# Concept Design to Detailed Design Workflows

Rex Sellentine

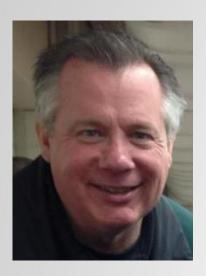
Technical Marketing Manager – Autodesk Automotive Products

@rexisID AutodeskDesign(youtube)





## Technical Marketing ISM MFG



Name Rex Sellentine

Location Mail Position Title

Grand Blanc, MI Rex.Sellentine@Autodesk.com Technical Marketing Manager

#### BIO

Rex rejoined Autodesk in 2014 as a Technical Marketing Manager for Autodesk's Automotive products. As a technical marketer, Rex takes his extensive knowledge in Industrial Design and visualization and creates workflows for his product line, creates most of the content on Autodesk website for Automotive and gathers all the assets needed to equip the sales team.

Rex has over a decade working with Alias products and over two decades working with visualization packages.

#### **Expertise**

Industry(s): Automotive

Autodesk Product Expertise: Alias, Speedform, VRED, StudioWall



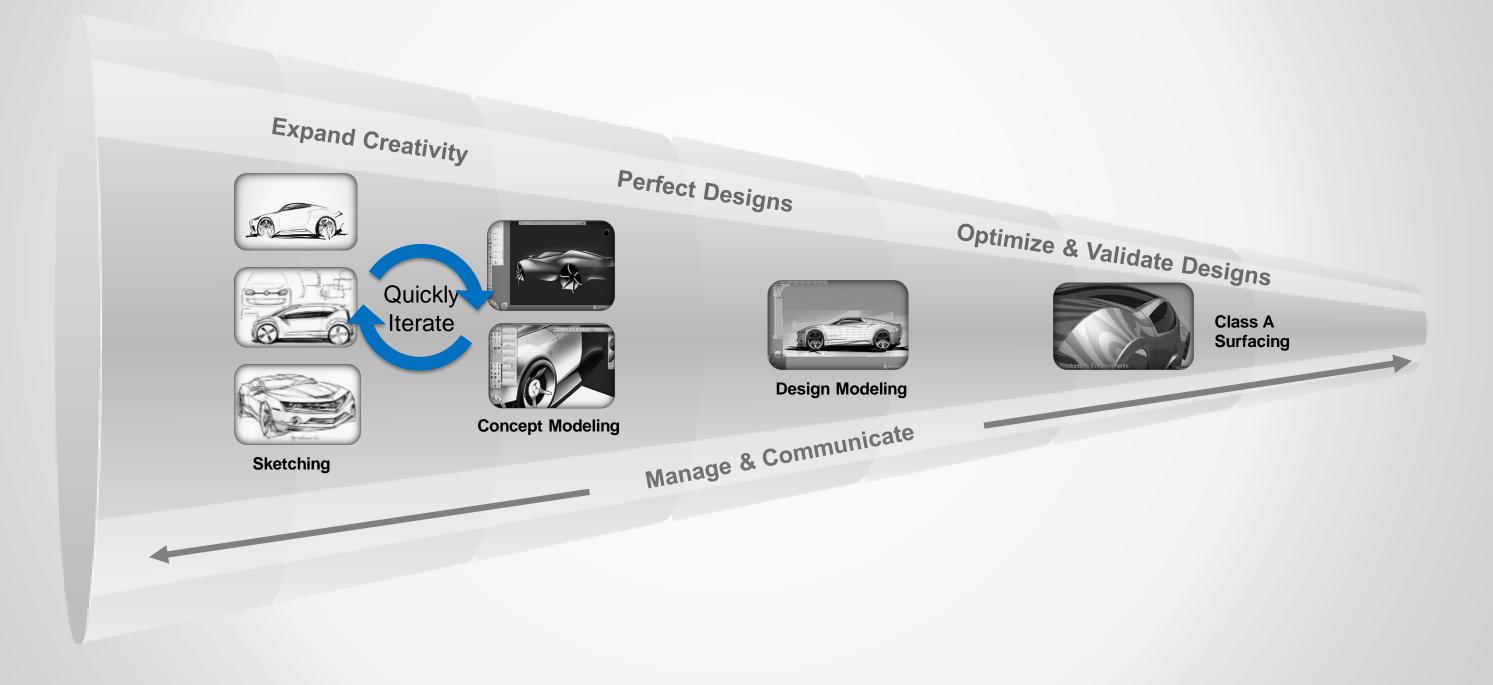
## **Class summary**

In this class, we will investigate workflows of using Speedform. We'll start investigating Industrial design, then move quickly to the advantage of using Speedform. We'll then spend time on how Speedform data can be used for design reviews, then create 3D prints, then off to engineering and simulation worlds. Finally, we'll look at two workflows of using concept data into Alias to begin the detailed design process.



