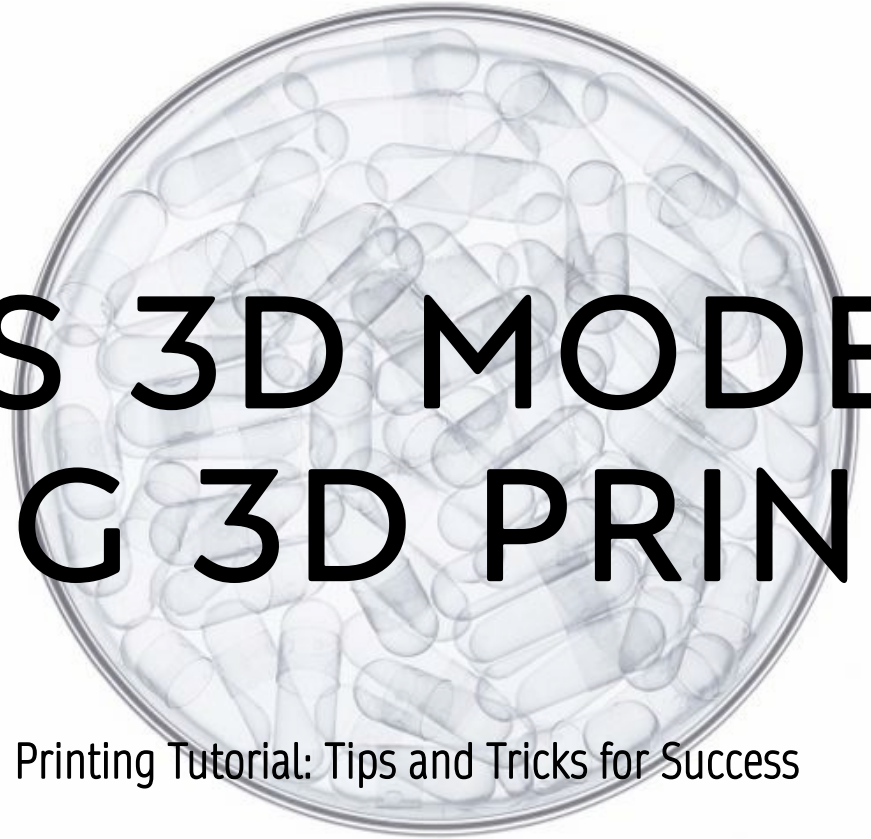

BUILDS 3D MODELLING USING 3D PRINTING

Printing Tutorial: Tips and Tricks for Success

1. LEARN ABOUT THE PRINTING ENVIRONMENT & CHOOSE A 3D PRINT

BEFORE YOU START PRINTING, IT'S IMPORTANT TO UNDERSTAND THE PRINTING ENVIRONMENT. ENSURE THAT YOU HAVE A WELL-VENTILATED SPACE WITH GOOD AIR FLOW AND AN AMBIENT TEMPERATURE OF AROUND 22°C/71.6°F. THIS WILL CREATE AN OPTIMAL ENVIRONMENT FOR SUCCESSFUL PRINTING. NEXT, CHOOSE A 3D PRINT THAT YOU WANT TO CREATE USING THE SONIC MEGA 8K PRINTER. FOR THIS TUTORIAL, WE WILL BE USING THE AQUA GRAY 8K RESIN

2. THINGS TO PREPARE BEFOREHAND

TO ENSURE A SMOOTH PRINTING PROCESS, GATHER THE NECESSARY MATERIALS AND PREPARE YOUR WORKSPACE. YOU WILL NEED THE FOLLOWING ITEMS: - 3 TO 4 BOTTLES OF RESIN (AQUA GRAY 8K) - 95% ISOPROPYL ALCOHOL (IPA) - PAPER TOWELS - GLOVES - CLEAN TRAY FOR PRINTED MODELS - METAL SCRAPER (FOR REMOVING PRINTS FROM THE PLATE) - PLASTIC SCRAPER (FOR CLEANING THE VAT) - FUNNEL AND PAPER FILTERS (FOR RECYCLING LEFTOVER RESINS) - GLOVES, MASKS, AND GOGGLES (FOR PERSONAL PROTECTION) MAKE SURE YOUR WORKSPACE IS CLEAN AND FREE FROM ANY DIRECT SUNLIGHT. IT IS ESSENTIAL TO WEAR YOUR PROTECTIVE GEAR THROUGHOUT THE ENTIRE PRINTING PROCESS.

3. PHROZEN XP FINDER – FIND THE BEST RESIN PARAMETERS

TO OPTIMIZE YOUR PRINTING PARAMETERS, WE RECOMMEND USING THE PHROZEN XP FINDER.

FOLLOW THESE STEPS:

1. DOWNLOAD THE XP FINDER STL FILE FROM THE DESCRIPTION BOX BELOW THE VIDEO.
2. REFER TO OUR RESIN PROFILE AND START PRINTING WITH THE SUGGESTED PARAMETERS.
3. COMPARE THE RESULTS OF THE XP FINDER PRINT AND ADJUST THE PARAMETERS IF NECESSARY. IF THE TEXTS ARE PUFFY, REDUCE THE EXPOSURE TIME. IF THE TEXTS ARE HARDLY VISIBLE, INCREASE THE EXPOSURE TIME.

3. PHROZEN XP FINDER – FIND THE BEST RESIN PARAMETERS

4. IF THE AMBIENT TEMPERATURE IS BELOW 20°C/68°F, INCREASE THE BOTTOM AND NORMAL LAYER EXPOSURE TIMES FOR BETTER PRINTING RESULTS. 5. CONDUCT A FEW TEST PRINTS TO FINE-TUNE THE PARAMETERS AND ACHIEVE THE BEST RESULTS. FOR MORE INFORMATION, YOU CAN REFER TO OUR HELP CENTER FOR ADDITIONAL SUPPORT.

