THEOREM
CAD PUBLISH

Extend the use of visualisation data by creating interactive documents enriched with 3D content directly from the native source CAD (3DEXPERIENCE, CATIA V5, CREO or NX) or JT data

Who should use Theorem's 3D PDF?

Based upon Adobe® technology, 3D PDF is a publishing solution for organisations of all sizes who design with mechanical CAD applications. 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.

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 CADPublish 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.

MBD

Theorem's CADPublish 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.

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
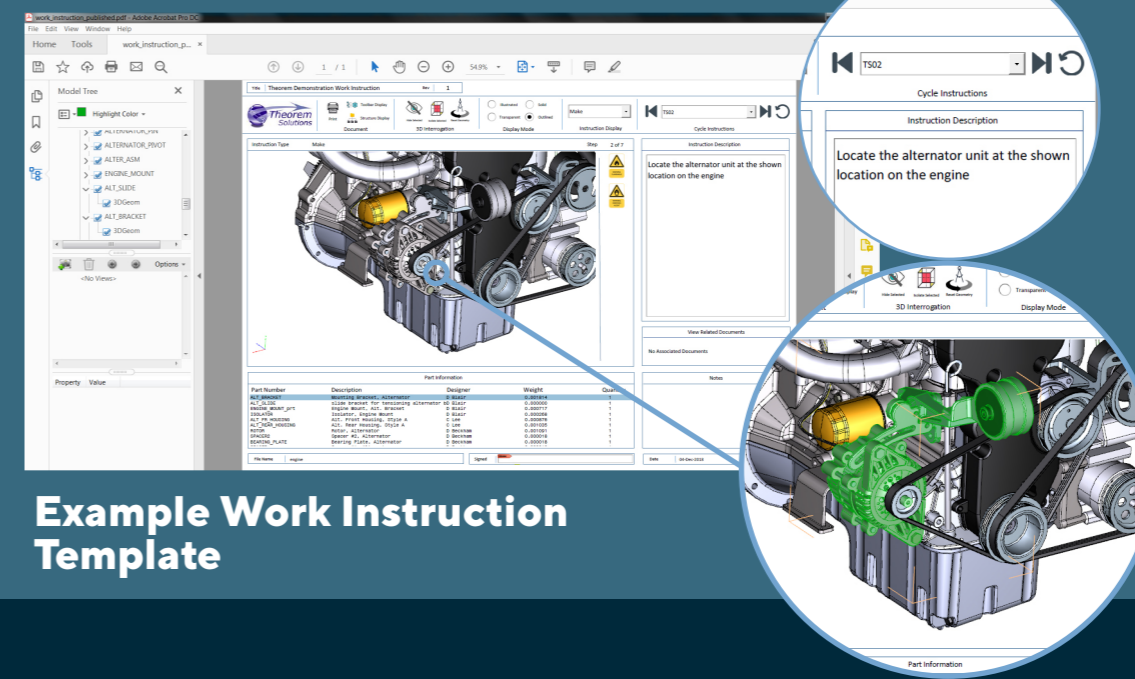
Protect your IP

Improve security of your 3D data with password protection

Example Work Instruction Template

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®.