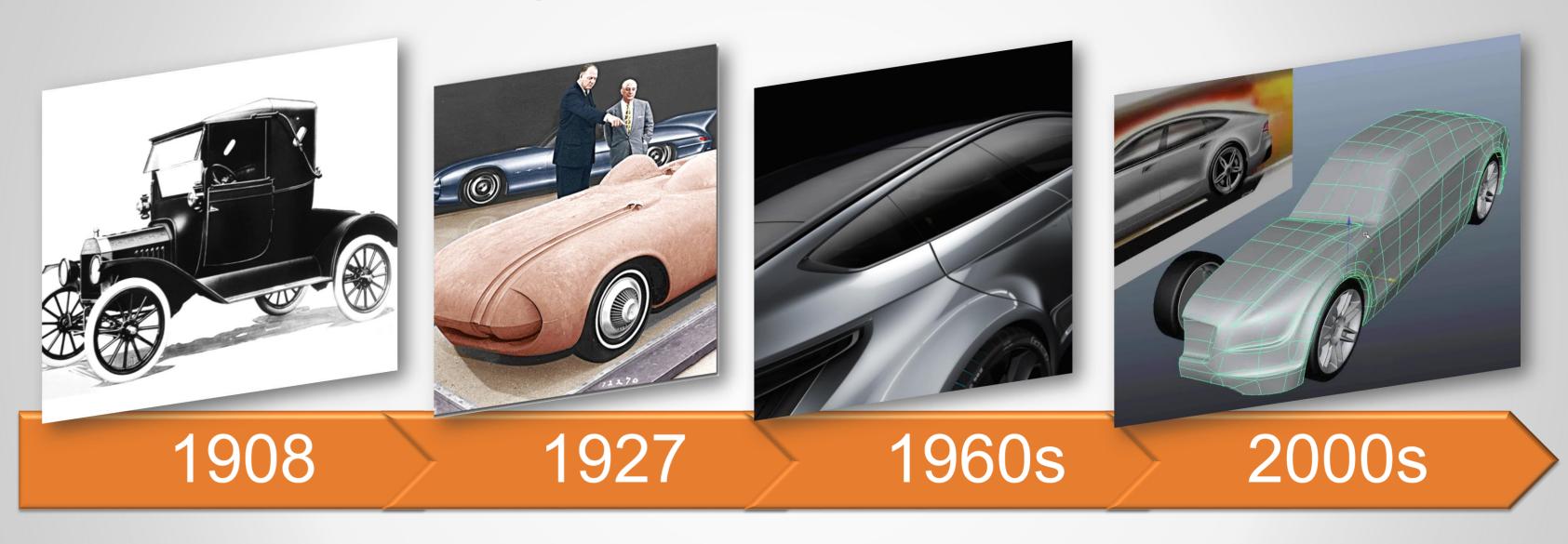
## **Concept Modeling**

Efficiently define and iterate on early design concepts





## **Concept modeling milestones**



No styling Clay

NURBS

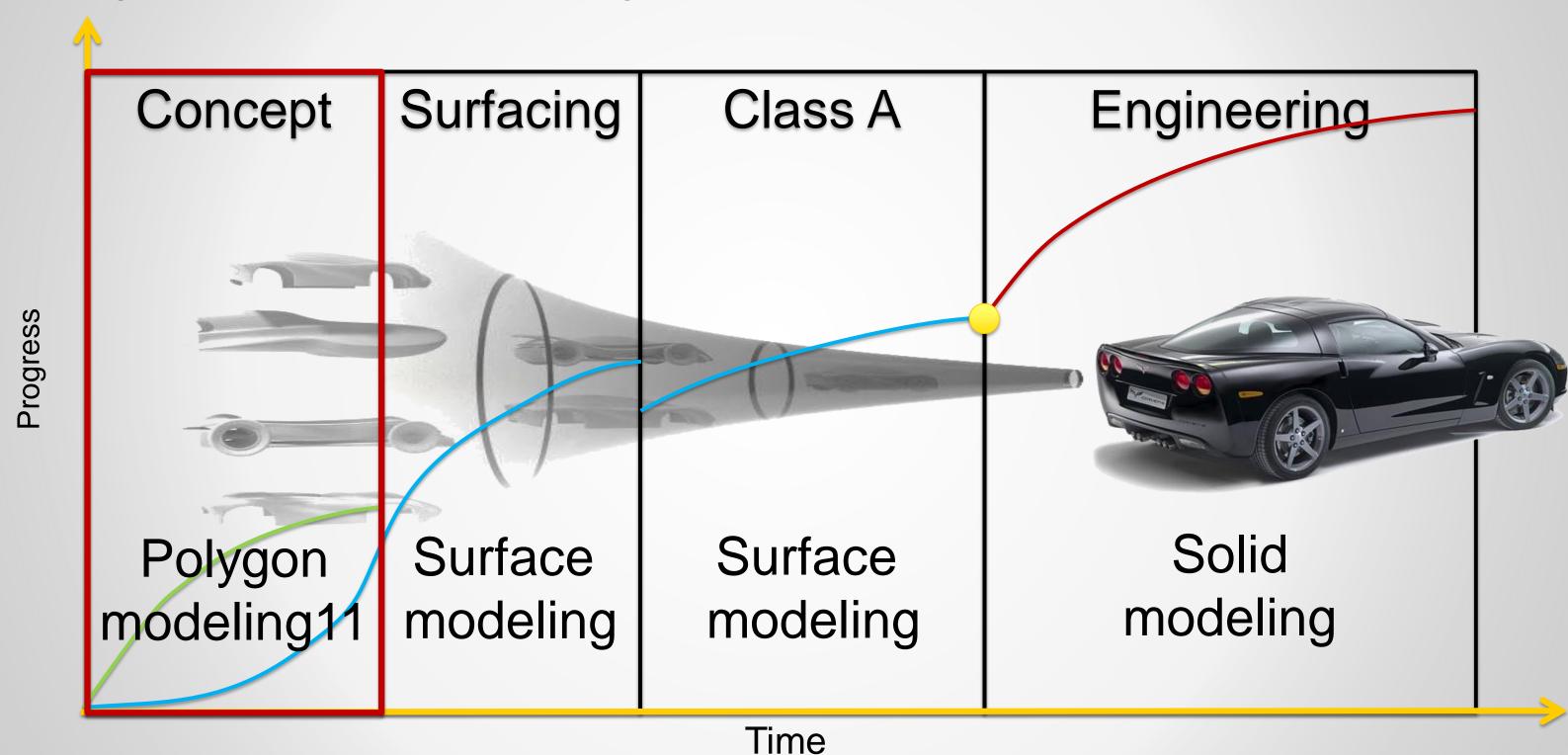
