

Mixed models

STEP files can contain mixed 3D model representations in a single file. One part of the model is defined as NURBS surfaces while the other part is defined as triangulated mesh data. ViewVidia can view mixed 3D models and separate each entity type. This unique capability is complimentary to CAD applications that do not support mixed 3D model representations.

Upgrades Available:

You can upgrade ViewVidia to Capvidia's advanced CAD data translation system (3DTransVidia **) by adding additional modules. Our upgrade policy secures your initial investment in ViewVidia and opens the possibility to add functionality as your requirements change. Capvidia offers solutions for CAD data translation, CAD data validation, and CAD quality assessment as standalone applications, multi-user solutions, or corporate systems that can be easily integrated in existing CAD/CAM and PLC environments using Capvidia's OpenXML* data format.

Upgrade scheme

Viewer

ViewVidia



CAD Data Translation Software

3DTransVidia

(*) All Capvidia applications share one common data structure - Open XML. Capvidia's Open XML format is designed to store and exchange the most complex 3D CAD data structures including full parametric 3D model representation (geometry and topology), semantic description (PMI), text annotation and triangulated representation.

(**) Supported Import Formats: CATIA V4 (.model, .exp / up to 4.2.4), CATIA V5 (.CATPart, CATProduct / up to R21), CATIA V5 PMI, Unigraphics (.prt / up to 18, NX6), Unigraphics PMI, Pro/E (up to Wildfire 5), Pro/E PMI, Inventor (up to 12), ACIS, STEP, IGES (5.x - 6.x), VDA-FS, AutoForm (.af, .afm), STL, VRML, 3DTransVidia XML, NASTRAN, Abaqus, Ansys.

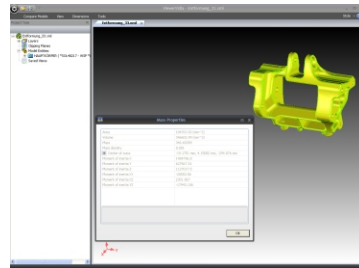
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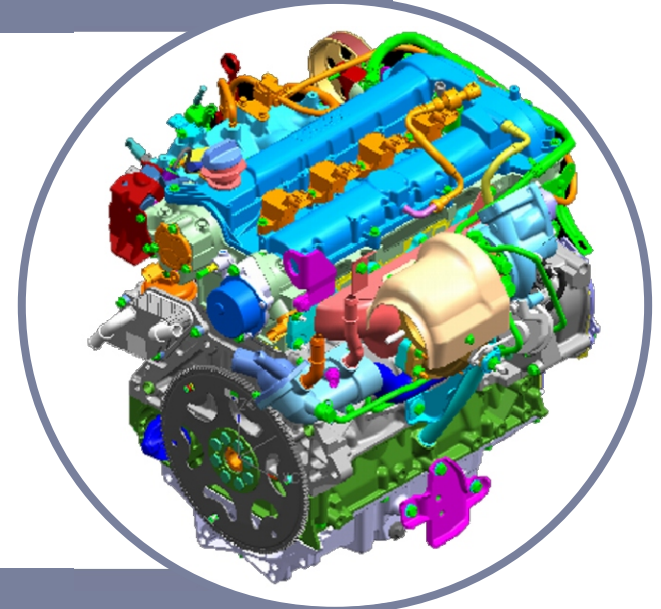
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Mass properties

VIEWVIDIA

View and Analyze 3D CAD Models without a CAD System



ViewVidia is a universal, easy to use viewer for 3D CAD data including MBD (model based definition). You can view a 3D CAD model along with its dimensions and annotations, see the product structure, measure model entities, define cross sections, and add comments for processes that require 3D visualization and collaboration. No CAD license is required to view the following formats:

- Native: CATIA V4, CATIA V5, Unigraphics, Pro/E, SolidWorks, Inventor, ACIS, Parasolid
- Neutral : STEP, IGES, VDA-FS, OpenXML (Capvidia), STL, VRML
- PMI and GD&T: native CATIA V5, UGX, Pro/E
- FE file formats: NASTRAN, Abaqus and Ansys

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ViewVidia functions

Graphics

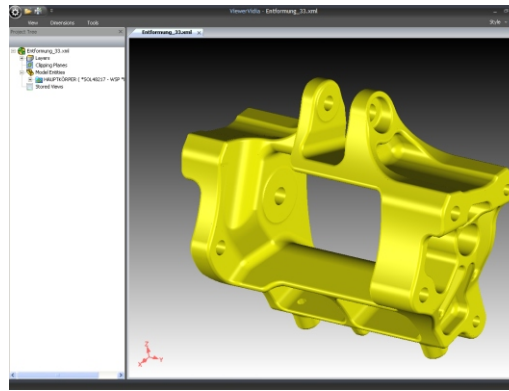
ViewVidia offers all typical 3D viewer functions in an easy intuitive user interface. You can rotate, zoom and pan 3D models, set rendering options, change colors, define dynamic cross sections, automatically set dimensions, measure individual entities, and add your own annotation. You can highlight vertexes and edges for easy selection and use filters to effectively select model parts. One of the selection criteria can be entity color. For detailed model investigation you can use clipping planes and dynamic cross-sections. You can open multiple models in different windows..