4. SLICING 3D MODELS TIPS AND TRICKS

NOW THAT YOU HAVE THE OPTIMAL PRINTING PARAMETERS, IT'S TIME TO PREPARE YOUR 3D MODEL FOR PRINTING. WE RECOMMEND USING CHITUBOX 1.9.0 OR ABOVE, OR ANY OTHER SLICER THAT YOU PREFER. FOLLOW THESE STEPS FOR SUCCESSFUL SLICING:

1. IMPORT THE STL FILES OF YOUR 3D MODEL INTO THE SLICING SOFTWARE.
2. PLACE THE MODELS WITHIN THE BLUE SQUARE, WHICH REPRESENTS THE SIZE OF THE BUILDING PLATE.
3. CONSIDER THE WEIGHT OF THE MODEL. FOR LARGER MODELS (OVER 30 CM), HOLLOWING THE MODEL CAN SIGNIFICANTLY REDUCE THE WEIGHT AND THE AMOUNT OF RESIN USED.

4. SLICING 3D MODELS TIPS AND TRICKS

4. ADD HOLES TO THE BOTTOM OR ANY NON-VISIBLE AREAS OF THE MODEL TO FACILITATE RESIN FLOW AND DRAINAGE.

5. TILT THE MODEL AND ADD SUPPORTS TO THE BACK, ENSURING THAT THE FRONT SIDE REMAINS FREE FROM SUPPORTS.

6. IF NEEDED, ADD ADDITIONAL SUPPORTS TO WITHSTAND THE WEIGHT OF LARGE MODELS. CHOOSE THE "CUBE" SHAPE AS THE RAFT FOR BETTER RESIN FLOW BACK TO THE VAT. USING THESE TECHNIQUES WILL HELP PREVENT PRINTING FAILURES AND ENSURE SUCCESSFUL PRINTS.

5. 3D PRINTING TIPS AND TRICKS

7. THE TOTAL PRINTING TIME WILL VARY DEPENDING ON THE COMPLEXITY AND SIZE OF THE MODEL. ONCE THE PRINT IS COMPLETE, YOU'LL NOTICE THAT ONLY A SMALL AMOUNT OF RESIN HAS BEEN USED. THE REMAINING RESIN IN THE VAT CAN BE FILTERED AND SAVED FOR FUTURE USE. CAREFULLY REMOVE THE BUILDING PLATE, BEING CAUTIOUS NOT TO SPILL ANY RESIN OUTSIDE OF THE VAT.

5. 3D PRINTING TIPS AND TRICKS

4. CLOSE THE CHAMBER TO AVOID EXCESSIVE LIGHT EXPOSURE.

5. MONITOR THE PRINTING PROCESS AND ADD MORE RESIN WHEN THE BUILDING PLATE LIFTS UP TO AVOID RUNNING OUT OF RESIN DURING THE PRINT.

6. KEEP THE CHAMBER CLOSED DURING THE ENTIRE PRINTING PROCESS.

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5. 3D PRINTING TIPS AND TRICKS

THE REMAINING RESIN IN THE VAT CAN BE FILTERED AND SAVED FOR FUTURE USE.

CAREFULLY REMOVE THE BUILDING PLATE, BEING CAUTIOUS NOT TO SPILL ANY RESIN OUTSIDE OF THE VAT.

6. POST-PROCESSING AND CURING

AFTER THE PRINT IS REMOVED FROM THE BUILDING PLATE, IT'S TIME TO PROCEED WITH POST-PROCESSING AND CURING. FOLLOW THESE STEPS: 1. USE A PLASTIC BUCKET OR CONTAINER LARGER THAN THE PRINTED MODEL. 2. FILL THE CONTAINER WITH 95% IPA AND GENTLY CLEAN THE MODEL INSIDE AND OUT. 3. ONCE CLEANED, ALLOW THE MODEL TO DRY. 4. USE THE CURE MEGA DEVICE TO CURE THE INSIDES OF THE MODEL FOR APPROXIMATELY 30 MINUTES. 5. IF YOUR MODEL IS HOLLOW, THE CURE BEAM CAN ASSIST IN CURING HARD-TO-REACH AREAS.

7. MAINTENANCE

PROPER MAINTENANCE IS CRUCIAL TO ENSURE THE LONGEVITY OF YOUR SONIC MEGA 8K PRINTER. HERE ARE SOME MAINTENANCE TIPS: - USE A METAL SCRAPER TO GENTLY REMOVE ANY CURED RESIN FROM THE VAT. - IF YOU PLAN TO USE THE SAME RESIN FOR YOUR NEXT PRINT, PERFORM A "VAT CLEANING" TO REMOVE ANY CURED RESIN RESIDUE FROM THE VAT. - TO CLEAN THE VAT, FOLD A PIECE OF PAPER IN HALF AND PLACE IT IN THE CORNER OF THE VAT. SET THE "VAT CLEANING" TIME TO 20 SECONDS.

7. MAINTENANCE

LIFT THE PAPER TO REMOVE ANY CURED RESIN. - CLEAN THE BUILDING PLATE BY WIPING IT WITH A CLEAN PAPER TOWEL AND IMMERSING IT IN A BUCKET FILLED WITH 95% IPA FOR AN HOUR. REMOVE THE PLATE FROM THE BUCKET AND ENSURE THERE ARE NO CURED RESINS IN THE HOLES.

PRIMARY GOALS