Slicing Guide for Objet studio

What is Objet Studio?

Objet studio is a 3D Slicer software for creating toolpath files for Stratasys Polyjet machines. **Polyjet Machines at Mhub:**

Eden 260

Objet 30 Prime

Material Selection

Eden 260

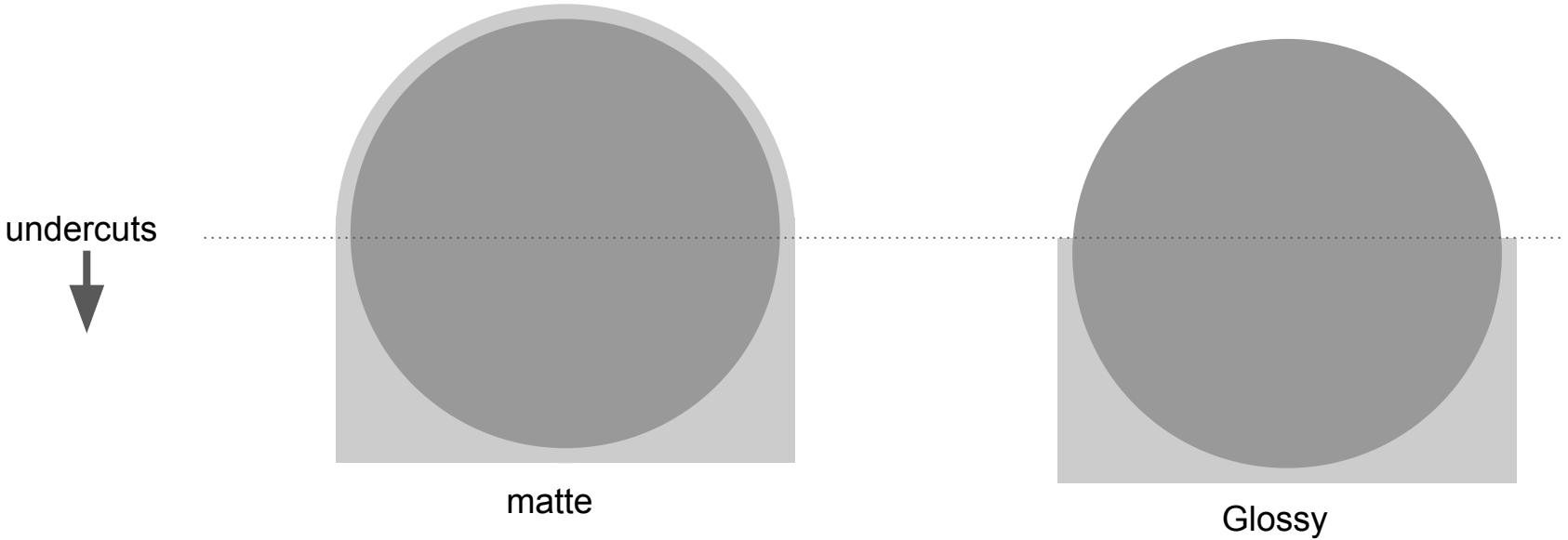
Med 610 - Clear material with medical/ dental rating

Objet 30 Prime

Vero Grey - Rigid opaque grey

Two print finishes: Matte & Glossy

All downward facing surfaces require support material. A matte surface is achieved by covering model material with support material and curing with UV light. Therefore if you were printing a sphere as shown below you can only achieve a gloss finish on the top half of the object. Choose between matte and glossy finish based on your project needs. Glossy mode will use less support material and therefore cost less, but matte mode allows you to achieve a uniform finish and get higher precision for small components

