



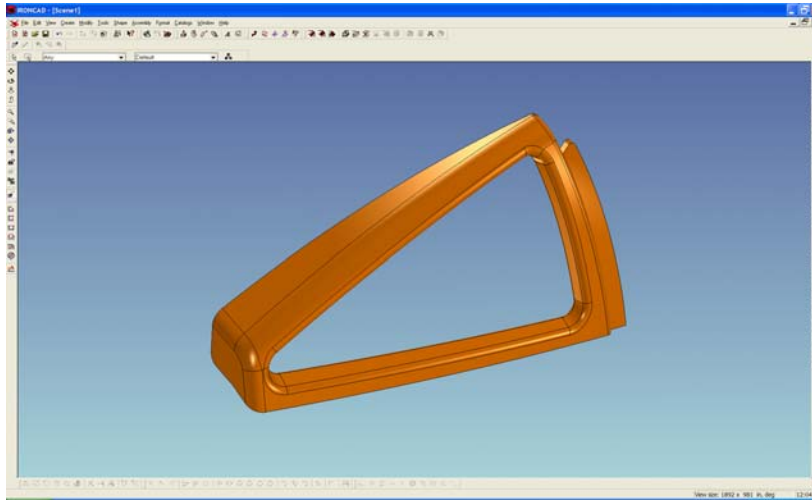
FreeForm® Modeling Plus™ v8.2 — Solutions

Solution: Identifying and Fixing Draft Problems

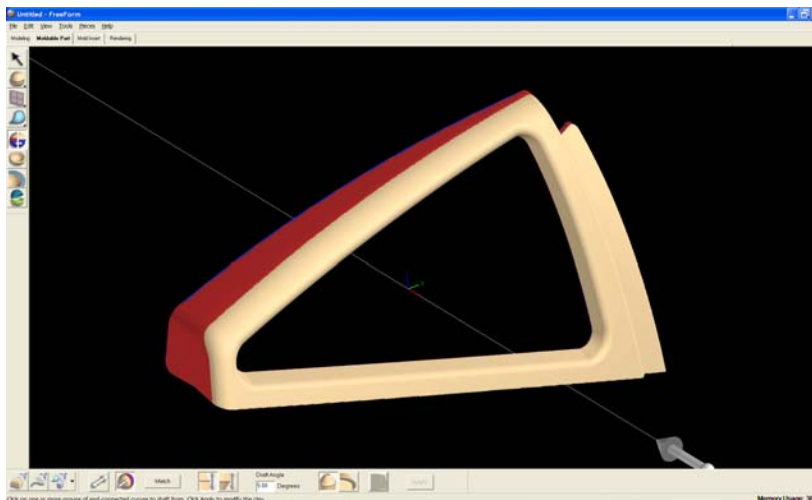
Problem: Identifying and correcting draft problems late in the product development cycle is costly, time consuming, laborious, and can impact design aesthetics.

Solution: Using FreeForm Modeling Plus parting line colors and associated mold tools, quickly identify potential problems early in the design stage, and examine design alternatives to correct the problems, either automatically or interactively.

The following sequence illustrates:



1. Export IGES surface data from CAD.

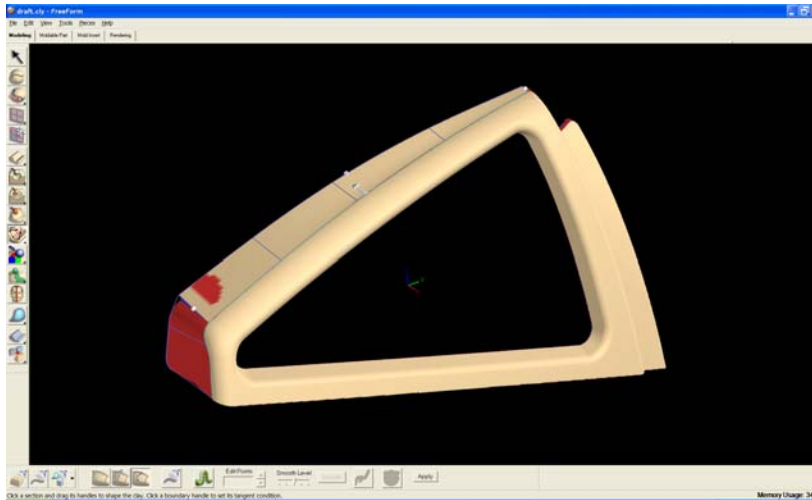


2. Import IGES surface data for initial review, and convert the data to FreeForm digital clay.

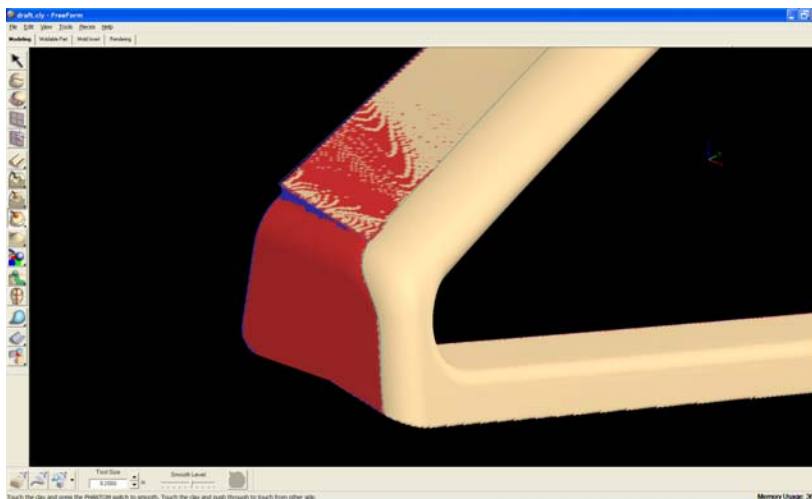
Establish a pull direction for draft calculations, and turn on *Show Parting Line Colors* using a specified draft angle. Areas displayed in red and blue indicate areas that do not meet draft requirements.

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3. After the draft problem areas have been identified, they can easily be adjusted automatically or interactively to produce design variations and alternate parting line locations. These images show the effect of direct modification using the *Shape Clay* command. Parting line colors update as changes are made.



Subsequently, after examining solutions to meet draft requirements, data can be exported back into the CAD system and used for reference to update and adjust the original CAD data. This reference data can include 3D curves, surfaces, solids, STL data, and rendered images.

Additionally, the FreeForm Modeling Plus data may be exported directly to CAM for manufacturing.