



# PUBLISH

Theorem's Publish 3D enables the creation of interactive documents enriched with 3D content directly from the native source CAD (CATIA, NX or Creo) or JT data. Based on Adobe® technology, 3D PDF is a publishing solution for organisations of all sizes who design with mechanical CAD.

3D PDF provides the ability to extend the use of visualisation data via interactive 3D documentation that can be shared amongst those within the organisation and supply chain who may not have access to, or use, native CAD data.

## 3D PDF

With 3D PDF anyone can consume, view and mark up 3D data contained within a document format, eliminating the need to install specialist viewing software or to be trained to use a special tool, by using the freely available Adobe Acrobat Reader®.

## | Who should use Theorem's 3D PDF?

3D PDF is an enabling tool for anyone who needs to be involved in the process so they can read, view and mark-up 3D data, thus speeding up the development process to leverage investments in CAD and PLM data assets.

This allows those within the organisation and supply chain to view, interrogate and contribute to the creative process and importantly, in an increasingly competitive marketplace, gain a strategic advantage.

3D PDF can be configured via Theorem's bespoke templates to distribute CAD models to different departments removing the need for physical documents and drawings to be shared.

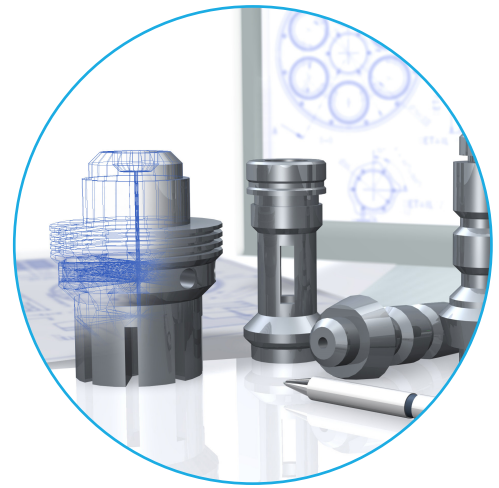
- As a solid assembly (rendered) for marketing
- Hidden line removed for technical publications
- An exploded view for customer service
- Inspection Reports for Quality and Inspection Departments
- Works Instructions for Manufacturing Departments
- Request For Quotation for Purchasing Departments
- Engineering Change Request for Engineering Departments
- Bill of Materials (BOM) for Manufacturing Departments or purchasing

## | Why use 3D PDF?

Published interactive 3D data contained within a 3D PDF file can be shared, viewed and interrogated using the freely available Adobe Acrobat Reader by users and departments who do not have access to native CAD data, but who need a 3D representation without the need for additional installed applications and knowledge of how they work.

Once published, using Adobe Acrobat Reader a user will be able to:

- View the 3D model
- Interrogate the model tree sub-assemblies
- Turn components in assemblies on and off
- Shade and render for technical authoring
- View as a solid and wireframe
- Cross section components and assemblies



## | How can Publish 3D be of benefit?

The beauty of this technology is the simplicity of deployment and ease of use, removing the barriers to integrating departments, customers and suppliers into the product lifecycle process.

Imagine the scenario where everyone in the organisation and the supply chain can collaborate using a single interactive document. The opportunity for gaining strategic advantage by adopting this new technology to leverage your CAD and PLM assets should not be underestimated.