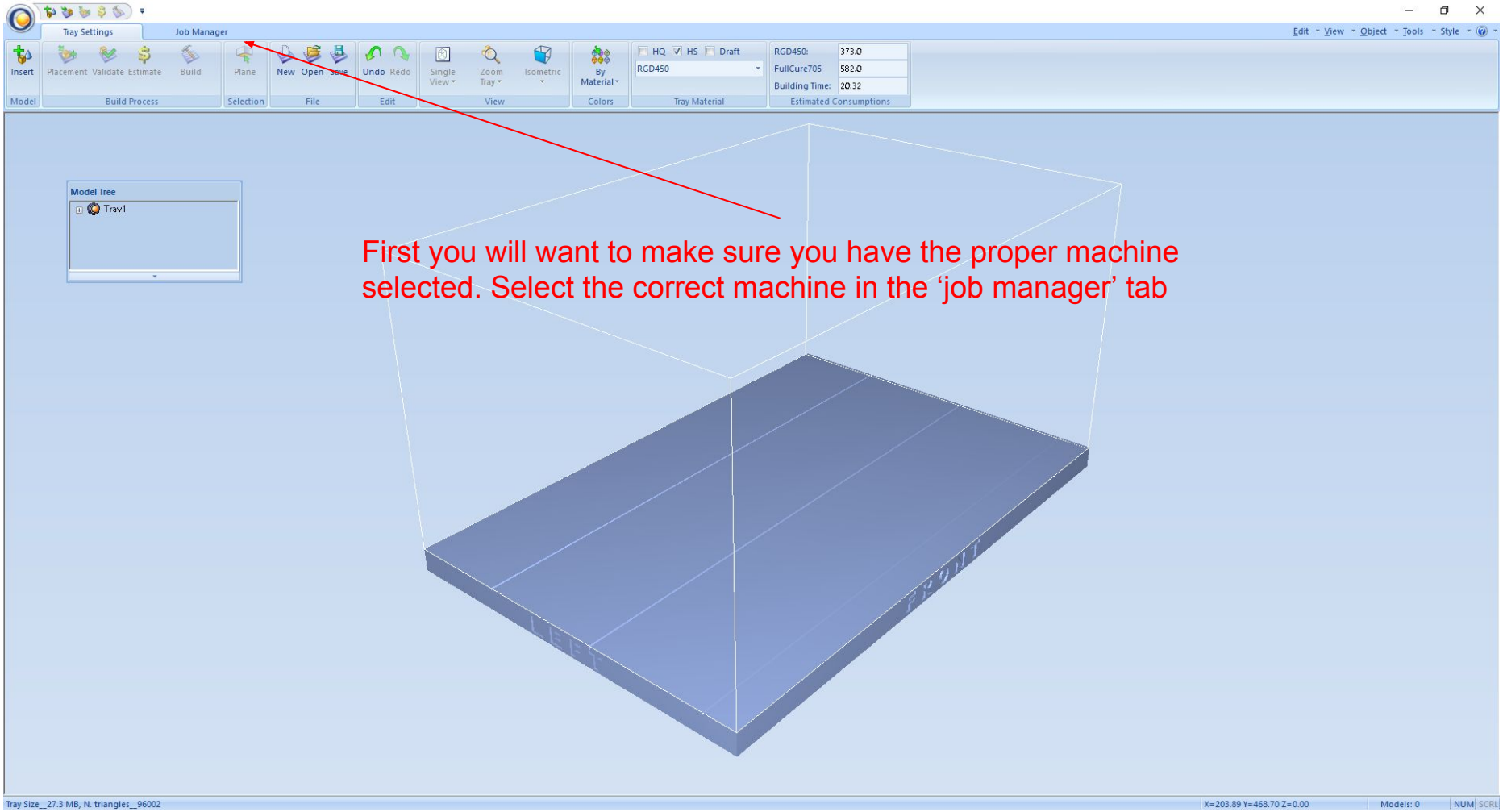


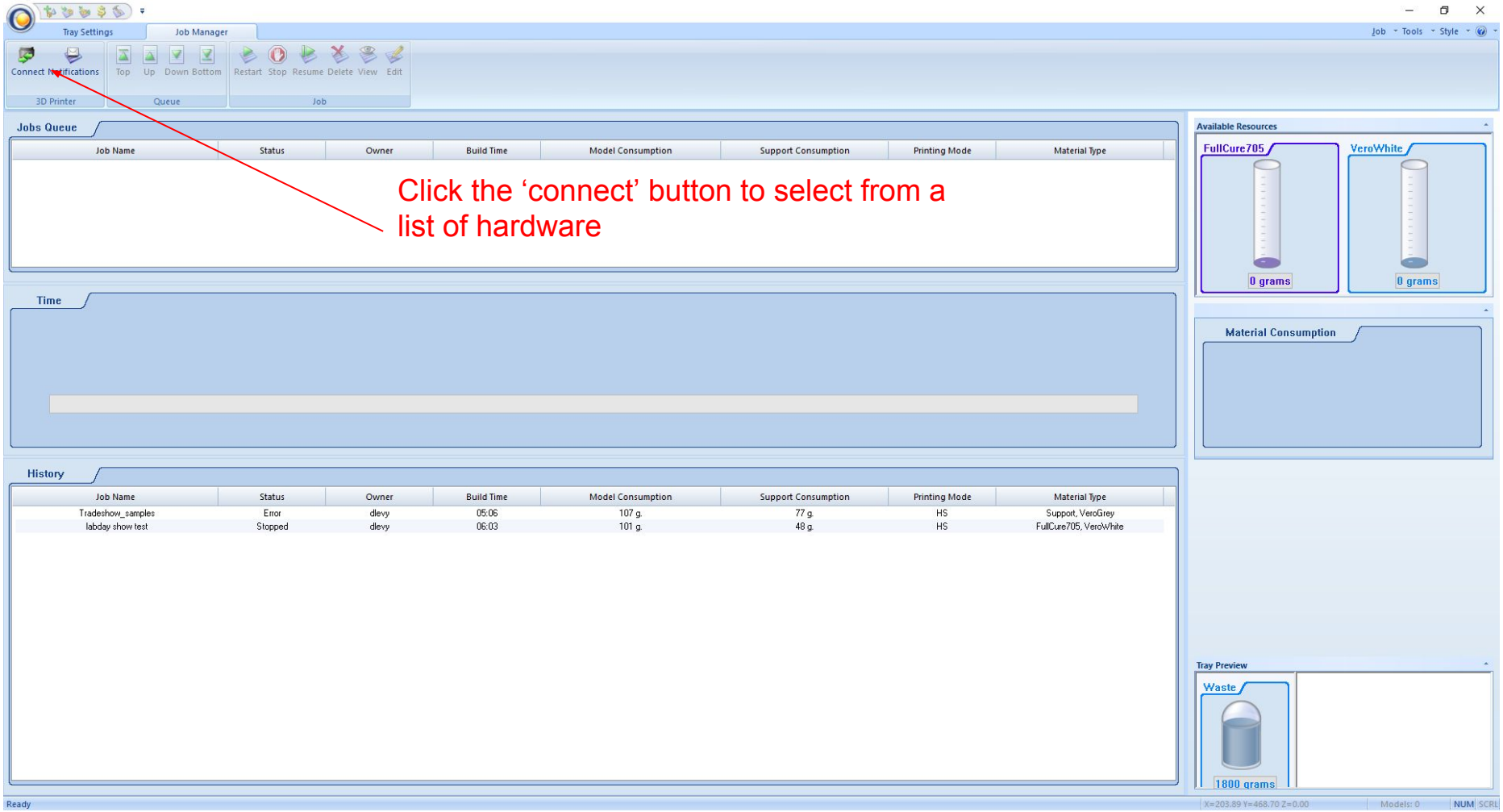
Print Speed

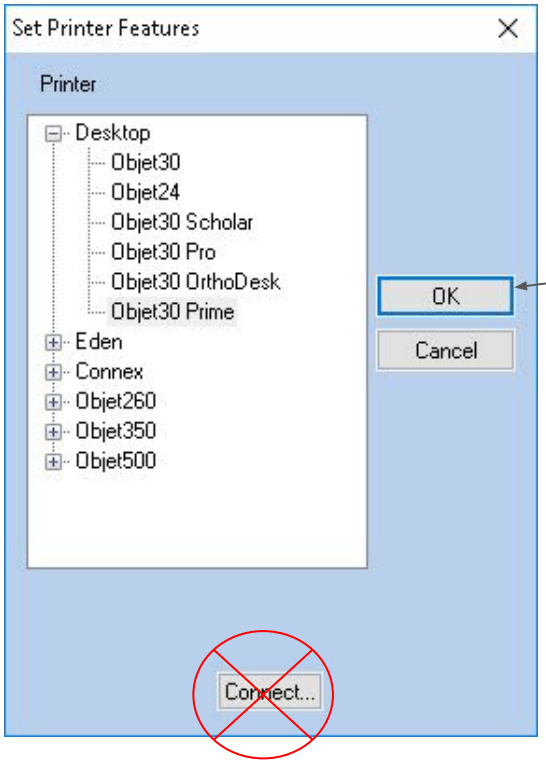
High Speed - 28um

High Quality - 14um

There are two print speeds/resolutions to select from. Also, the height of your build will have a direct relationship to the total time to print your part.


Tray Settings
Job Manager
Edit
View
Object
Tools
Style
Insert
Placement
Validate
Estimate
Build
Plane
New
Open
Save
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
RGD450
RGD450: 373.0
FullCure705 582.0
Building Time: 20:32
Model
Build Process
Selection
File
Edit
View
Colors
Tray Material
Estimated Consumptions
Model Tree
Tray1
First you will want to make sure you have the proper machine selected. Select the correct machine in the ‘job manager’ tab
Tray Size__27.3 MB, N. triangles__96002
X=203.89 Y=468.70 Z=0.00
Models: 0
NUM
SCRL


Tray Settings
Job Manager
Job
Tools
Style
Connect
Notifications
Top
Up
Down
Bottom
Restart
Stop
Resume
Delete
View
Edit
3D Printer
Queue
Job
Jobs Queue
Job Name
Status
Owner
Build Time
Model Consumption
Support Consumption
Printing Mode
Material Type
Click the ‘connect’ button to select from a list of hardware
Time
History
Tradeshow_samples
Error
dlevy
05:06
107 g.
77 g.
HS
Support, VeroGrey
labday show test
Stopped
dlevy
06:03
101 g.
48 g.
HS
FullCure705, VeroWhite
Available Resources
FullCure705
0 grams
VeroWhite
0 grams
Material Consumption
Tray Preview
Waste
1800 grams
Ready
X=203.89 Y=468.70 Z=0.00
Models: 0
NUM
SCRL



Find your machine and click ‘OK’

It will prompt you to restart the application

Do not click connect

Tray Settings | Job Manager

Edit | View | Object | Tools | Style

Insert | Placement | Validate | Estimate | Build | Plane | New | Open | Save | Undo | Redo | Single View | Zoom Tray | Isometric | By Material | HQ | HS | Draft | RGD450 | RGD450: 373.0 | FullCure705 | 582.0 | Building Time: 20:32

Model | Build Process | Selection | File | Edit | View | Colors | Tray Material | Estimated Consumptions

