

DIMENSIONAL CONTROL SYSTEMS

ENGINEERING IN NEW DIMENSIONS

Photo Realistic Dimensional Studies



3DCS Visualization Export Add-on

<u>3DCS Variation Analyst Spec and Simulation Studies</u>

Before cutting the first tool, before creating the first part, before prototypes and clays, determine your product specifications and Perceived Quality by using photorealistic renderings. Determine how your specifications will affect the design and establish clear build objectives.

Completed Monte Carlo simulations and optimized your design? Now take it to the next level and create life-like virtual prototypes that take into account all of your part and process variation to get a realistic representation of your product. Identify critical to quality characteristics early in the design phase instead of waiting until the start of production.

Just beginning the design? Determing tolerances and specifications? Use high-end visualization to see your tolerance scenarios with set measurements, gap and flush conditions. Find out how your design will look and make changes.





Define

dimensional build requirements

Simulate

the variation from part tolerances and assembly process **Create**

life-like virtual prototypes to see the impact of variation first hand

3DCS High-End Visualization Solutions

Create Photo-Realistic Product Images

Connect to high end visualization tools like 3DXcite's Deltagen. Transfer your models and create 3D visualizations of your products, depicting all of your part and process variation, or specified dimensional scenarios to view gaps and flush and other design conditions at different measurements.

Generate Interactive Perceived Quality Studies

Produce flash presentations that let you toggle between views and specification scenarios to easily share your results or to present to your team. By determining build requirements using Spec Studies, you can save yourself the cost of clay and physical prototyping.



Create Virtual Prototypes

Reduce costs by creating digital prototypes instead of fabricating physical ones from metal, clay or plastic. Incorporate all of your manufacturing variation; both part and process.

Two Types of Studies

Create Spec Studies - Determine Design Requirements

View worst case scenarios, and various build scenarios. Determine measurment objectives for gap and flush conditions. Find out early in the design phase how your specifications will affect your product's appearance (Perceived Quality).



Generate Simulation Studies - Virtual Prototype

Run Monte Carlo simulations and view outputs. Create virtual prototypes that take into account part and process variation to demonstrate your product's appearance given your current design specifications.



Key Product Features

One Button Export - Export models with the push of a button.

Automatic Material Mapping - Create automatic material conversions.

Create Easy to Share Presentations - Create and share 3D interactive flash based presentations that can be displayed on any flash capable device.

Toggle Between Spec Study Scenarios - Quickly switch between your tolerance and view scenarios to viualize possible product builds.

Add to Existing Software - As a 3DCS Add-on module, easily add functionality to your existing 3DCS Suite.

Use Manufacturing Data - Import real world data into 3DCS Variation Analyst for root cause analysis to improve existing build processes.

