Polyquark develops and markets Wrapstyler, a trim design package for the automobile and aircraft industries. The software is used for the whole trim design process for car and aircraft seats, door panels and dashboards.

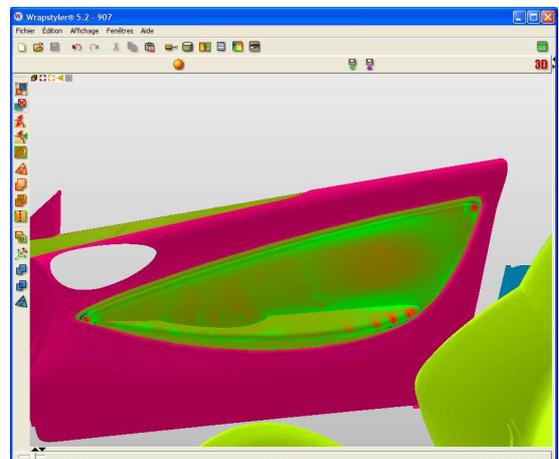
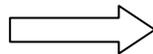
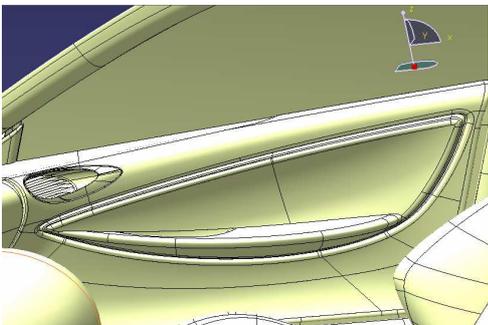
Wrapstyler users include the BMW, PSA and Toyota groups, the fabric maker Michel Thierry, the auto supplier Faurecia and many second- and third-tier suppliers.

Its functionalities have been designed specifically to address the imperatives of professional users, cutting out the systematic recourse to prototypes, reducing the risk of defects, and enabling designers to be more creative by offering a wide choice of automated functions and simulations.

Manufacturers use Wrapstyler from the preliminary project stage as a virtual mock-up tool to address a range of very precise issues, be they technical (wear, seam length, feasibility, etc.) or marketing (textural rendering and color schemes). It also facilitates inter-departmental communication and acts as an interface between OEMs, first-tier suppliers and fabric makers.

Auto suppliers use Wrapstyler to compute patterns (including flaps and knots) and generate the files needed to cut them out on NC machines. They can also perform feasibility studies (stress, deformation, pressure), define the seat cover layout, automatically manage seams, produce quotations and generate assembly drawings.

Datakit helps Wrapstyler to find a way round any 3D shape



The latest version of Wrapstyler integrates Datakit's CATIA V5 converter. Till now, neutral data exchange formats were available with Wrapstyler but did not meet the increasing customer demands for full 3D model data.

Polyquark chose the Datakit solution for its ability to communicate with Opencascade, (the open source kernel that underlies Wrapstyler), its ease of integration, license management, using Flexlm & floating licenses, and file management (of the type used by major accounts).

The CATIA V5 native converter eliminates the problems inherent to using intermediary files. Colors, layers and more generally the geometric information are fully converted along with the model's topological data. Jean Yves BRUD, Polyquark manager, explains: "we are going further than ever before in optimizing the methods we offer. Wrapstyler now has really powerful automatic functions for computing flaps, seams and flat patterns.

The Datakit converter also gives us a 3D import solution that is easy to use, completely reliable and that guarantees the integrity of the shape we get from the conversion. If the 3D shape came out altered, for example with mismatching faces, the pattern would no longer fit it and we would lose the

value of all the automated functions that then come into play in Wrapstyler.”

The converter is available as an option, and solutions are also available to import native 3D files from companies working with SolidWorks or NX.

To find out more about Polyquark and Wrapstyler: <http://www.wrapstyler.fr/index.htm>