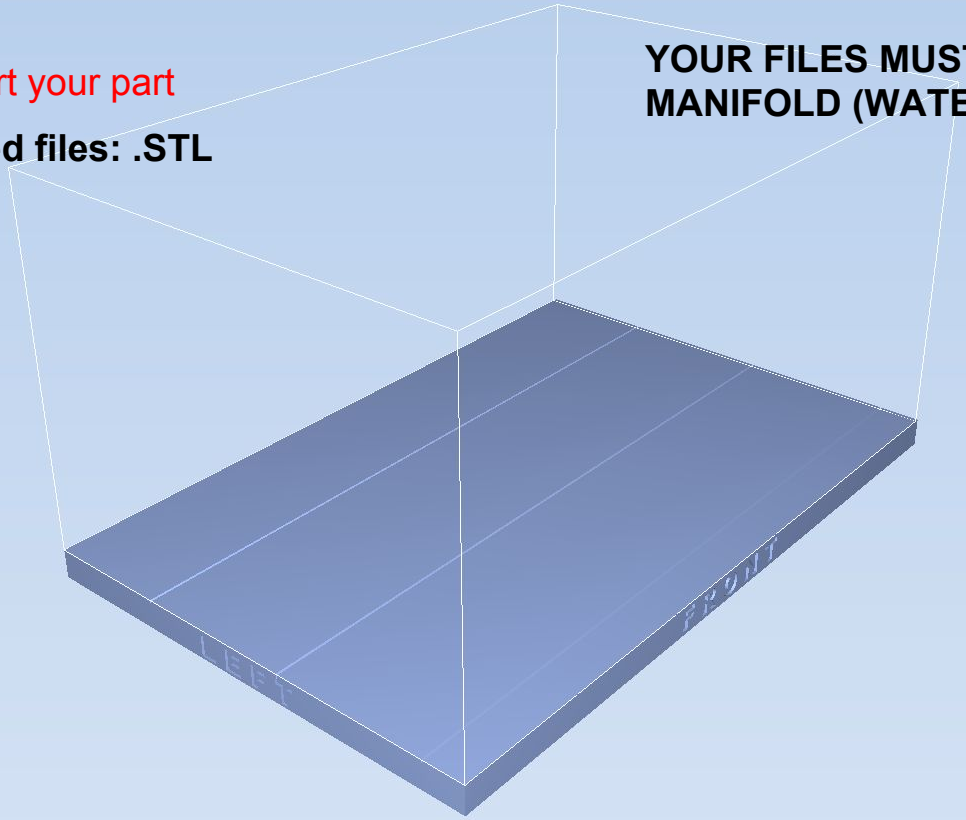
Model Tree

Tray1

Insert your part

Accepted files: .STL

YOUR FILES MUST BE A SOLID MANIFOLD (WATER TIGHT) MODEL

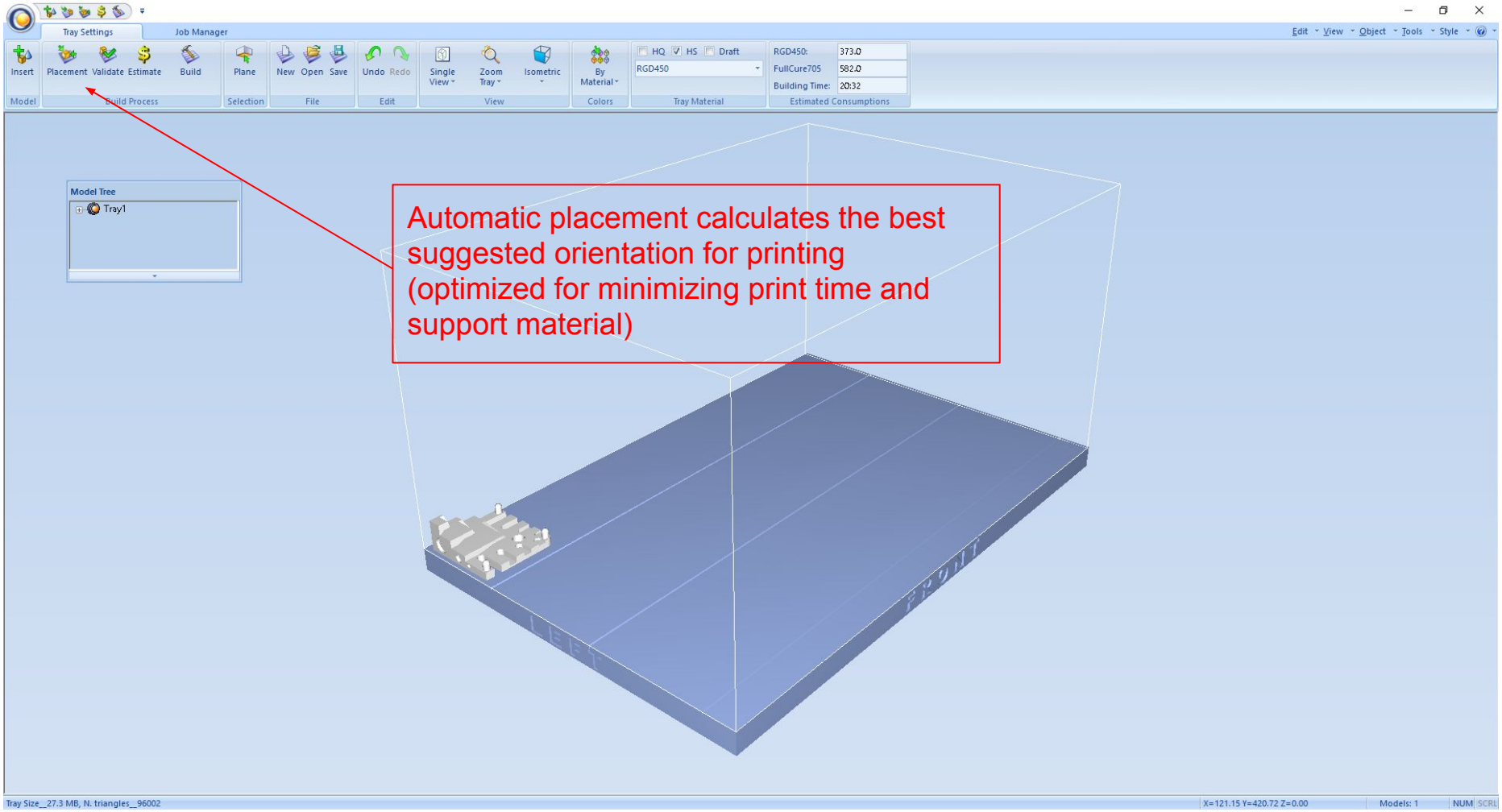


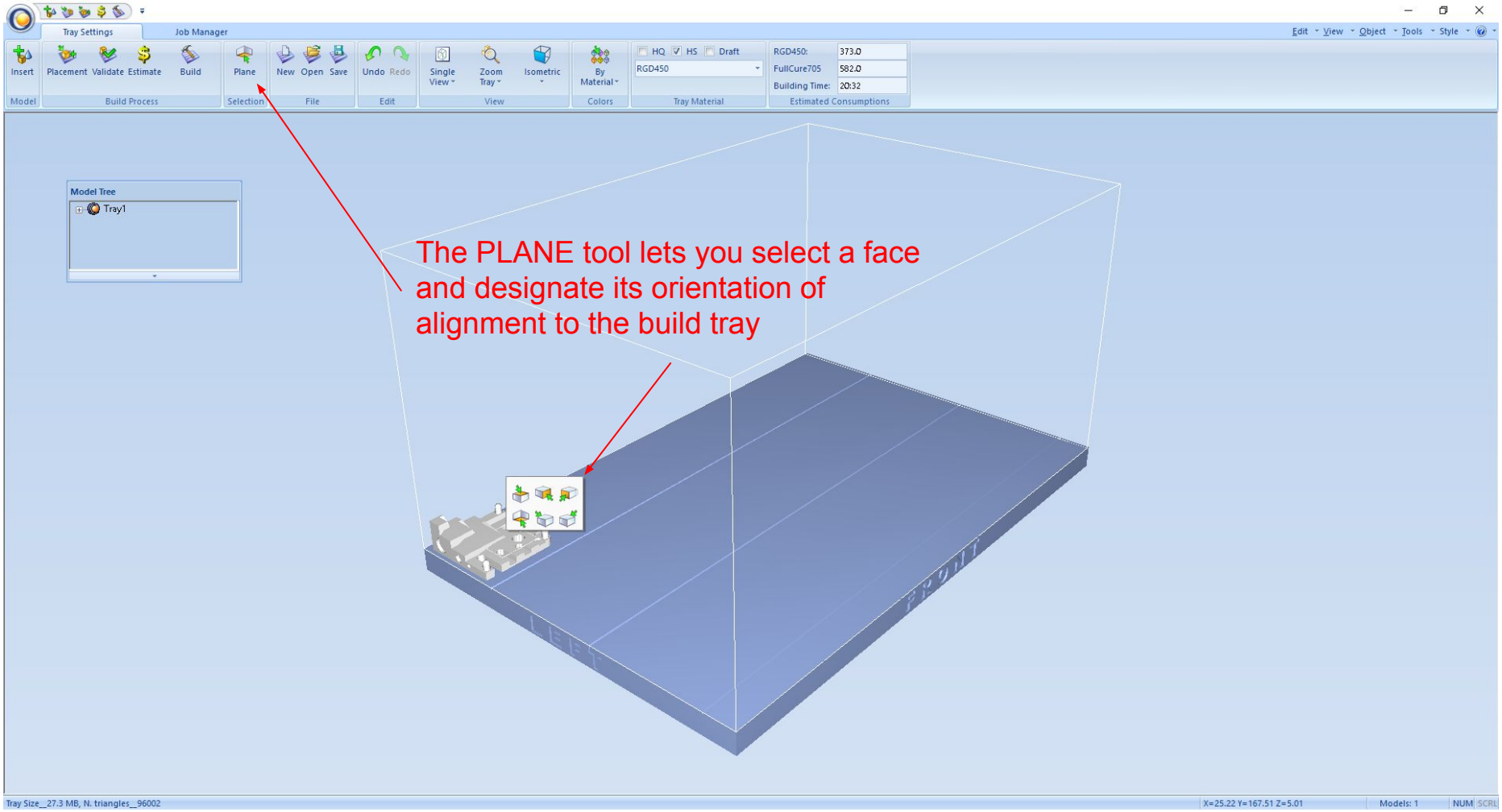
Tray Size__27.3 MB, N. triangles__96002

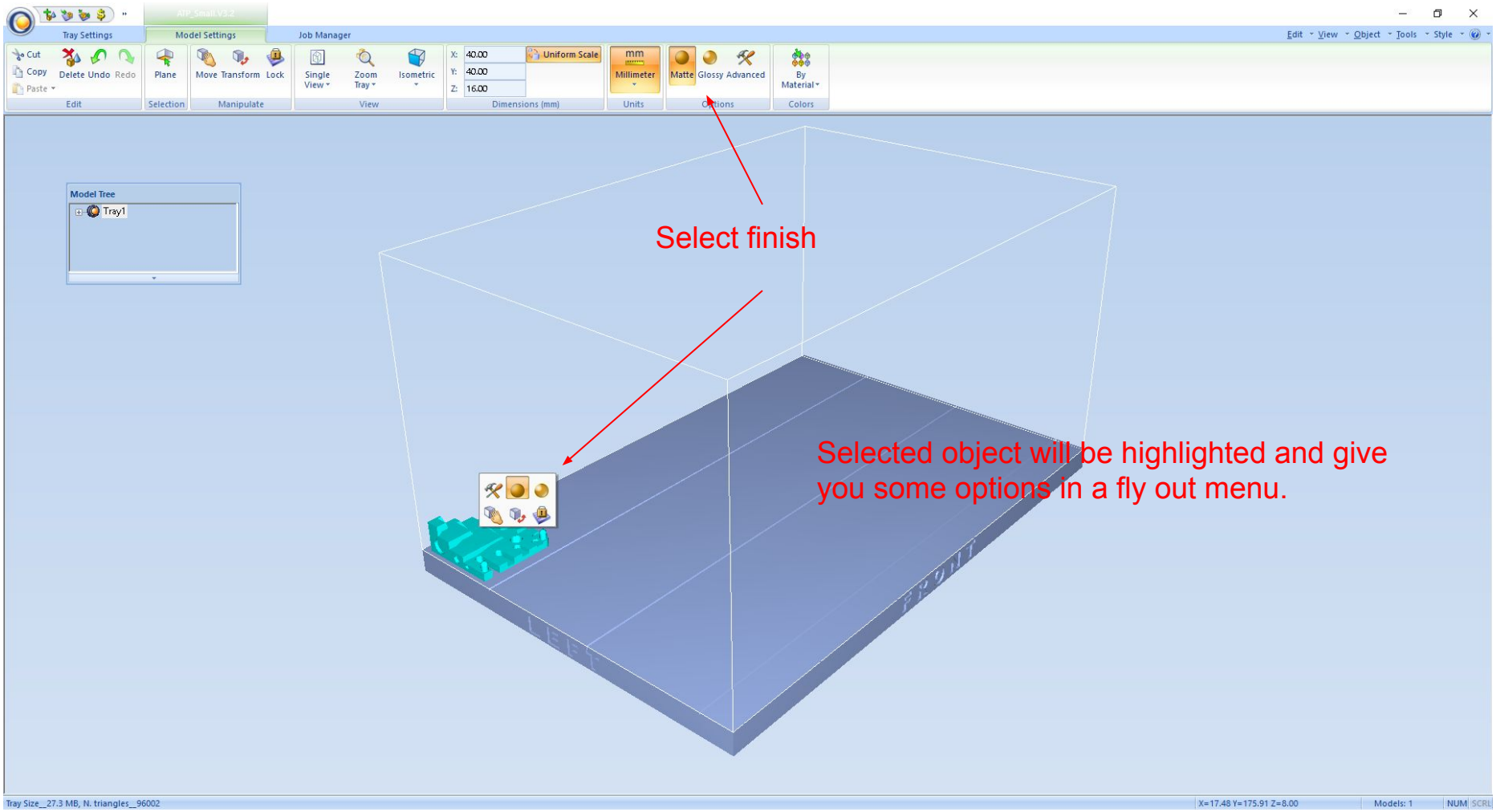
X=242.62 Y=1070.90 Z=0.00

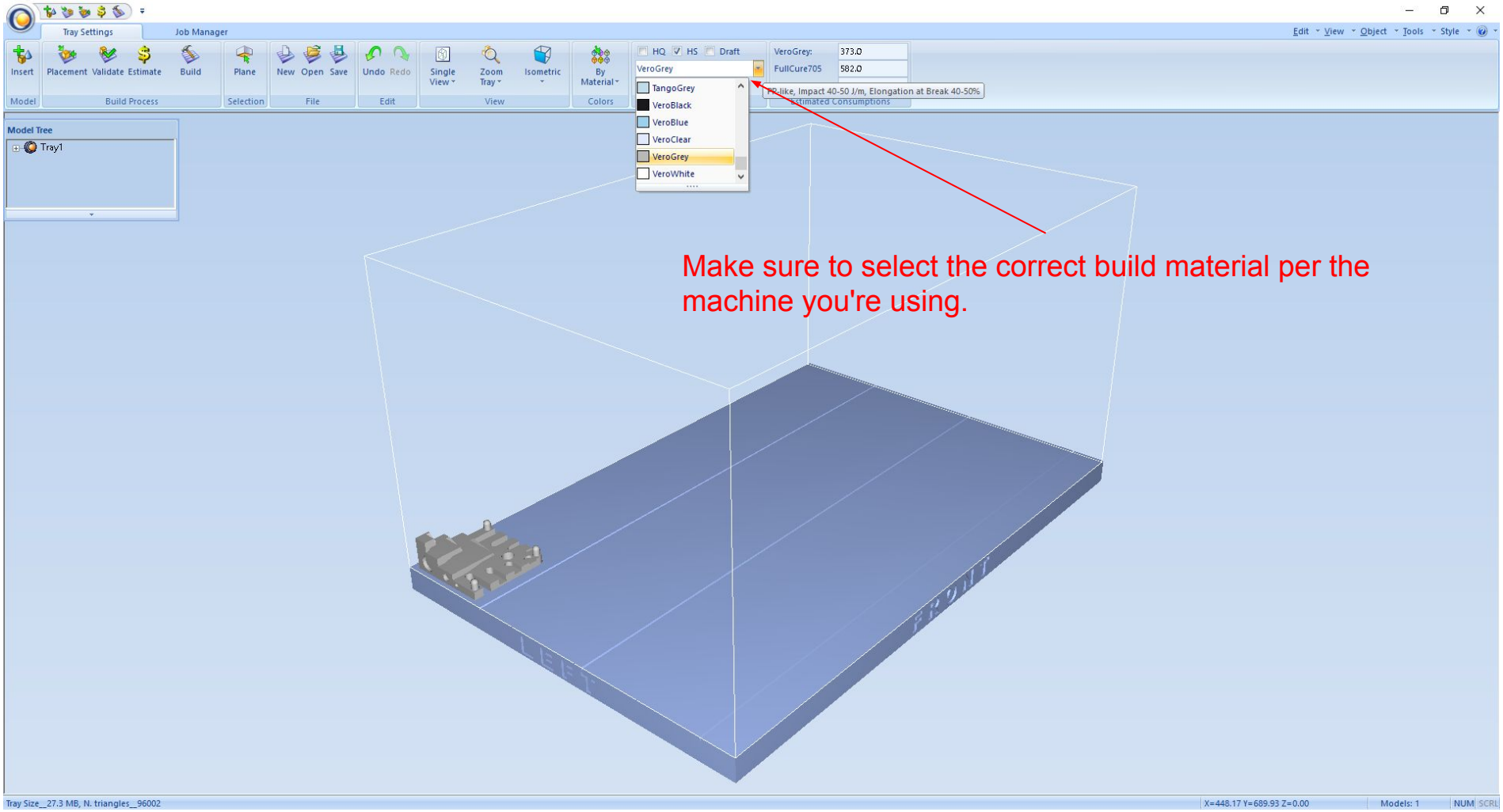
Models: 0

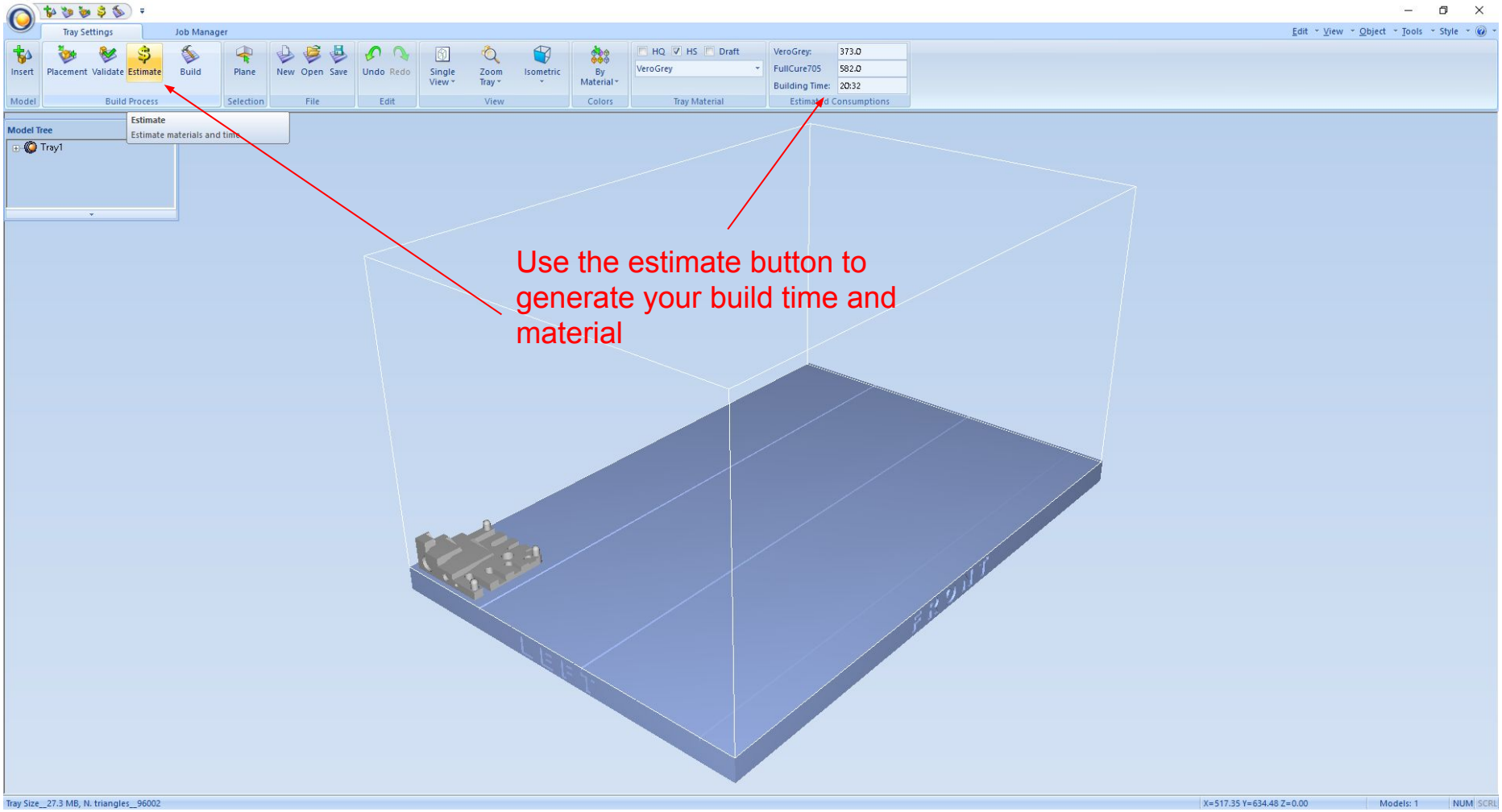
NUM SCRL

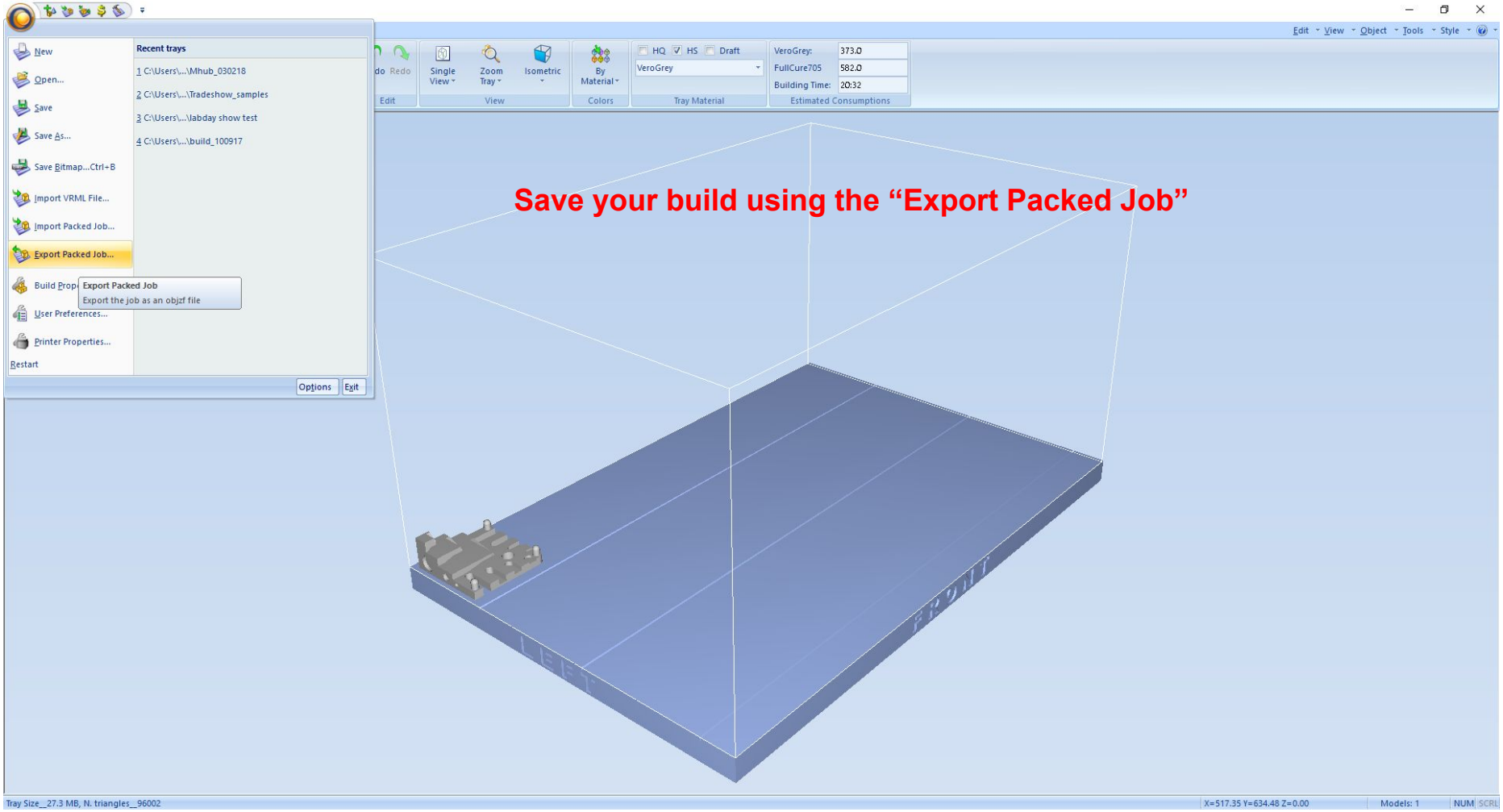

Tray Settings
Job Manager
Edit
View
Object
Tools
Style
Insert
Placement
Validate
Estimate
Build
Plane
New
Open
Save
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
RGD450
RGD450:
373.0
FullCure705
582.0
Building Time:
20:32
Model
Build Process
Selection
File
Edit
View
Colors
