3D Printing Models with Kraftwurx.com

Posted by Marco CM - 2013/06/14 12:03

What types of 3d model and image file formats can be uploaded to Kraftwurx.com?

3D Models: .STL, .OBJ, .WRL, .DAE, .3DS, .PLY, .BRE, .CTM, .ES, .GTS, .JSON, .OFF, .PDB, .PTS, .PTX, .QOBJ, .TRI, .V3D, .X3DV, .XYZ 2D Texture maps: .PNG, .JPG, .BMP and (.ZIP/.RAR for multiple file uploads.)

How do I 3d print a model on Kraftwurx.com?

1. Upload a 3d model file using the "Upload A Model" button found on the home page.
Accepted formats: .STL, .OBJ, .WRL, .DAE, .3DS, .PLY

2. Inside the Model Editor set the scale and a material for your 3d print. You will see a calculated price for your 3d print based on scale and material chosen.

3. Save the model or add to cart for purchase. If the model for any reason is unprintable, you will be given the option to choose send Kraftwurx staff the model for manual repair at no extra cost.

What is required of a 3d model in order to be 3d printable?

1. Models must be "Watertight" or closed, meaning they cannot have openings or holes in the polygon mesh. Imagine if the model contained water, anywhere water would pour out is a hole in the mesh. Netfabb Basis is a free to download tool that can help to locate and repair model errors.

2. Models must be "Manifold", meaning edges cannot be shared between more than two faces or polygons. Most 3d modeling applications have tools to help identify non-manifold areas of a model. Blender 3D is a free to download tool that support a non-manifold repair option.

3. Model walls cannot be too thin for the chosen material. A good rule of thumb is to keep walls above 1mm thick. Each 3d print material has different capabilities, some are capable of walls as thing as 0.4mm.

4. Model faces or polygons must all be aligned and facing the same direction. Flipped normals equal holes in the mesh. Most 3d modeling application provide a auto align normals function.

How is the cost of a 3d print computed on Kraftwurx.com?

The volume of a model is use to calculate the amount of material a given 3d model will consume upon printing. The cost is determined by the amount of material consumed upon printing. An additional Handling Fee is applied and may vary depending on the material chosen. Complexity, detail level, and design do not affect the cost.

What are "Model Diagnostics"?

3d Models uploaded to Kraftwurx.com are automatically checked for 3d printability. If a model s not

ready for 3d printing for any reason Kraftwurx provides the user the option to submit the model for free diagnostics and repair. A member of the Kraftwurx staff will examine the 3d model and make any repairs possible in order to prepare the model for 3d printing. A Kraftwurx staff member will then send the model file back to the user ready for uploading and 3d printing along with details of the errors and required repairs.
Kraftwurx does not currently auto-repair models because we believe education is key to growing the 3d printing community.

How do I 3d print a full color model on Kraftwurx.com?

1. Ensure your 3d model has assigned UV coordinates and a color image texture map. Limit one (1) UV map and corresponding image per model file.

2. Upload the 3d model in .OBJ file format to Kraftwurx.com using the "Upload A Model" button found on the home page.

3. Inside the Model Editor loads the model choose Multi-Color Sandstone as the 3d print material. Click the checkaerd ball inside the Finishes box in order to select and upload your 2d color image texture file. Accepted image file formats: .PNG, .JPG, .BMP.

What is the maximum file size I can upload to Kraftwurx.com?

Kraftwurx.com offers the largest file size upload at a maximum of 200 MB or 12 Million Polygons per 3d model.

What are the specs and resolution of Multi-Color Sandstone 3d prints?

600x540 dpi, 0.089mm Layer thickness, 0.4 detail resolution, and CMYK color process = 8 million possible colors. Models must have only one UV space or coordinate and one corresponding color image file.

Are my 3d model files kept private?

All files are kept private by default. Users are not required to publish or sell their designs in the public store front. Krafwurx staff protects all files and user content with a variety of encryption and security measures. Kraftwurx staff is always available to sign Non-Disclosure Agreements and Intellectual Property Contracts as well.

Do the copyrights of my 3d models, images, and content remain %100 mine if I upload them to Kraftwurx.com?

Yes, all copyrights, intellectual property, concepts, prototypes, models, images, designs and content are protected and 100% your ownership. Kraftwurx does not owner or rights over any content added by users of Kraftwurx.com. Kraftwurx staff is available to sign Non-Disclosure Agreements as well if desired. If for any reason we would like to photograph or showcase your 3d prints, we would ask for written permission before doing so.

Do I have to publish my models for sale in the online store to order 3d prints?

No, you are not required to publish any models to the online store or make designs public if you do not wish to. All 3d models uploaded to Kraftwurx.com are kept private by default.

How do I order a 3d print in a material I see on the Material's page but is not available in the Model Editor?

Some 3d print materials require more intensive calculations and model examination in order to develop an accurate cost for a 3d print.
Kraftwurx provides 48hr turnaround quoting for these materials. If you do not find it in the Model Editor, save your model and please email websales@kraftwurx.com stating the model file name as you saved it, the desired material(s) and part dimensions along with any other additional comments or notes. A member of the Kraftwurx staff will reply via email or phone within 48hrs or less with a prepared quote.

What if my model is too small to be 3d printed in a selected material?

3D Print size limitation are set for two reason. The first being detail limitations of the material. The part maybe too small for features or details to resolve completely upon printing. The second reason is that small parts may become lost after printing during post processing/handling. We allow users to purchase models at a smaller than recommended size if they so choose, but they must combine more than one small part by connecting them for printing to do so. We encouraged users to sprue multiple small parts together or other wise connect them in order to prevent loss. This is the best method for 3d printing model kits, and figurines with multiple components.

How does Kraftwurx handle removal of support material?

Nearly every type of 3d printing technology requires support material in order to maintain part accuracy and structure during printing. Support material can come in the form of either hard plastics, powder, gel, or wax depending on the type of 3d printer being used. All supports require manual removal after 3d printing is complete. This removal can be either snapping off supports, washing away gelatin support material in a chemical bath or depowdering parts with a air pressure depending on the 3d printing technology used.

Depending on the model's shape and what type of support material is used removal can be either very simple or complex and time consuming. Kraftwurx staff follows a policy of removing any and all supports possible from models within capability. We will not remove support materials from 3d printed models in only two circumstances, First: If a 3d printed model is deemed extremely fragile or has the potential to break in shipping without a provided support structure. i.e. Highly detailed figurines with thin arms, poles etc. Second: If the customer specifically requests for the support to be left intact in the order notes.

(This FAQ is ever growing, we encourage emailing suggested questions to support@kraftwurx.com)

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