

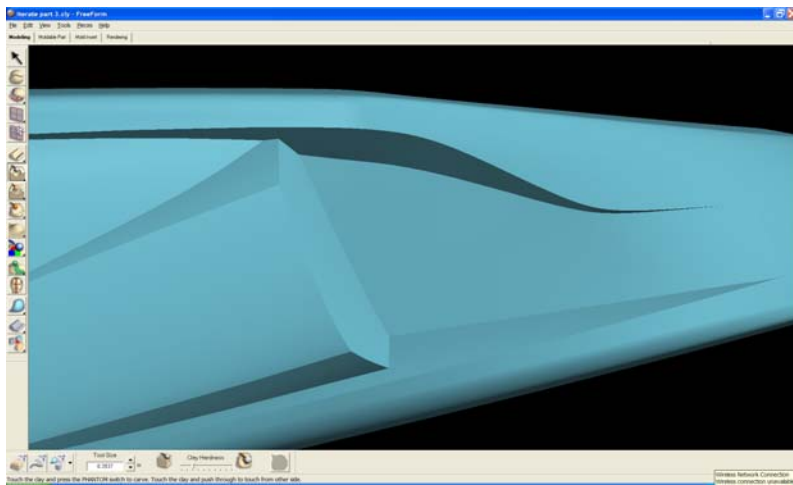
FreeForm® Modeling Plus™ v8.2 — Solutions

Solution: Quickly visualize, iterate, and solve complex surface intersections, creating a curve network for export and surfacing

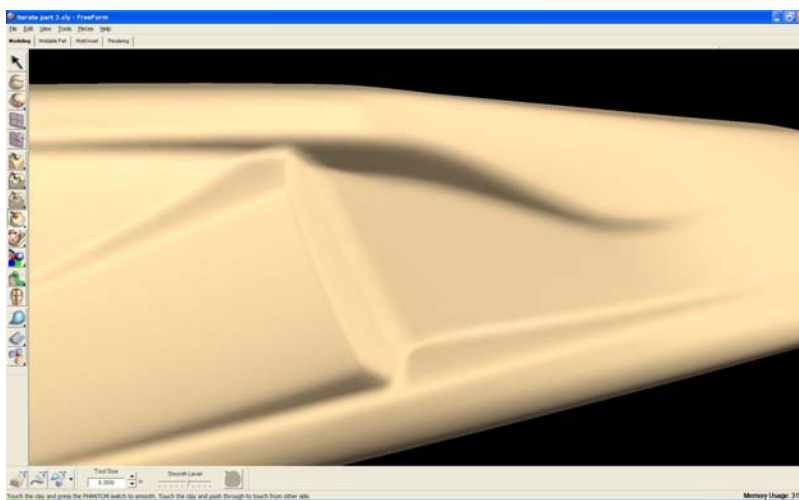
Problem: Forms are often developed with swept surfaces and similar “gestural” techniques, leaving filleting and blending of intersections for later completion. This process often results in complex surface intersections that are not easily visualized or modeled using traditional CAD tools. It also can result in compromised design intent due to CAD software limitations.

Solution: Use the FreeForm Modeling Plus system to quickly visualize, iterate, and solve complex surface intersections, creating a curve network for export and surfacing.

The following sequence illustrates:



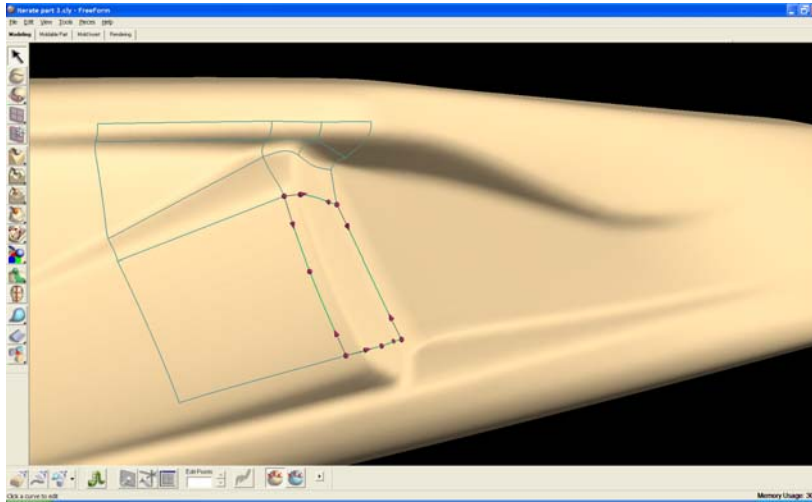
1. Surface data is imported as a Parasolid® sheet, and then converted to digital clay.