Tray Material
Estimated Consumptions
Model Tree
Tray1
Automatic placement calculates the best suggested orientation for printing (optimized for minimizing print time and support material)
Tray Size__27.3 MB, N. triangles__96002
X=121.15 Y=420.72 Z=0.00
Models: 1
NUM
SCRL


Tray Settings
Job Manager
Edit
View
Object
Tools
Style
Insert
Placement
Validate
Estimate
Build
Plane
New
Open
Save
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
RGD450
RGD450: 373.0
FullCure705 582.0
Building Time: 20:32
Model
Build Process
Selection
File
Edit
View
Colors
Tray Material
Estimated Consumptions
Model Tree
Tray1
The PLANE tool lets you select a face and designate its orientation of alignment to the build tray
Tray Size__27.3 MB, N. triangles__96002
X=25.22 Y=167.51 Z=5.01
Models: 1
NUM
SCRL


Tray Settings
Model Settings
Job Manager
Edit View Object Tools Style
Cut
Copy
Paste
Delete
Undo
Redo
Edit
Plane
Selection
Move
Transform
Lock
Manipulate
Single View
Zoom Tray
Isometric
View
X: 40.00
Y: 40.00
Z: 16.00
Uniform Scale
Dimensions (mm)
mm
Millimeter
Units
Matte
Glossy
Advanced
Options
By Material
Colors
Model Tree
Tray1
Select finish
Selected object will be highlighted and give you some options in a fly out menu.
Tray Size__27.3 MB, N. triangles__96002
X=17.48 Y=175.91 Z=8.00
Models: 1
NUM
SCRL


Tray Settings
Job Manager
Edit
View
Object
Tools
Style
Insert
Placement
Validate
Estimate
Build
Plane
New
Open
Save
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
VeroGrey
TangoGrey
VeroBlack
VeroBlue
VeroClear
VeroGrey
VeroWhite