Project Tree

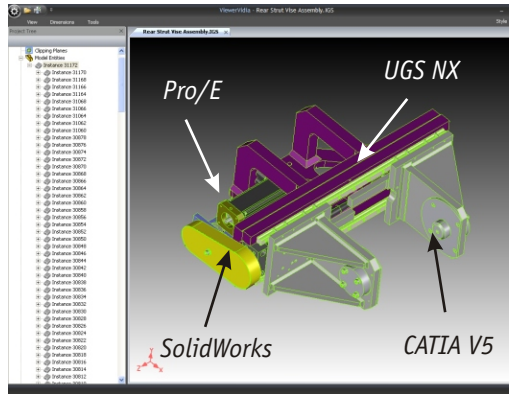
ViewVidia's project tree shows the entire model structure (layers, model entities, views, GD&T) and gives you direct access to each separate model entity. The original CAD model structure is preserved with original name definitions, assembly and sub-assembly structures including instances. You can view both single parts as well as complex assemblies. An automatic link between the graphics window and project tree helps to identify and find specific entities in the model. Each entity has its own property page providing access to the entity definition. You can change entity attributes such as color or transparency.

Mass Properties

The global dimensions which include the bounding box, volume, surface area, center of gravity and moments of inertia are automatically calculated even if the model is not defined as a solid. If you specify material properties, the total mass will also be calculated.



ViewVidia User Interface



Building Assembly

Building Assembly

You can combine different models into one scene and build an assembly from individual parts. Parts can be in different formats. You simply read them into one 3D scene.

Dimensioning

You can dimension selected edges, arcs, and angles with the click of a mouse. Dimensioning can be applied to separate entities or the whole model. Distances between vertexes and surface can also be measured and annotated.

Annotation

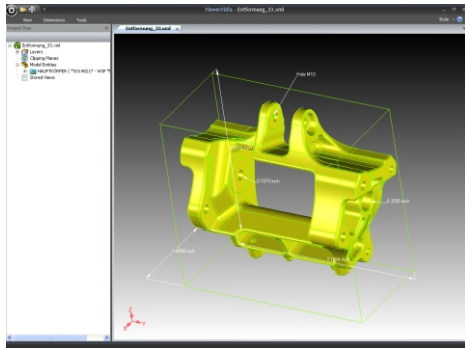
Text annotation can be added to each model entity. The link between the model entity and the annotation label is automatically maintained.

View MBD Data – GD&T and PMI

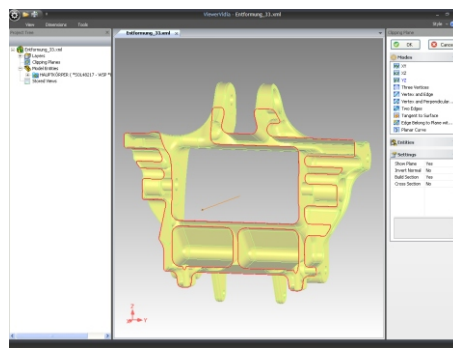
Review MBD data by viewing the 3D model along with the GD&T (Geometric Dimensioning and Tolerance) and PMI (Product Manufacturing Information). View the Datums, dimensions, tolerances, flag notes, annotations, stored viewpoints and layers. The following data formats are supported: native CATIA V5, UGS/NX, Pro/E and STEP A203 Ed2..

Print

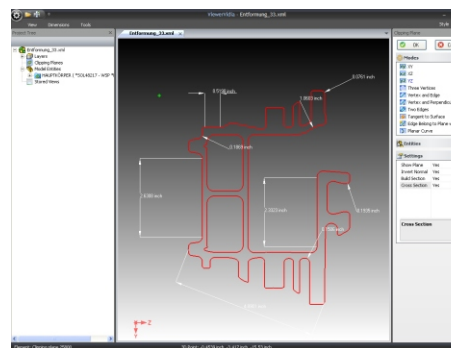
Print a paper copy of the information in graphical window with full control over the letter type and line thickness. You can print to PDF, HTML, and XML formats.



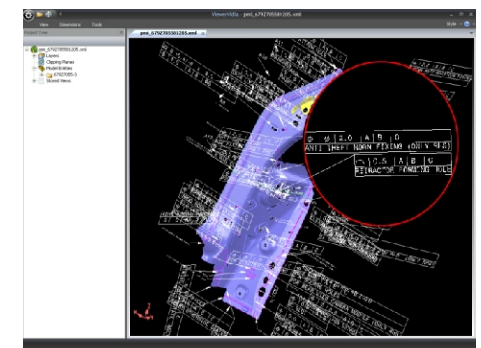
Bounding Box Global Dimensions



Clipping Plane



Dynamic Cross Section



Product Manufacturing Information (PMI)