HOW TO - 3D Printing Scale Miniatures
Posted by Marco CM - 2012/08/03 14:01

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Many miniature makers and scale model companies are turning to 3d printing to create their model masters. The latest in today's 3d printing technology allows for extremely high resolution details and perfectly smooth surfaces. Not previously possible with additive manufacturing.

The highest detail materials available are produced by EnvisionTEC and are available on Kraftwurx.com as the "Nano-Detail" family of materials. They come in a variety of formulations for different end uses.

One of the greatest advantages of 3d printing miniatures or scale models is scale-ability. No need to re-sculpt another copy at a different scale. Instead you simply change the scale of your model on Kraftwurx.com and print another at the new mathematically accurate scale.

In order to 3d print your war gaming miniature or scale model on Kraftwurx.com, follow these steps.

1.) Export a .stl, .obj or .wrl file of your 3d model from any 3d software package.

2.) Upload the model file to Kraftwurx.com (It is advised to check the model file prior to upload for 3d print validation using Netfabb Basic free software)

3.) Set the scale for your model in the model editor, select mm,cm, or inches. Enter the proper dimensions for your 3d print in the number fields and hit enter.

4.) Select one of the "Nano-Detail" materials for your miniature. The site will generate a price for your print based on the scale and material chosen.

Nano-Detail High-Temp is recommended for War Gaming miniatures that are intended to be used as model masters for casting. The Nano-Detail High-Temp material is specially formulated to produce very strong parts able to withstand the heat and pressure of rubber mold vulcanization.

Below are images of some very small scale models (1/1250). printed in Nano-Detail High-Temp material at Kraftwurx.com You can read more about Nano-Detail High-Temp material here: http://www.kraftwurx.com/3d-printing-support/3d-printing-materials-finishes/item/nano-detail-high-temp?category_id=18

 http://www.kraftwurx.com/images/fbfiles/images/007_web.jpg
 http://www.kraftwurx.com/images/fbfiles/images/009_web.jpg
 http://www.kraftwurx.com/images/fbfiles/images/006_web.jpg
 http://www.kraftwurx.com/images/fbfiles/images/005_web.jpg

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Re:HOW TO - 3D Printing Scale Miniatures
Posted by ottoxii - 2012/08/14 10:27

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the scale of the model shown is not 1/72 - it's 1/1250!
so the piece is only 20mm high ...
it came out in perfect quality - clean surface and no visible layers.

the Nano-Detail High-Temp-Material allows very small details (in this case down to 0.14mm) without resulting in a too fragile/brittle model.
can't wait to print the the rest of the ship ...

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Re:HOW TO - 3D Printing Scale Miniatures
Posted by Marco CM - 2013/07/02 14:10

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Kraftwurx has replaced all Nano-Detail materials with a superior set of Nano-Detail materials. These materials are Nano-Detail Crystal and Nano-Detail White. The new Nano Detail materials are not only 10x stronger than the previous materials, they now allow for interlocking functional parts! All at the same high-detail Kraftwurx users have come to love. I encourage you to print your next miniatures and scale model parts in the New Nano-Detail Crystal, you will be blown away.

Nano-Detail Crystal/White material specs:

Max Detail resolution: 0.01 mm
Min Functional Spacing: 0.4 mm
Print Layer thickness: 25 microns
Raw Surface Texture: Smooth
Chemical Resistance: Good
Min Wall thickness: 1.0 mm

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