FC like, Impact 40-50 J/m, Elongation at Break 40-50%
VeroGrey:
373.0
FullCure705
582.0
Estimated Consumptions
Model
Build Process
Selection
File
Edit
View
Colors
Model Tree
Tray1
Make sure to select the correct build material per the machine you're using.
Tray Size_27.3 MB, N. triangles_96002
X=448.17 Y=689.93 Z=0.00
Models: 1
NUM SCRL


Tray Settings
Job Manager
Edit
View
Object
Tools
Style
Insert
Placement
Validate
Estimate
Build
Plane
New
Open
Save
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
VeroGrey
VeroGrey: 373.0
FullCure705: 582.0
Building Time: 20:32
Model
Build Process
Selection
File
Edit
View
Colors
Tray Material
Estimated Consumptions
Estimate
Estimate materials and time
Model Tree
Tray1
Use the estimate button to generate your build time and material
Tray Size__27.3 MB, N. triangles__96002
X=517.35 Y=634.48 Z=0.00
Models: 1
NUM
SCRL


Save your build using the “Export Packed Job”
New
Open...
Save
Save As...
Save Bitmap...Ctrl+B
Import VRML File...
Import Packed Job...
Export Packed Job...
Build Prop
User Preferences...
Printer Properties...
Restart
Recent trays
1 C:\Users\...\Mhub_030218
2 C:\Users\...\Tradeshow_samples
3 C:\Users\...\labday show test
4 C:\Users\...\build_100917
Export Packed Job
Export the job as an objzf file
Options
Exit
Edit
View
Object
Tools
Style
Undo
Redo
Single View
Zoom Tray
Isometric
By Material
HQ
HS
Draft
VeroGrey
FullCure705
Building Time:
373.0
582.0
20:32
Edit
View
Colors
Tray Material
Estimated Consumptions
LEFT
FRONT
Tray Size__27.3 MB, N. triangles__96002
X=517.35 Y=634.48 Z=0.00
Models: 1
NUM
SCRL