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.
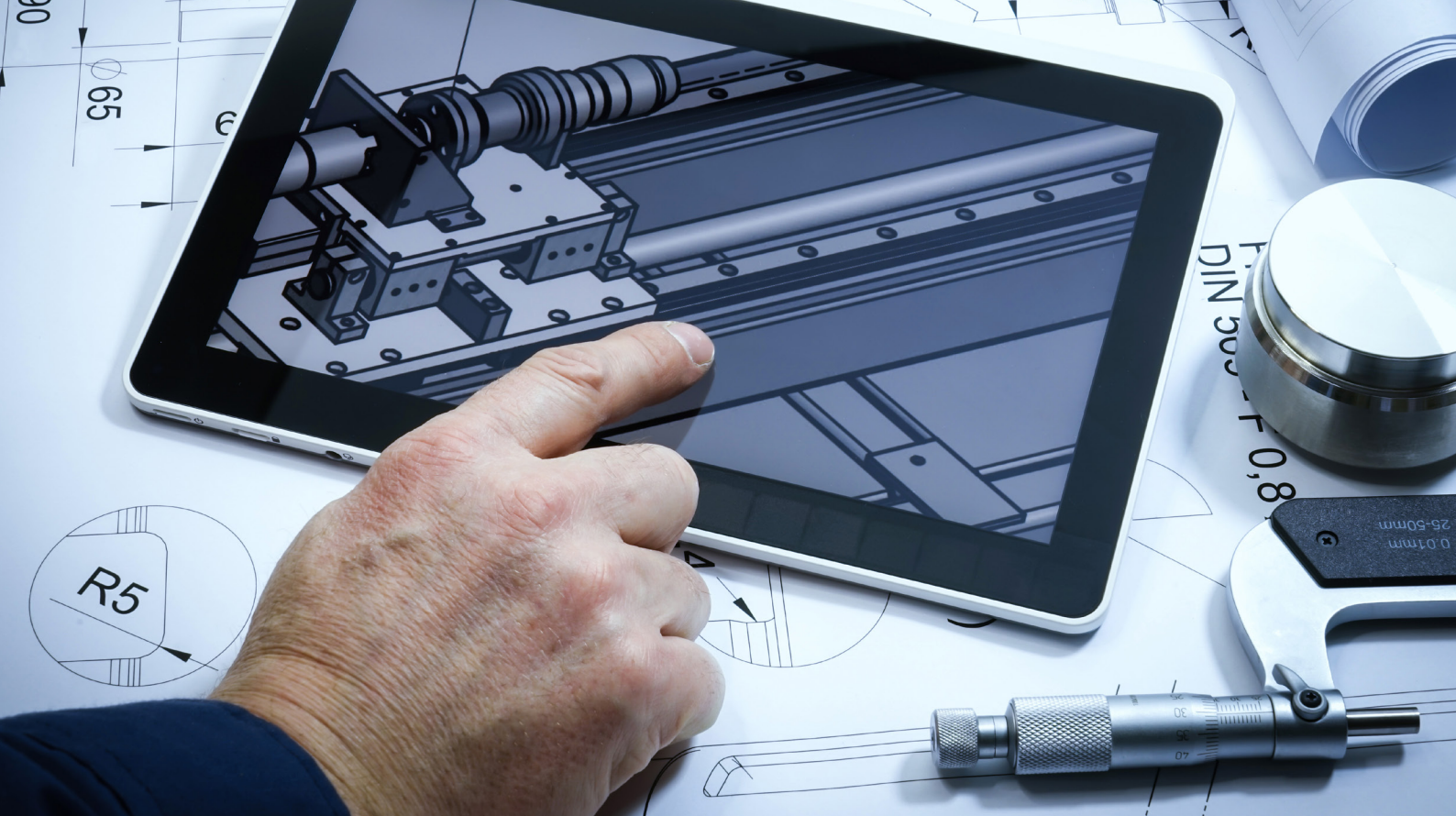
Configuration and Packaging

CADPublish is provided in a range of configurations to support small local requirements or for larger enterprise use. Flexible licensing makes **CADPublish** affordable and cost effective. Once configured, **CADPublish** 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 **CADPublish** has two levels of capability

3D PDF Create: Publishes from within the native CAD system and uses the Save As/Export function to create the 3D PDF. Users can publish to multiple company branded document types simultaneously.

3D PDF Enhance: Combines 3D PDF Create capabilities with the ability to batch publish from 3DEXPERIENCE, CATIA V5, NX, CREO and JT systems; allowing for adhoc and volume publishing.

Leveraging CAD Data with 3D PDFs: Key Use Cases

- 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

Uniquely

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

Request for Quotation: Present suppliers with crystal clear interactive 3D representations of products, components, sub-assemblies and specifications; removing ambiguity from the procurement process.

◯ THEOREM

UK, Europe and Asia Pacific Regions

⌖ THEOREM HOUSE
MARSTON PARK
BONEHILL RD
TAMWORTH
B78 3HU
UNITED KINGDOM

✉ sales@theorem.com

☎ +44 (0) 1827 305 350

USA and the Americas

⌖ THEOREM SOLUTIONS INC
100 WEST BIG BEAVER
TROY
MICHIGAN
48084
USA

✉ Sales-usa@theorem.com

☎ + (513) 5761100

🌐 **THEOREM.COM**

A ◯ TECHSOFT3D Company