Polygons



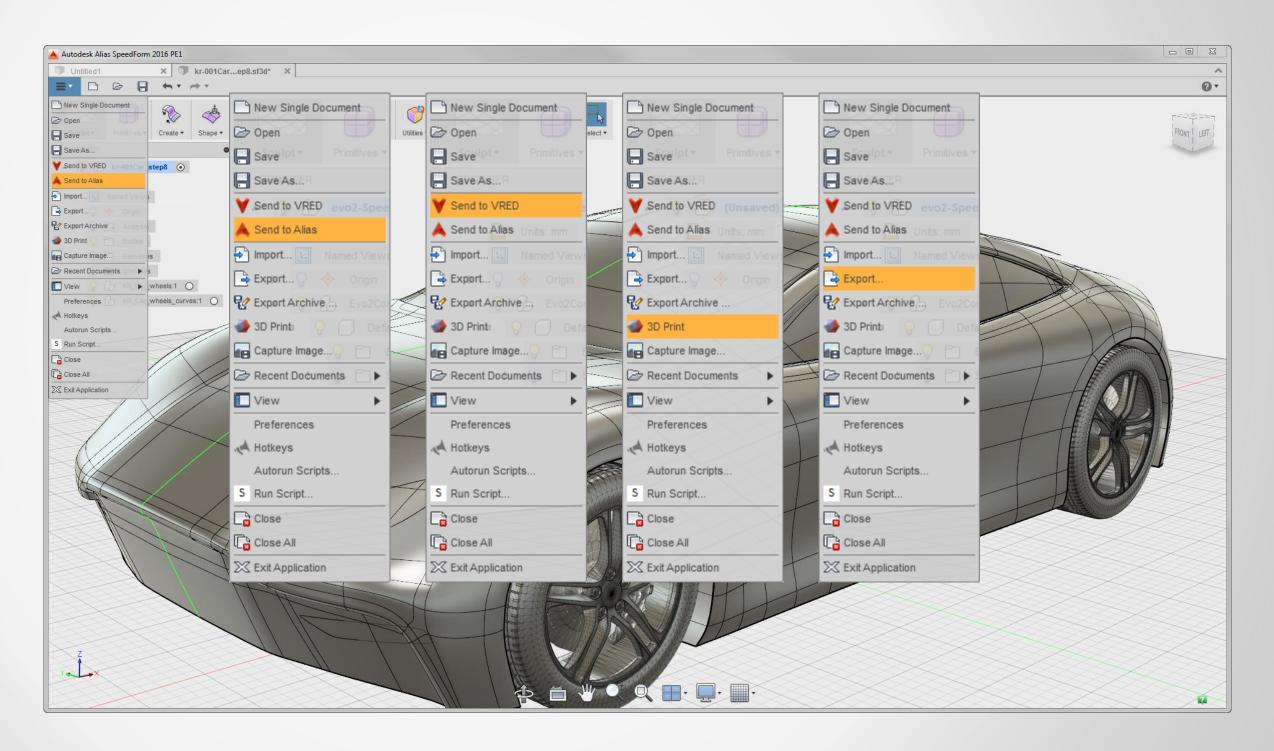
**AUTODESK**<sub>®</sub>

## Common approaches to concept modeling

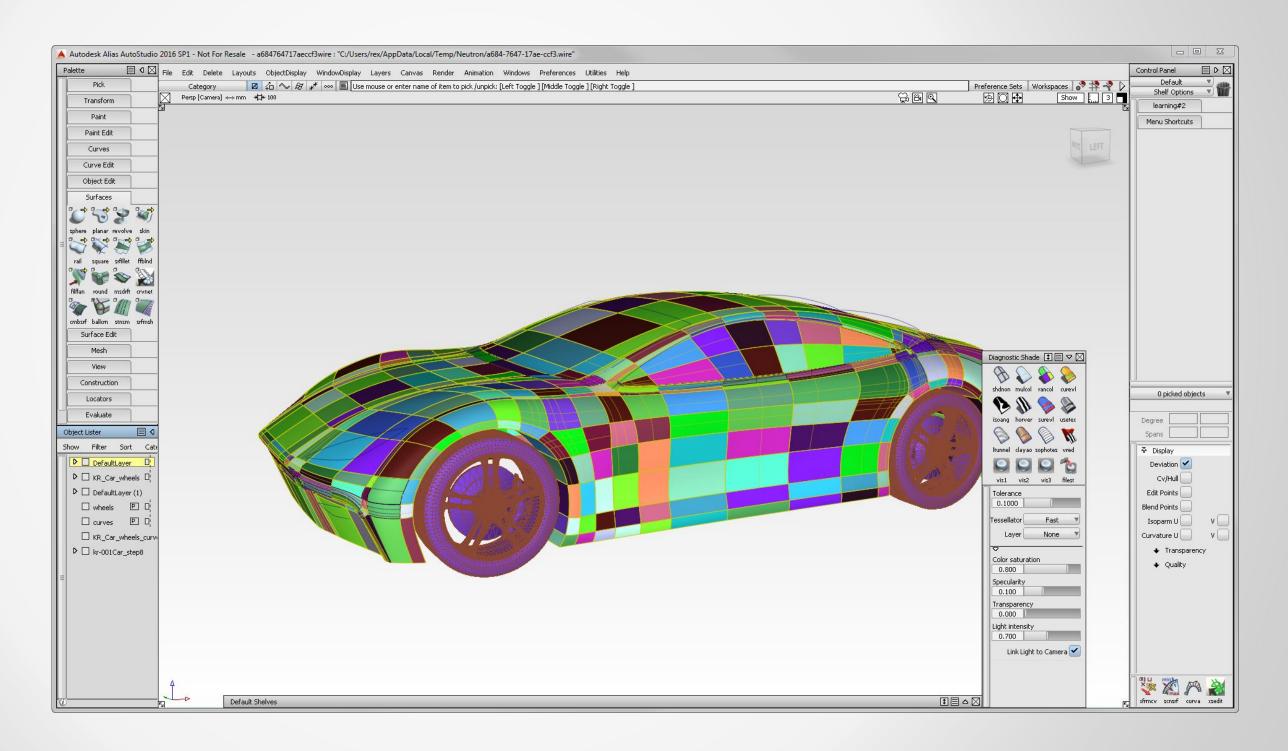
Polygon vs surface modeling



