## **3DCS VIEWER**

## **Democratize Dimensional Simulation**



# View 3DCS Software Model Inputs and Outputs

Utilize Model Based Engineering practices to provide real insight through your organization with 3DCS Viewer, allowing other teams to directly view 3DCS model information instead of only drawings and reports.

#### View and Access 3DCS Models - The What

3DCS Viewer is a streamlined version of 3DCS that enables users to open and interrogate 3DCS models without changing or altering them. This provides the ability to give 3DCS model access to a larger group in your organization, promoting Model-Based Engineering and democratization.

#### Model Part and Process Variation - The How

3DCS Viewer provides in-depth model access to select professionals in your organization providing advanced Model-Based Definition access by interrogating models for important information - Part Locating Strategy, Datums, GD&T Callouts, and more.

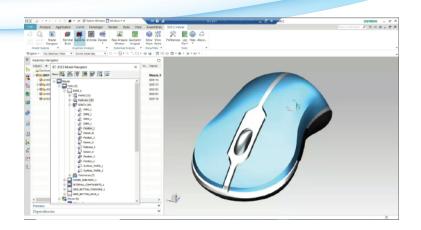
Store, read, and view 3DCS models using your existing PLM structure to improve and control access - giving key stakeholders the ability to view models in detail while protecting your data.

#### Open Any 3DCS Model - The Why

3DCS Viewer can be used to open any 3DCS model, allowing you to animate and deviate the model, review contents of Measures and Tolerances, load analysis results to view results, run advanced analyzers using 3DCS AAO Add-on, and all within your CAD environment.

This provides users a better understanding of product specifications, giving context to traditionally 2D drawings by allowing them to interrogate the 3D model directly.





## **Key Product Highlights:**

Integrated and Standalone Versions -Use 3DCS Mechanical integrated into CATIA V5, 3DEXPERIENCE, Creo, NX, SOLIDWORKS, or the CAD neutral Standalone version.

**Use Existing PLM Systems** – Test design changes using simulation to reduce the need for prototypes.

View the 3DCS Model Directly – Find the true source of your problem to root cause build issues and non-conformance.

Review Results of Analysis – Use kinematic motion to analyze products through their functional range of motion to determine the effects of variation.

**View Deviation in Real-Time** – Model assembly process, tooling, fixtures, clamping, Datums, Locators and account for their added variation.

Take Advantage of 3DCS AAO – Model with a prebuilt library of joints and constraints for ease of modeling mechanical and kinematic products.

Dig Deep Into the 3DCS Model -Read in CAD GD&T in the form of PMI or FTA, and use CAD Joints and Constraints to quickly set up your model and reduce reauthoring.





Share 3DCS Results | Collaborate Across the Organization

## Give Access to DVA Models Across the Organization

#### **3DCS Viewer - Value**

- 1. Enable DVA (Dimensional Variation Analysis) inputs and outputs to be reviewed by people "outside" of the 3DCS Modeling team (within the Cad system).
- 2. Improve Collaboration between the 3DCS Modeling team and all other teams that have a role and stake in assuring dimensional quality requirements are being achieved.
- 3. Democratization (accessible to everyone) of dimensional simulation to more engineers in the dimensional quality value chain. Model-Based Systems Engineering

## Find the Source of Variation and Improve Quality

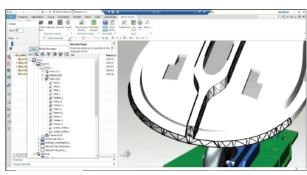
Use 3DCS software to hone in on the source of variation, and then use iterative design changes to optimize your product for manufacture and assembly (DFMA - Design for Manufacture and Assembly). #DCS Viewer then lets you share these results with stakeholders to allow for informed decision making.

### **Collaborate and Communicate More Effectively**

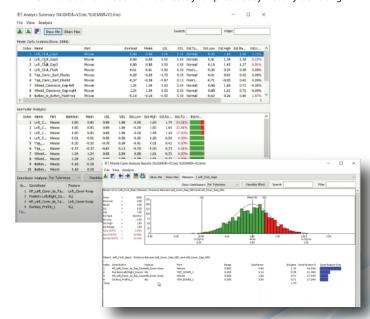
Improve Collaboration between the 3DCS Modeling team and all other teams that have a role and stake in assuring dimensional quality requirements are being achieved.

## **Benefits of 3DCS Vlewer Summary**

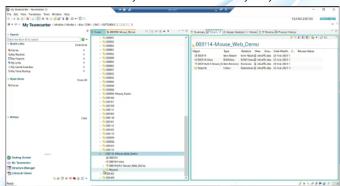
- 1. Opens any 3DCS model (CM, MM with addon license)
- 2. Animates & Deviates
- 3. Review contents of Measures & Tolerances
- 4. Load Analysis Results and Show \ Min Max
- 5. Optionally Runs AAO \ GeoFactor Analyzer
- 6. Supports in all 3DCS Platforms



Vlew variation and see how it affects your product by visually deviating



View Monte Carlo analysis and Cotnributor Analysis by Measure



Utilize your PLM systems like Teamcenter to organize and share models

DCS is a software developer providing tolerance analysis and quality inspection solutions to the automotive, aerospace, medical device, electronics and energy industries. With more than 20 years' experience, DCS has grown to include clients from every region of the globe including companies like Airbus, BMW, GM, LG, Jaguar Land Rover, Phillips, Sony, Textron Aviation and Volkswagen. As a quality solution provider, DCS prides itself on providing clients not just software, but services, staffing and dedicated support to guarantee the success of their quality initiatives.









