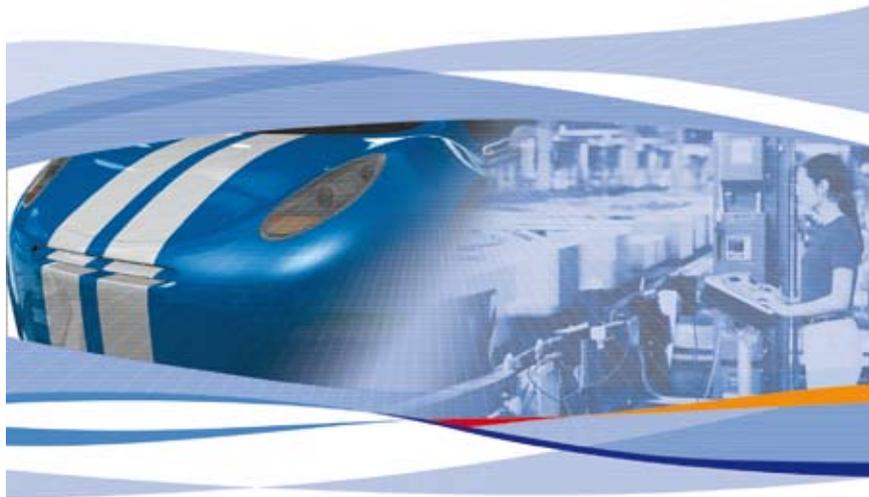


Automotive Surfacing Solutions

Improving the Shape of the Automotive Industry



Loss of data and lack of automation and precision can generate significant challenges for an automotive design studio. In the studio milling process, a cumulative loss of data can create the need for multiple iterations in clay model cycle time. In addition, the inability to collaborate or re-use data can increase the amount of manual processes and negatively impact accuracy.

We offer two surfacing solutions that can be applied to CATIA Studio Milling and Body Exterior Reverse Engineering - Digitized Shape Editor (DSE) and Quick Surface Re-construction (QSR). When these packages are applied with our proven methodologies, design time and costs can be dramatically reduced.

Implementing these methodologies and best practices can provide an accelerated head start for your vehicle development programs.

When used in CATIA Studio Milling, DSE and QSR enable you to achieve a perfectly balanced right and left symmetry on the model, capture changes made by hand and create data that can be re-used.

When applied to Body Exterior Reverse Engineering, these solutions capture shapes that have been sculpted in clay and convert the images into 3-D digital data that can then be used for CAE.



Case Study - CATIA Studio Milling

Industry standard process starts with the exterior surface being created by the Digital Sculptor using traditional laborious methods. The NC cutter path is then generated and the clay is modified by hand. The surface is then re-created using traditional methods and cutter paths regenerated from scratch for each iteration.

With the Quick Surface Method, Automatic Surface is used to create surfaces in very complicated areas that are typically very time consuming. The surface can then be milled using 5 Axis flat cutters resulting in a much higher quality surface on the clay in a shorter period of time. When Power Fit Surface is used it creates a large slab area in a fraction of the time.

Benefits

When used with CATIA Studio Milling your benefits include:

- Quick duplication of clay model details
- Directional 5 Axis Milling
- Incorporation of early design feedback
- Substantial reduction of surfacing man-hours
- Impressive reduction of man-hours for NC cutter path generation.

When used with Body Exterior Reverse Engineering for CAE the benefits include:

- Substantial reduction in cycle time from scan to surface
- Significant improvement in quality of surfaces, which may suffer from data loss during translation from non-native file type to CATIA.

For more information

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