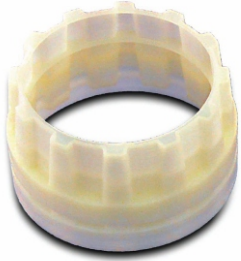


Solido SD300Pro 3D printer



The **Solido SD300 Pro 3D Printer** is a desktop 3D Printer that allows you to build three-dimensional models directly from your workstation. This network-compatible printer can speed the development cycle by putting model creation in the hands of the designers and engineers themselves. The SD300 Pro 3D Printer saves time and reduces costs while improving the quality of the products and parts that you design.

Affordability

The SD300 Pro 3D Printer carries both a low initial investment and low cost of ownership. There is no post-build curing process and no need for dedicated personnel. In addition, the cost-effective SD300 Pro consumable materials allow for a low per-model cost.



Ease of Operation

Anyone can operate the SD300 Pro-3D Printer. Building a model is as simple as printing to a typical office printer. Replacing consumable materials is no more complicated than changing cartridges on a standard office printer. The build process requires no intervention and creates no ambient dust or residue so there is no cleanup required.



Improved Design Communication

The SD300 Pro will accelerate your design and development cycle by improving communication throughout the process. Early stage concept modeling and multiple design iterations are no longer cost prohibitive. You can produce more models, more often, at a lower cost, and obtain immediate feedback from colleagues and customers. This allows early identification of design issues, ensures a smooth transition to development, and saves valuable time throughout the entire process.



Confidentiality

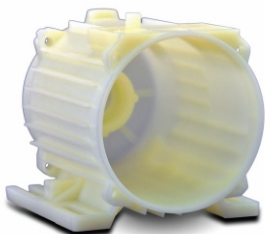
With the SD300 Pro, organizations can safeguard confidential, proprietary design information by keeping model creation in-house, in-department and in-office.

Durable Models

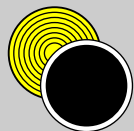
Using Plastic Sheet Lamination, the SD300 Pro 3D Printer produces rugged yet flexible models made of SolidVC®, a rigid PVC based plastic. The accuracy, strength and durability of the parts produced on the SD300 Pro make them perfectly suited for all stages of the design cycle, from concept verification through form, fit and functional testing, including snap-fit. Models can be machined, drilled, finished and painted, and they show no distortion over time.

State of the Art Content

As part of intelitek's Blended Learning solution, the SD300 Pro is supported by intelitek's LearnMate e-learning curriculum. This interactive web-based content provides students an extensive background in 3D solid modeling technology, along with step-by-step lab activities using the SD300 Pro.



Unique prototyping – think it, design it, build it.



Setup and Software Overview

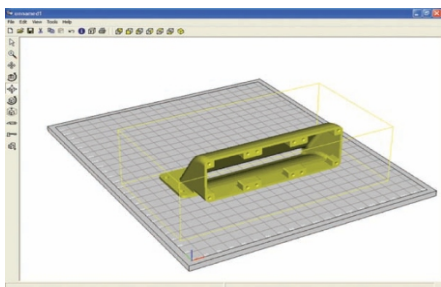


Setting up the SD300Pro is very Simple and straightforward. Easy-to-follow instructions are included with the unit, so you should be up and running in just a Few minutes. Load the Consumables, install the

software (called SDView) on your computer, and connect the computer to the SD300Pro with the supplied USB cable and you're ready to Produce your first part. The machine has LCD display for menu commands, LED status indicators, And emits status beeper codes, So you always know its status and state of readiness.



SDView is the front-end application that prepares, edits, and manipulates 3D CAD models and drives the SD300Pro. Model creation actually begins when you export 3D model



Files from virtually any CAD or animation source in the STL format. SDView is also able to make corrections to STL files that may not be optimized for 3D printing. There are a couple things to remember when using SDView that will make your work easier. First, you can save build time and material by splitting large models into smaller sections, arranging the sections to optimize the build space, and then gluing the separate sections together (with cyanoacrylate Super Glue) after they are removed from the machine and post-processed. Second, your model block must contain peeling cuts that allow for easy removal of excess material the only post-processing required of parts produced by the SD300Pro.



Creating Parts

The SDView software creates models with two outer shells, An outer one called the Channel and one actually touching the model called the Cocoon. SDView cuts and glues the residual material of the channel in a way that lets it be pulled out in a continuous spiral peel. After the channel is cleared, the model surrounded by the cocoon can be pushed out. The cocoon completely surrounds the outer surface of the model and fills all the cavities. The cocoon is removed by finding the start of the peel and using the forceps to remove the peel in a zig-zag manner using the Z folds that were created with SDView. Finally, the SDView software creates peeling cuts that are necessary for removing excess post-build residual material with the forceps. Peeling cuts are applied as the final stage in preparing the model for printing.

Once you're done prepping the model with SDView, you're now ready to send the data to the SD300Pro and build a 3D model. You can click the Build Model button in the toolbar, select Build model from the File menu, or just press Cntrl + B. Next, build parameters will be displayed, such as the number of layers needed to print the part, time needed to build the part, etc. Throughout the build process, the status of the build updates continually until a message reading "Model Complete" is displayed.

Select Lift Model and the model block raises off the build table and can be removed from the machine. Once the model is removed, it is time to do some post-processing, which goes quickly by peeling using forceps. Next, push the model encased by the cocoon by inverting the block and pressing the underside with both hands. Remove the residual material surrounding the model by pulling the Z folds. The 3D model is revealed and is now ready to be drilled, filed, sanded, or painted for final finishing.



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LASER SYSTEMS LTD.

“Solar Laser Systems Ltd are committed to providing excellence in technological products, software and support”