## **Speedform Interoperability Options**

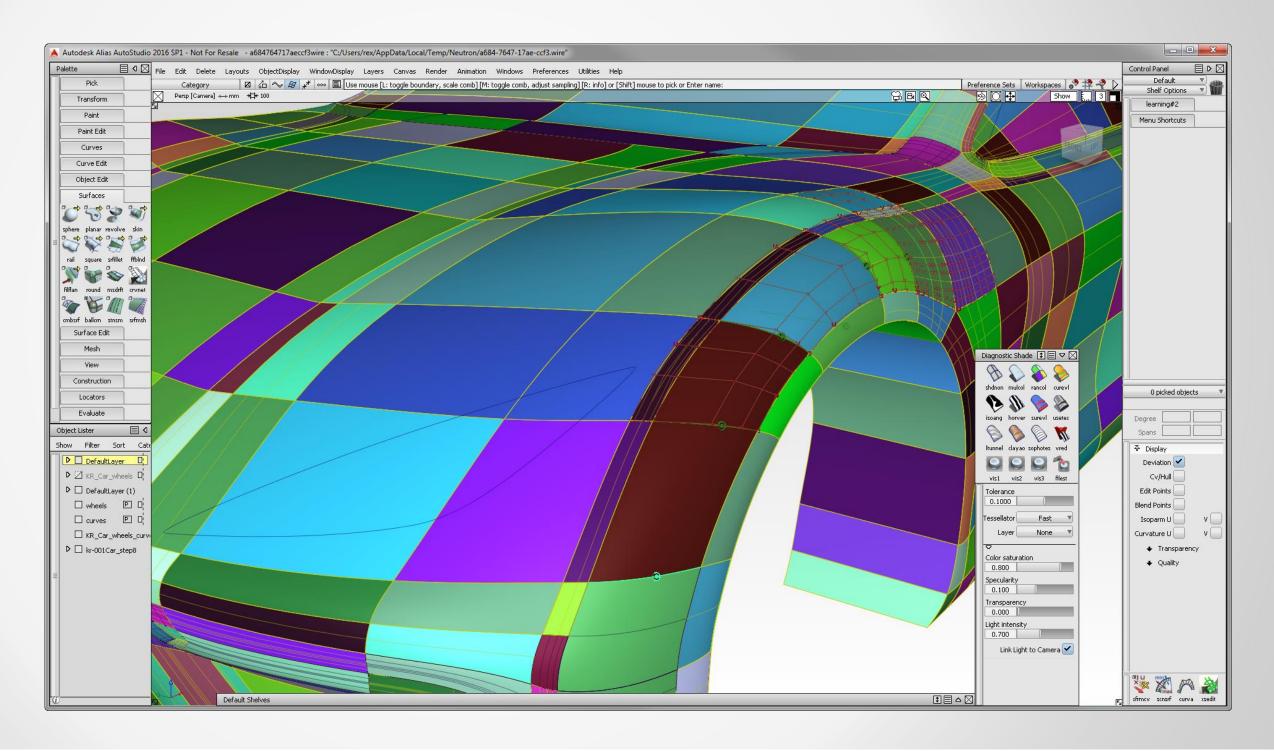


## **Speedform Data in Alias**



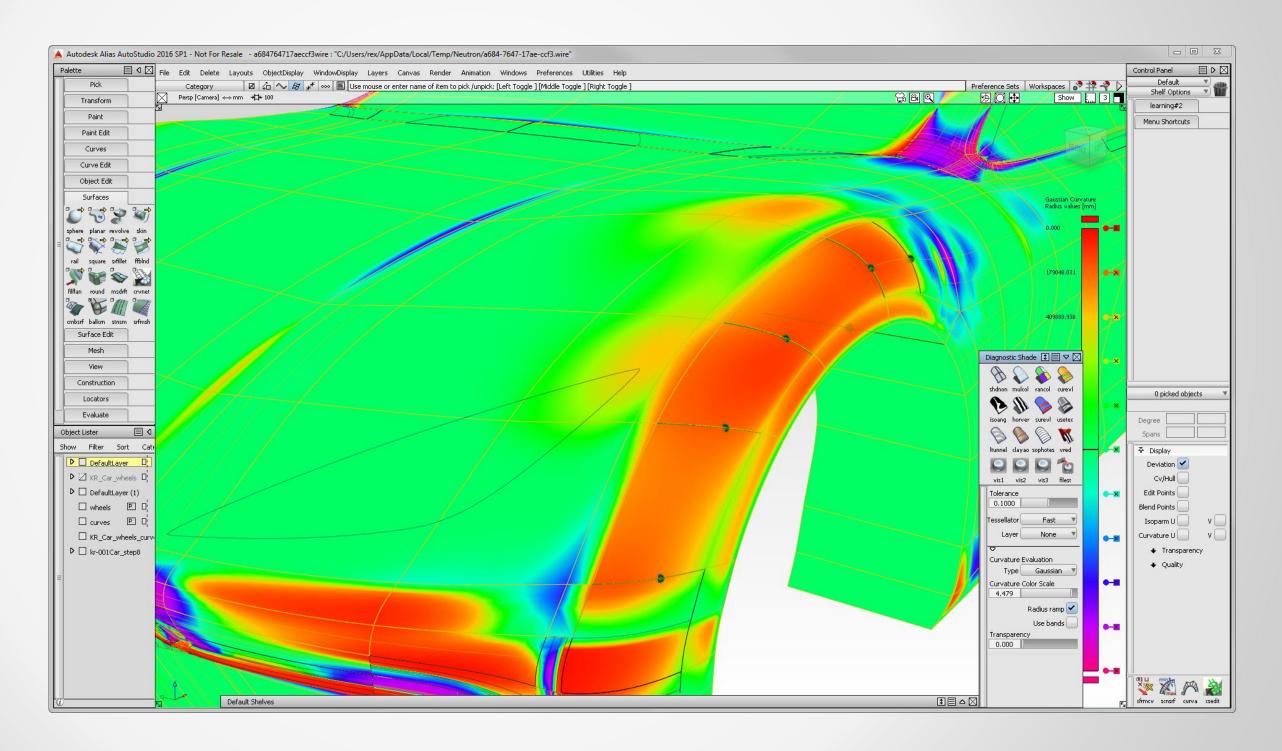


## **Regular Surfaces with Continuity**