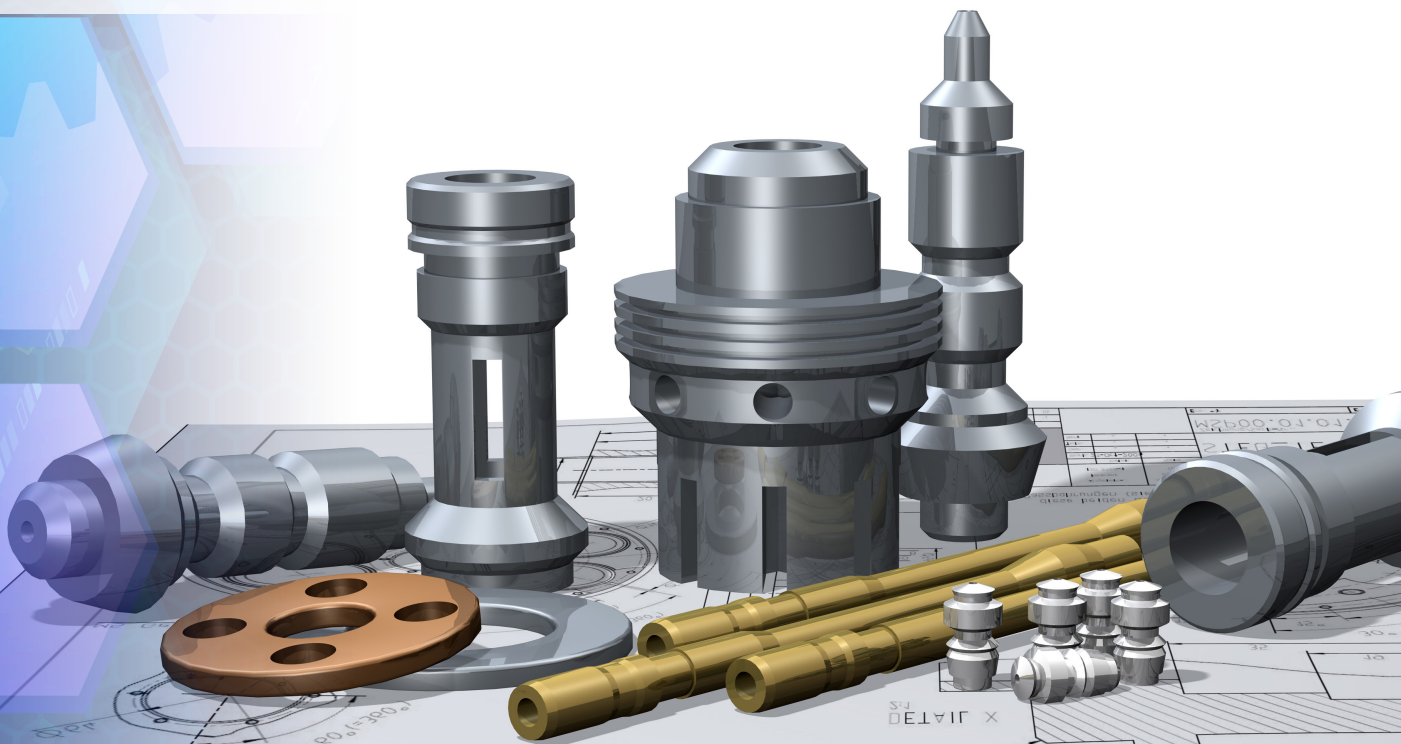
## | Benefits

The largest benefit to 3D PDF is the ability for the content to be accessed via the free Adobe Reader; there is no specialist software to be installed on the computers of those that need to consume the content. Only the authors of the content need the CAD and the 3D PDF tool. Everyone else just needs the free Adobe Reader which is often on every work-place computer as part of the standard build.

- Get your 3D data to market faster
- Send small files that are free to consume rather than large 3D CAD files
- Improve your internal and external communication
- Achieve rapid decision-making
- Benefit from seamless data exchange
- Reduce the number of development errors
- Improve your product and process quality
- Protect your IP
- Improve security of your 3D data with password protection

When engineering departments need to collaborate with other departments, or the wider supply chain, their 3D CAD files are often too large for transfer. Moreover, it is rare that the consumers of this content need access to the full-fidelity 3D CAD, so a secure 'lightweight' representation, contained within a PDF file, is a perfect solution.

Unlike the full 3D CAD file, a PDF allows you to create a CAD representation without size restraints. Moreover, by not transferring the original BREP (Boundary Representation) CAD you are not putting your IP at risk.





