# What kinds of applications are supported by rapid prototyping from Ionic Models?

Ionic Models applies leading-edge technology to service a broad range of applications, including:

- Architecture
  - Study Models
  - Finished Models
  - Presentation Pieces
- Engineering
  - o Structural
  - o Electrical
  - o Hydrodynamics
  - Wind tunnel testing
  - Aerodynamics
- Construction
  - Task Methodology
  - Planning
  - Development
- Industrial Design/ Product Development
  - New product design
  - Special effects
  - Functional prototypes
  - o Ergonomics testing
- Motor Vehicles
  - Concept design
  - Engine component design
  - Mechanical component strategy

#### Education

- Architecture
- Anatomy
- o Genetic code
- o Molecular structure
- Chemistry

### Litigation

- Exhibiting
- Evidence recreation

#### Medical

- o MRI
- o CAT scan
- Surgery procedures
- Bone reconstruction

### Government/ Military

- o Planning
- Training
- Wind tunnel and radar cross section testing

### How quickly will my project be completed?

Utilizing sophisticated 3D printing technology, Ionic Models creates physical study models and prototypes in a fast, cost-effective manner. What used to take weeks to manufacture can now be produced by Ionic Models in a matter of days.

### How much will my project cost?

Scale models created through rapid prototyping from Ionic Models are about 80% less expensive than models created by hand. What's more, Ionic Models provides complete turnkey service to ensure high-quality results at competitive industry rates. To receive an online quote now, click here.

# How does the Z-310 printer work?

Fast and versatile, the Z-310 printer from Z Corp employs a base material of fine plaster powder with a non-toxic binder. Following the initial production stage, your model will be finished by hand to remove excess support powder. The final step in the process involves infiltration with CA (Cyanoacrylate) glue, which ensures the strength and durability of your model.

# How does the Polyjet printer work?

The Polyjet printer from Stratasys creates detailed scale models by precisely layering UV plastic in extremely fine layers. Environmentally stable, fully cured and non-toxic, each layer deposited by the Polyjet printer can be made as thin as 16 microns. Scale models created with the Polyjet printer offer smooth surfaces with fine features in addition to strength and durability.

# What kind of data files are supported by 3D printing?

Ionic Models has the technology and expertise necessary to work with a wide range of data files, including:

- CGR
- HCG
- Pro Engineer
- IPT
- Mechanical Desktop
- nigraphics
- PAR
- CADKEY
- IGES
- IDF
- STEP
- Parasolid

- SAT
- VDA-FS
- VRML
- STL
- DWG
- DXF
- TIFF
- JPG
- PD
- Viewpoint
- RealityWave
- HSF

### What standards are supported?

Ionic Models supports the following standards: ANSI, ISO, JIS, BSI, DIN, GOST, GB

# How big are the build areas for the Z-310 printer and the Eden 333 printer?

With the Z-310 printer from Z Corp, your prototype can be as large as 8" x 10" x 8" (203 x 254 x 203mm). With the Eden 333 printer from Stratasys, your prototype can be as large as 13.4" x 13.4" x 7.9" (340x340x200mm).

# How thick is each layer created by rapid prototyping?

With the Z-310 printer from Z Corp, each layer of your model will have a selectable thickness between .003"-.010" (.076-.254mm). With the Eden 333 printer from Stratasys, each layer of your model will have a thickness of 16 microns.

### Does 3D printing allow me to choose my model color?

Yes, rapid prototyping from Ionic Models allows you to choose the color of your model. All primary and secondary colors are available, giving you the opportunity to produce a custom scale model in any shade you select.

#### What if my model requires moving parts?

Giving you the power to see your design in action, scale models created through rapid prototyping from Ionic Models can be made to function with moving parts.

#### Will my design plans be kept secure and confidential?

Ionic Models ensures complete confidentiality and operates under stringent guidelines to protect your intellectual property. When requested, Ionic Models is happy to sign non-disclosure agreements to further protect your design plans and company information.

# How can I prepare my files for rapid prototyping?

To obtain unsurpassed results in the deadline-driven and cost-efficient commercial environment, Ionic Models asks that you follow the *Architecture Design Guide: Printing* 

*3D Architectural Models* to prepare your files for rapid prototyping. To download and review the guide now, <u>click here</u>.

# What if I don't have a digital 3D model?

Ionic Models can create your scale model through rapid prototyping even without a digital 3D model. Whether you have a 2D CAD file, a .jpg image or a hand-drawn sketch, Ionic Models can translate your design plans into a high-quality scale model through rapid prototyping.

# How can I get more information?

Ionic Models provides the rapid prototyping services you need to outperform the competition. To learn more, contact Ionic Models directly through <u>email</u>. If you'd like to speak with a service representative immediately, please call 303-327-8230.