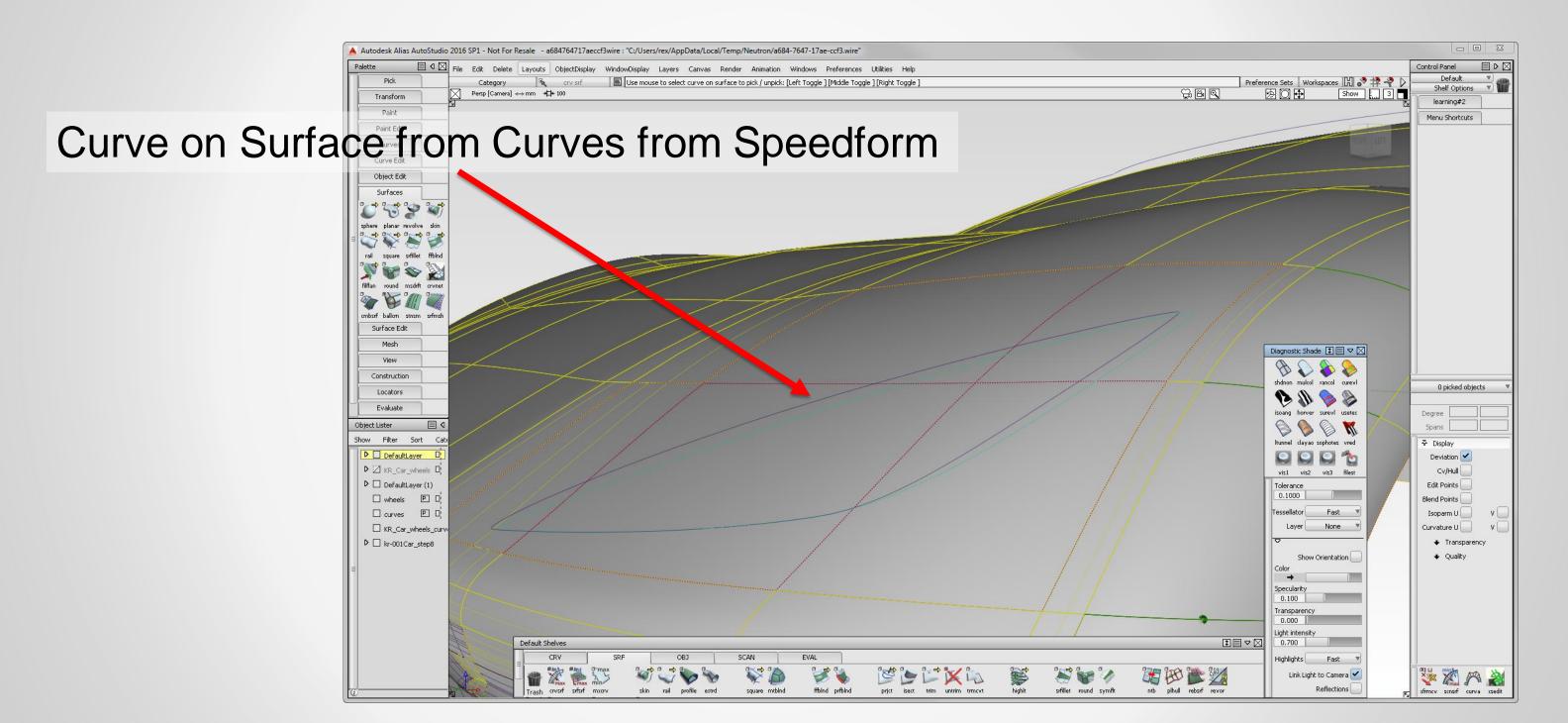


## **Surfaces Analytics**



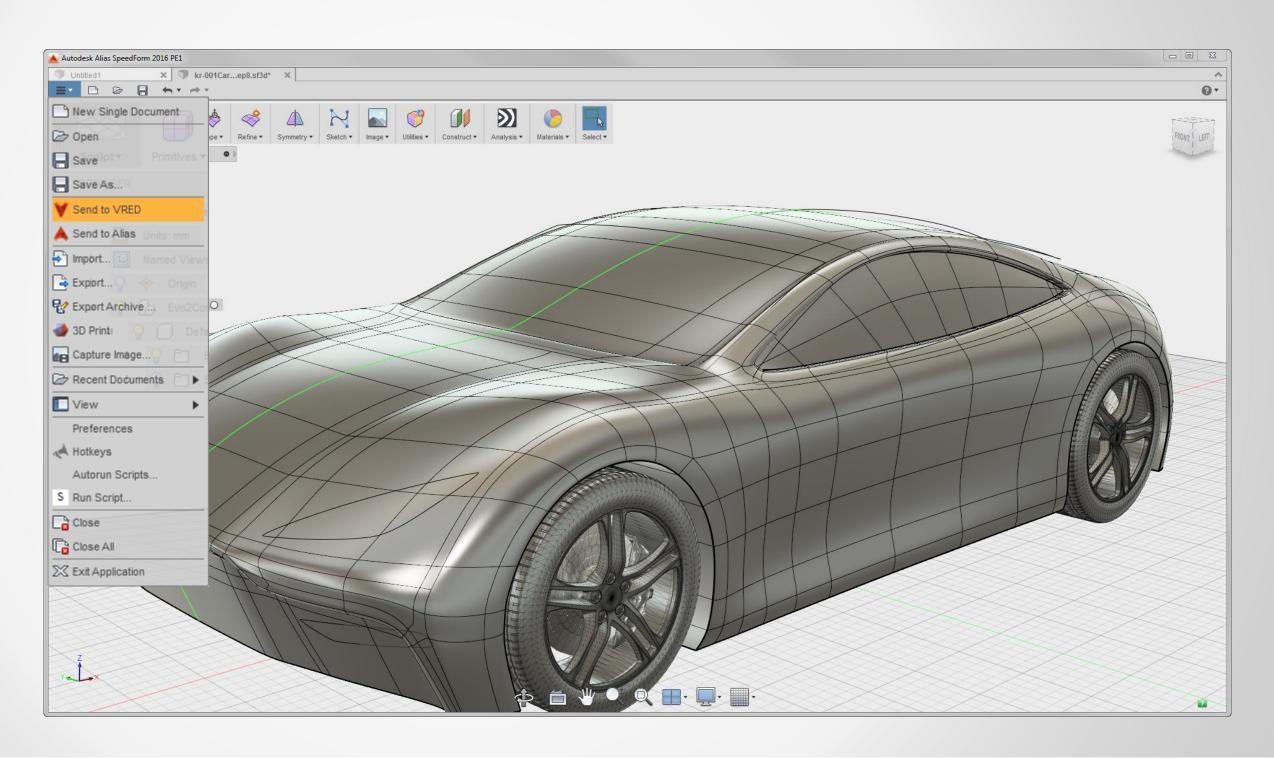


#### **Transfers Both Surfaces and Wires**

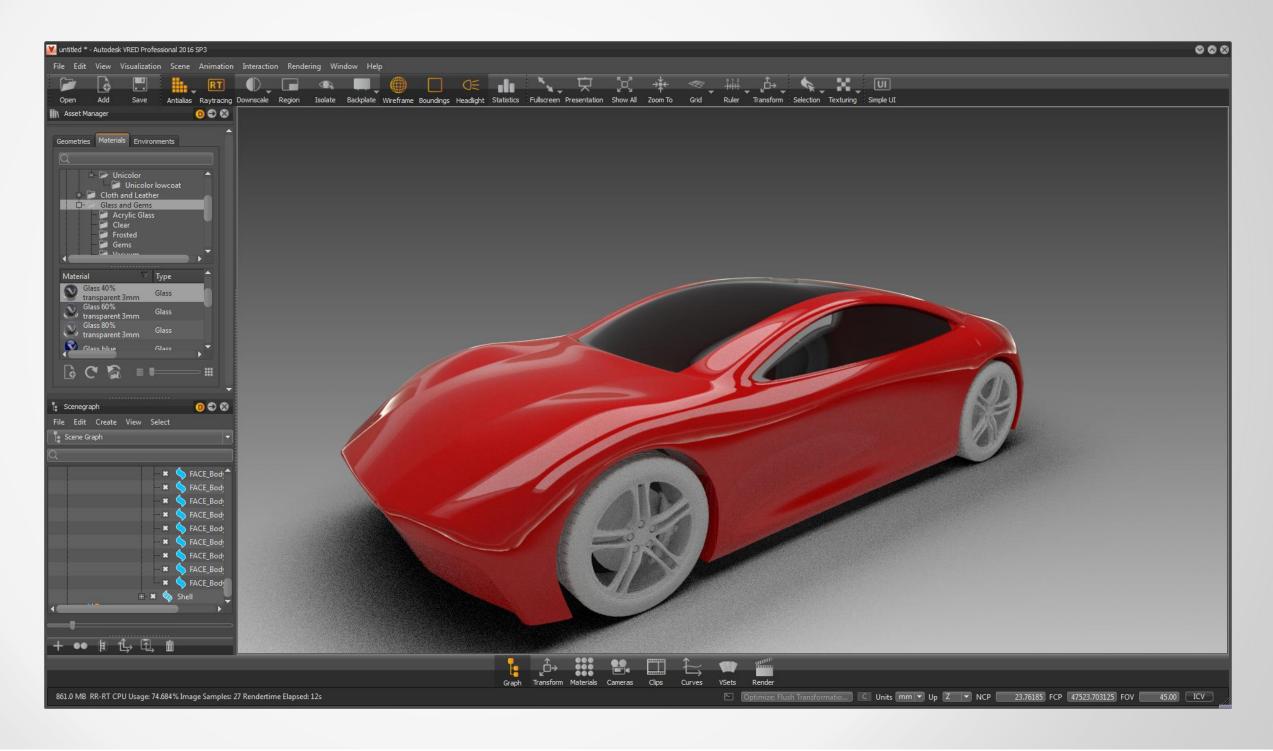




