

3D Print Modeling Services

RPG is pleased to offer 2 methods of 3D modeling:

FDM - Fused Deposition Modeling method uses a plastic filament build material which is extruded through a heated tip in a semi-molten state in thin layers to build up the model in layers. A second material that is soluble is used to build support structures to support the models during the build process. After the model is built, the support material is removed by placing the model in a heated alkaline bath. The dimensional accuracy and the durability of this method of 3D modeling is excellent. These 3D models are appropriate to use for industrial design and prototyping for actual parts usage.

3DP - 3DP Printing is a method that uses a plaster based composite powder deposited in thin layers to build up the part. Binder is printed into each layer using ink jet technology. The powder acts as a natural support structure and additional support structures are not usually required. After "printing", the model is dried in an oven and infiltrated with an adhesive to give additional strength. This method is quite fast, printing at 1 cubic inch per hour, however the structures are more fragile.

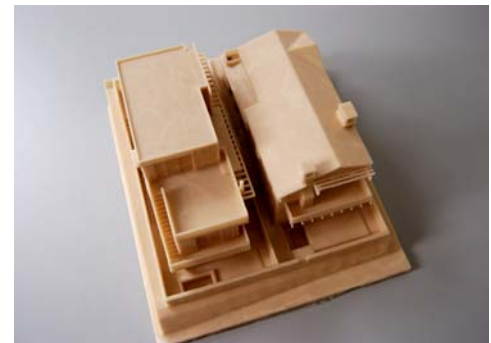
- 3 D Models Created Directly From Digital Data
- Fast Turnaround at 1" Vertical per Hour
- Able to Print Small Detailed Features

Files should be in STL format (AutoCAD, Bentley, Sketchup 3D Studio Max comparable) or conversion fees apply. File editing for preparation of modeling may be required.

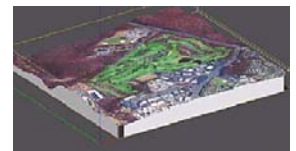
From aiding in conceptualization, fast-tracking collaboration, to prototyping parts for industrial usage, 3D models have become more automated and cost justifiable. For project managers, and owners who demand models for projects, now there is a timely, cost efficient solution.



Samples of FDM type of model



Sample of 3DP type of model



GIS, Survey and Topographical Applications

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