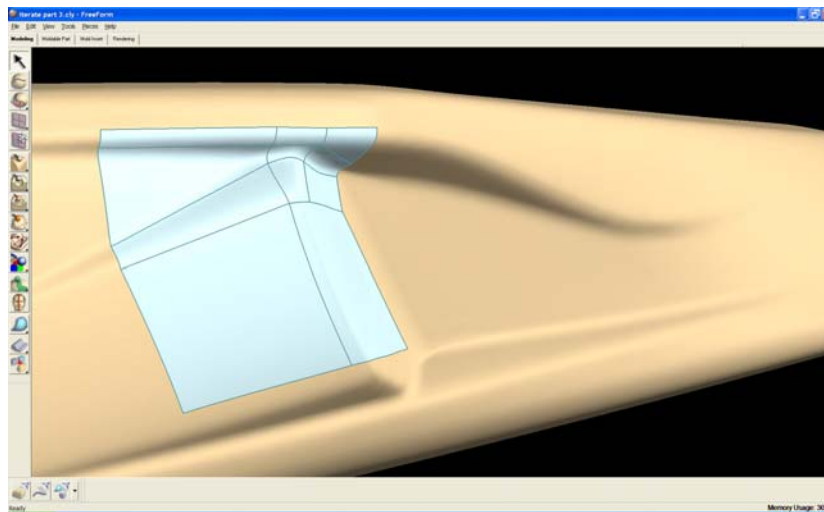
2. Multiple complex intersections are solved using clay filleting, blending, smoothing, and sculpting tools. Multiple design iterations are simple; and, due to the inherent nature of FreeForm digital clay, operations such as filleting, blending, smoothing, and shelling are not mathematically constrained as in traditional CAD—these operations always generate a result in FreeForm Modeling Plus.

— More —

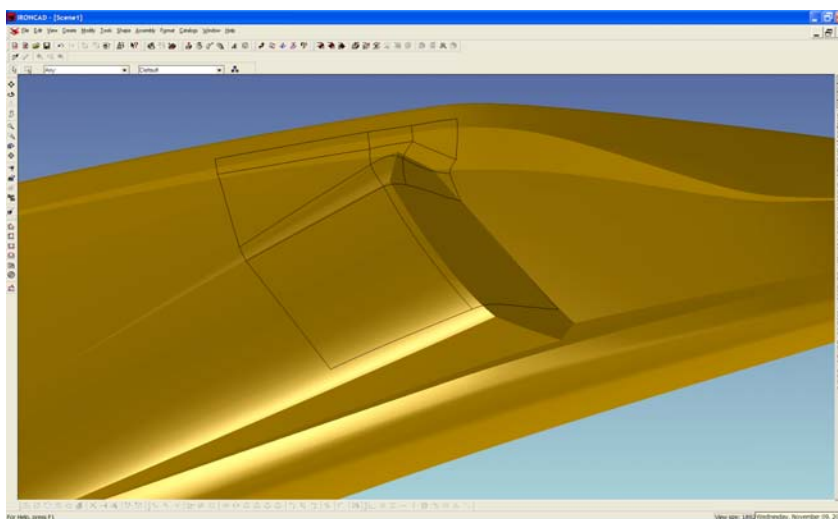
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3. Once the blends are completed in digital clay, it is much easier to visualize how the intersections should be developed and surfaced. With the clay as a haptic guide, a curve network with suitable topology is created.



4. The curve network is then used for surface creation directly in the FreeForm Modeling Plus system.



5. Alternatively, the curve network can be exported for development in CAD.