#### Send to VRED

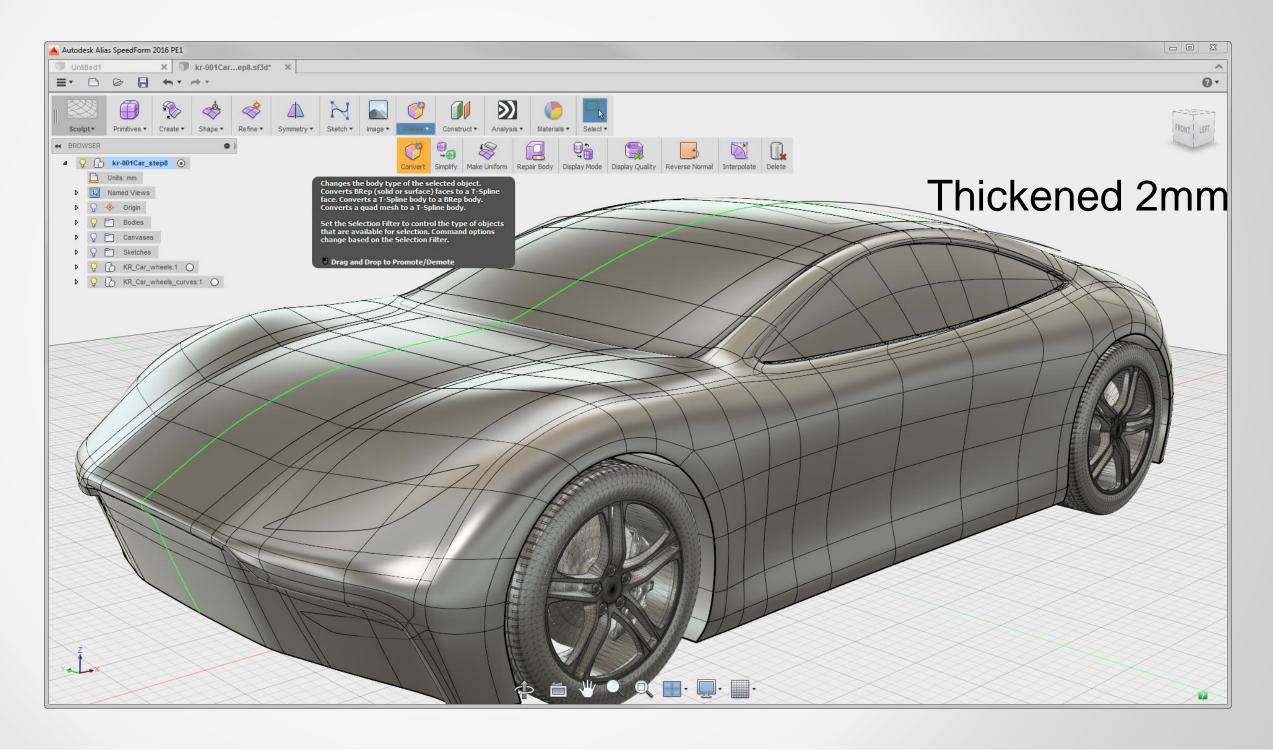


#### **Normal VRED file Materialized**



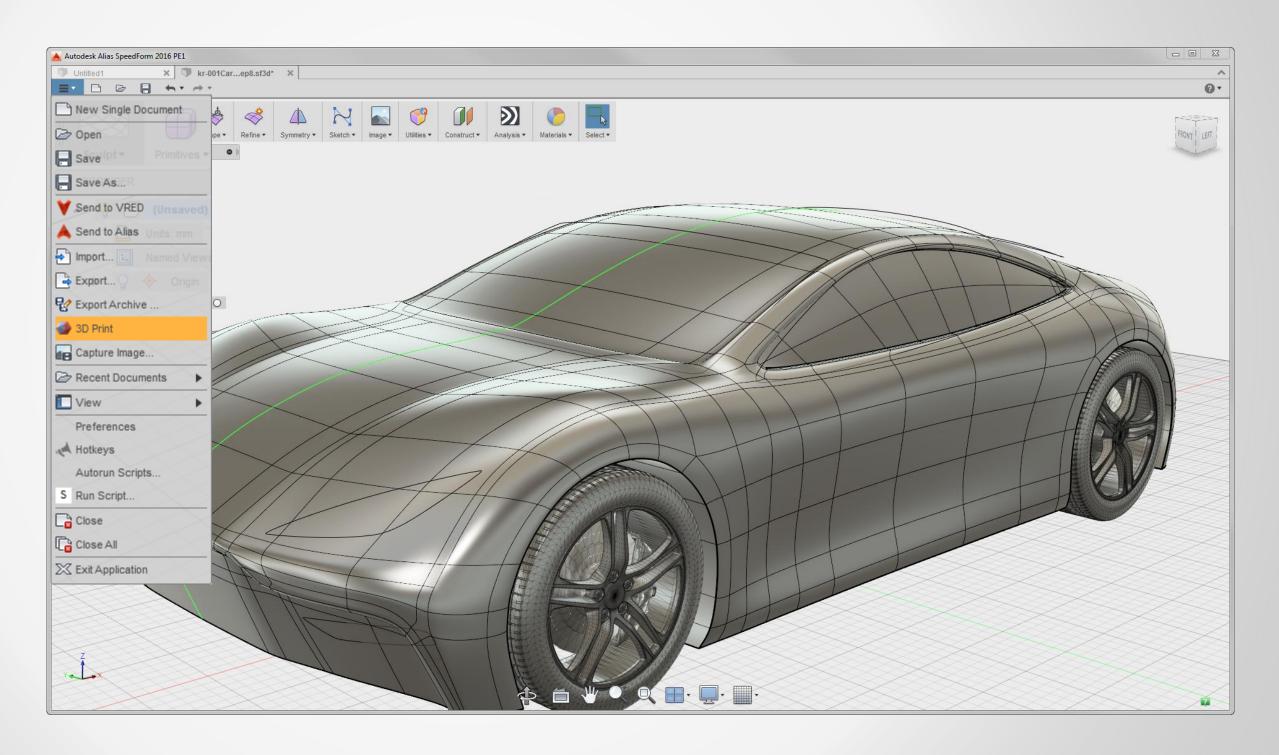


## Thickened part Converted for Exporting



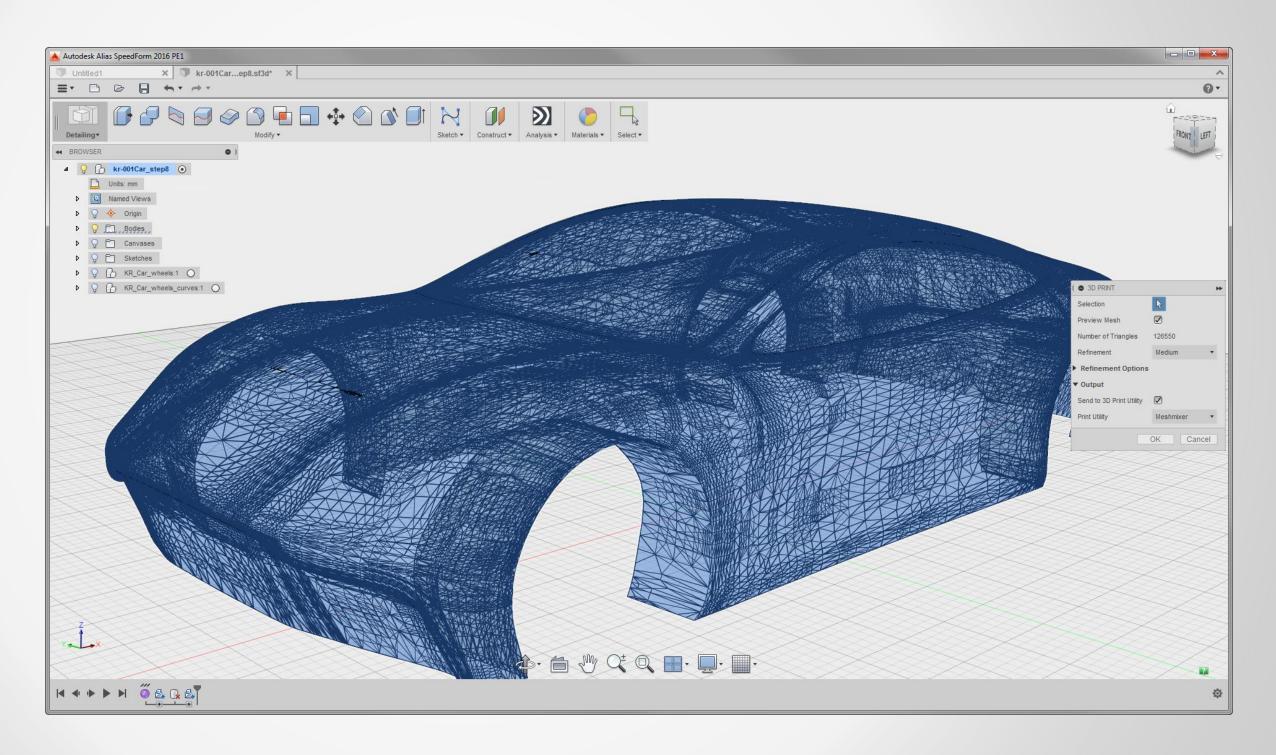