## | Uniquely

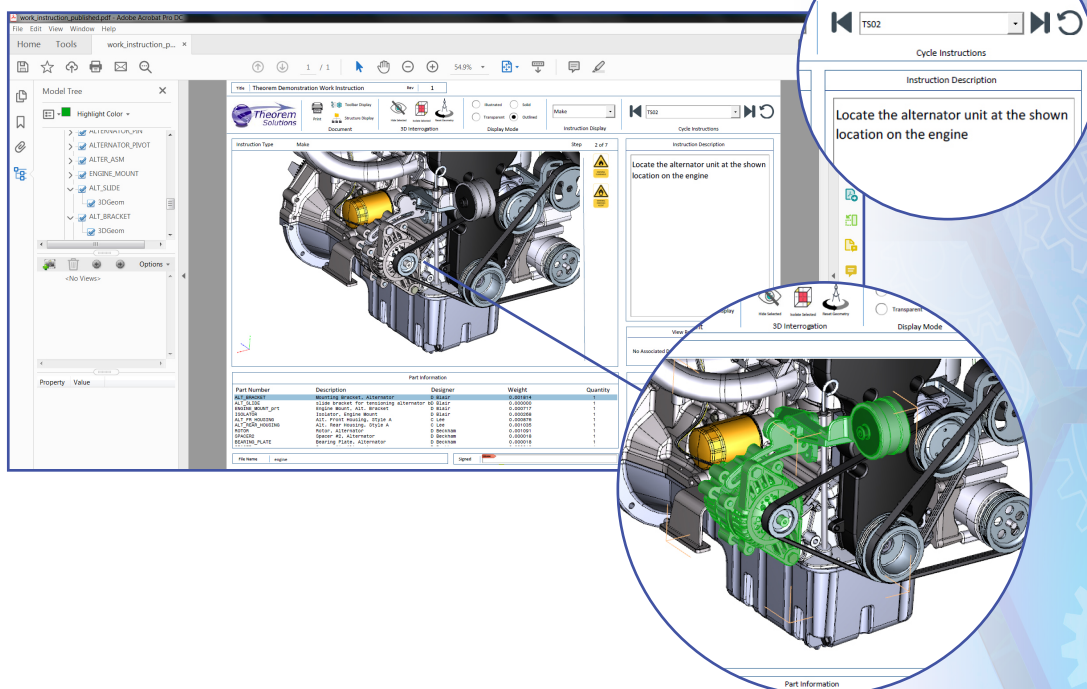
Theorem offers several use-case focussed templates that our customers can benefit from. A couple of the available templates are:

Work instructions provide detailed assembly/disassembly of components in a stepped process with each step referencing its own unique data set and view.

The Request for Quotation template offers the ability to present suppliers with crystal clear interactive 3D representations of products, components, sub-assemblies and specifications; removing ambiguity from the procurement process.

As well as there being several other templates available, Theorem's consultants can prepare custom templates for whatever use case you may have.

## | Example Work Instruction Template



### MBD

Theorem's PUBLISH products support the translation of 3D Product Manufacturing Information (PMI), assembly structure, geometry, attributes and metadata between the worlds' leading mechanical CAD/CAM systems enabling Model-Based Engineering.

## | Configuration and Packaging

Publish 3D is provided in a broad range of configurations and packages to support small local requirement or for large enterprise use. Flexible licensing makes Publish 3D affordable and cost effective. Once configured, Publish 3D will pull engineering data from a variety of enterprise-wide information repositories or MRP systems again leveraging your previous PLM investments.

*At a user level Publish 3D has three levels of capability*

**Publish 3D On Demand:** Allows for batch publishing from the CATIA V5, NX, CREO and JT systems into the 3D PDF format.

**Publish 3D Interactive:** Publishes from within the native CAD system and uses the Save As function to create the 3D PDF.

**Publish 3D Automated:** Allows for high volume batch publishing

## About Theorem Solutions

Theorem Solutions have been helping engineering and manufacturing users leverage the value of their CAD and PLM assets for over 25 years. We help the world's leading Automotive, Aerospace, Defense, Power Generation, Transportation, and White Goods manufacturers and their end-to-end value chains to optimize the use of their Digital assets. Our solutions enable product development and manufacturing businesses to compress design and manufacturing lifecycles, whilst improving product quality. Our core strength is in the visualization and utilization of data across complex organizations to maximize efficiency.

Theorem Solutions offers a consultative approach to help customers get the most from technology. We advise on optimum use cases, deployment strategy, and custom development as required to maximize the Return on Investment.

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