



3T RPD Ltd

Data Formats: CAD Systems & File Types

There are a number of CAD systems that we use and many different file types that we can read. Whilst we can generate a quotation from almost any data source, we can only build from those that are 3D. File types that are 2D do not include sufficient information to drive the modeling process, and therefore a 2D-3D conversion is required.

CAD Systems:-

SolidWorks	Advice on STL creation available
PTC Pro/Engineer Wildfire 1	
Materialise Magics RP	Rapid Prototyping software
Materialise 3-Matic	Rapid Prototyping software
Rhinoceros V3.0	3D Modeling software

File Types:-

Universal Translators:-	
.STL	Rapid Prototyping file (Binary with 0.01mm tolerance preferred)
.IGES	Initial Graphics Exchange Specification universal translator
.STEP	International Standard for Exchange of Product Model Data
.VDA	Surfaced Data Interface V2.0
.X_T	Parasolid
.OBJ	3D Object
.WRL	VRML (Virtual Reality Modelling Language)
Native CAD files:-	
.SLDPRT	Solidworks model file
.EXP	Catia V4 export file
.MDL	Catia V4 native file
.PRT	Pro/Engineer part file
.PRT	Unigraphics
.3DS	3D Studio
.3DM	Rhino file
2D image files:-	
.BMP	Windows Bitmap image format file
.JPEG	Joint Photographic Experts Group image file
.TIFF	Tagged-Image File Format image file
.PDF	Adobe Acrobat document

Whilst we can read these file formats, they are only 2D and hence do not include sufficient information to drive the modelling process. 2D-3D conversion is required.

The .STL and .IGES file formats have become the standard data transmission method for the Rapid Prototyping industry, with .STL being the preferred format to build SLS parts, and .IGES for DMLS parts. Almost all of today's CAD systems are capable of producing .STL and .IGES files and the process is often as simple as selecting File, Save As, .STL/.IGES. For further information on how to generate a good .STL file, refer back to Data Transfer in the Technical Data section on our website.

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