## **Export a 3D Print**



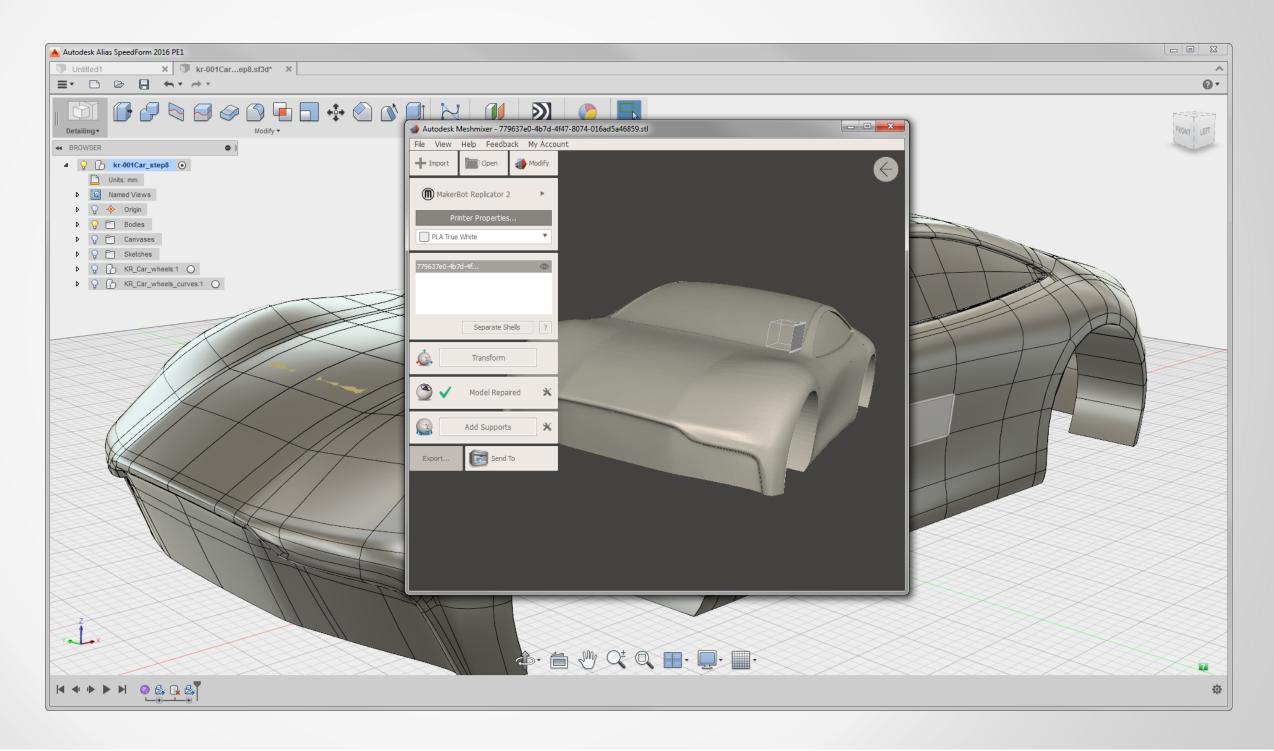


## 3D Print Mesh preview



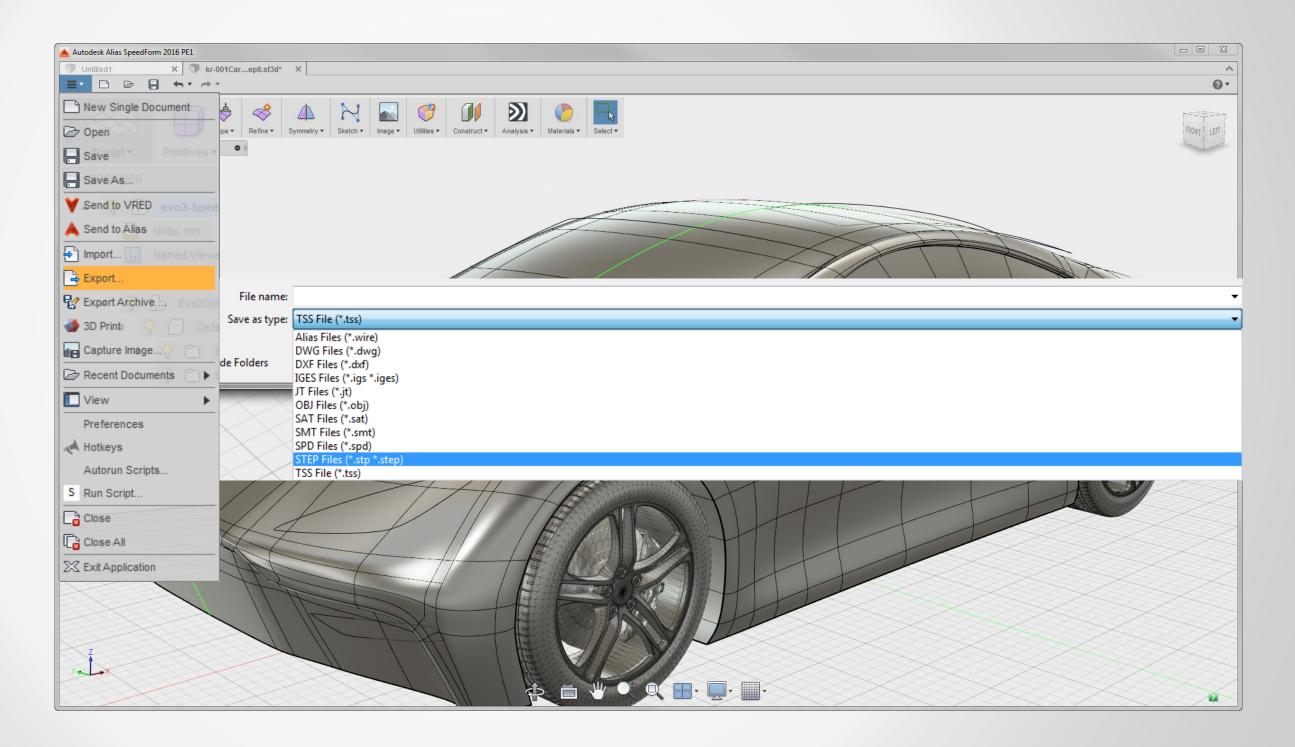


## 3D Print Mesh cleaned and ready for printing



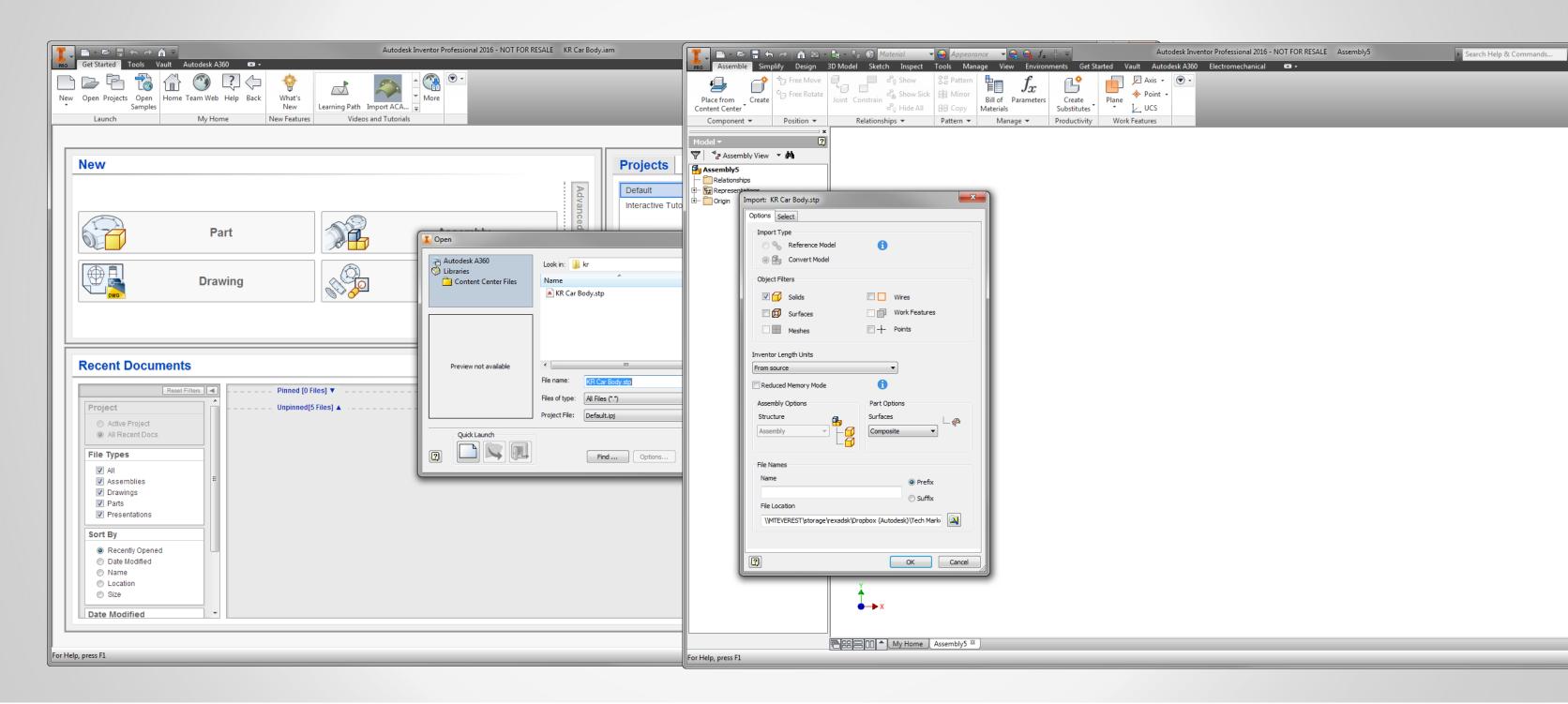


## **Export To Step**



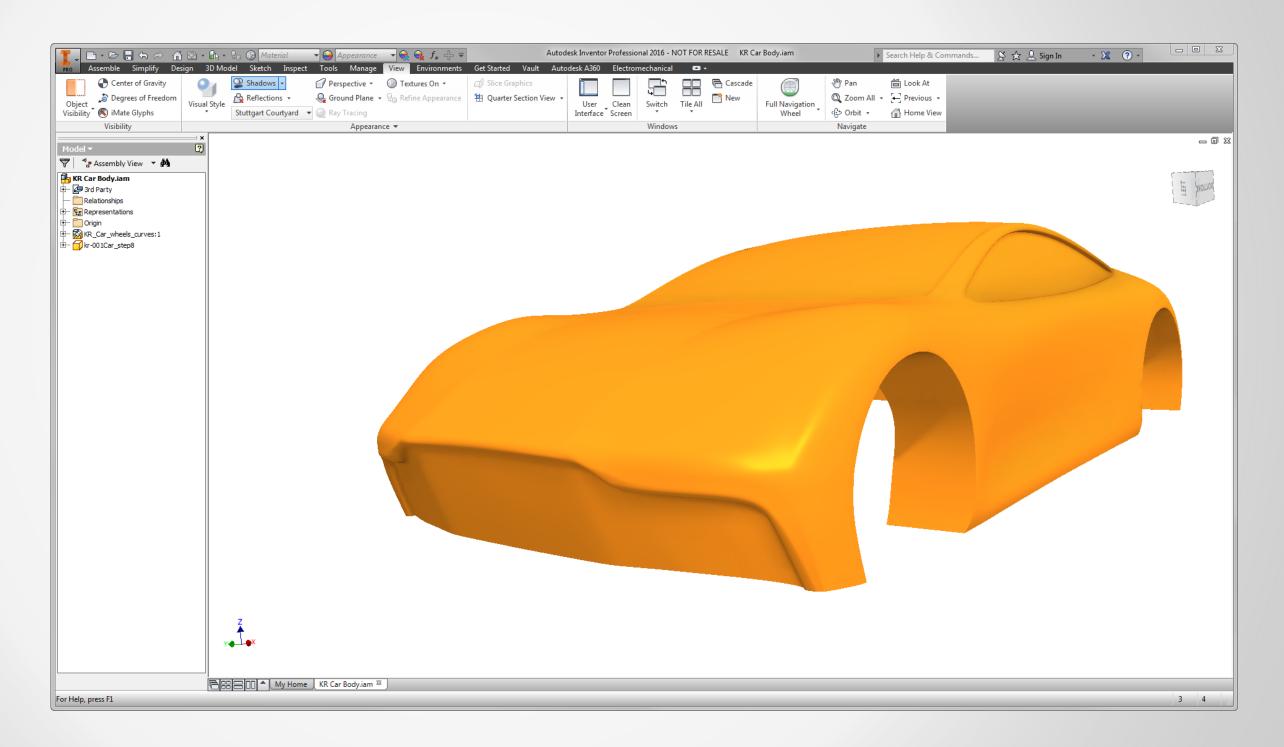


## **Open file in Inventor**





## **Exported file in Inventor**





## **Exported file in Inventor**

