SHINING 3D
DENTAL

AccuFab-CEL Dental 3D Printer

Higher, Faster, Easier

SHINING3DDENTAL.COM

AccuFab-CEL

AccuFab-CEL has significantly improved its printing speed, especially in full-platform printing. With SHINING 3D's self-developed mainboard and high-performance light panel, the AccuFab-CEL offers a premium-level printing experience for users in the 3D printing field.

Estimated printing times* for various items (Layer Thickness: 100μm):

- Orthodontic models: 14 minutes
- Surgical guide: 20 minutes
- Crown & Bridge: 11 minutes
- Implant models: 20 minutes
- Denture: 70 minutes for vertical printing
- Splint: 45 minutes for tilted printing (using HyperClear)

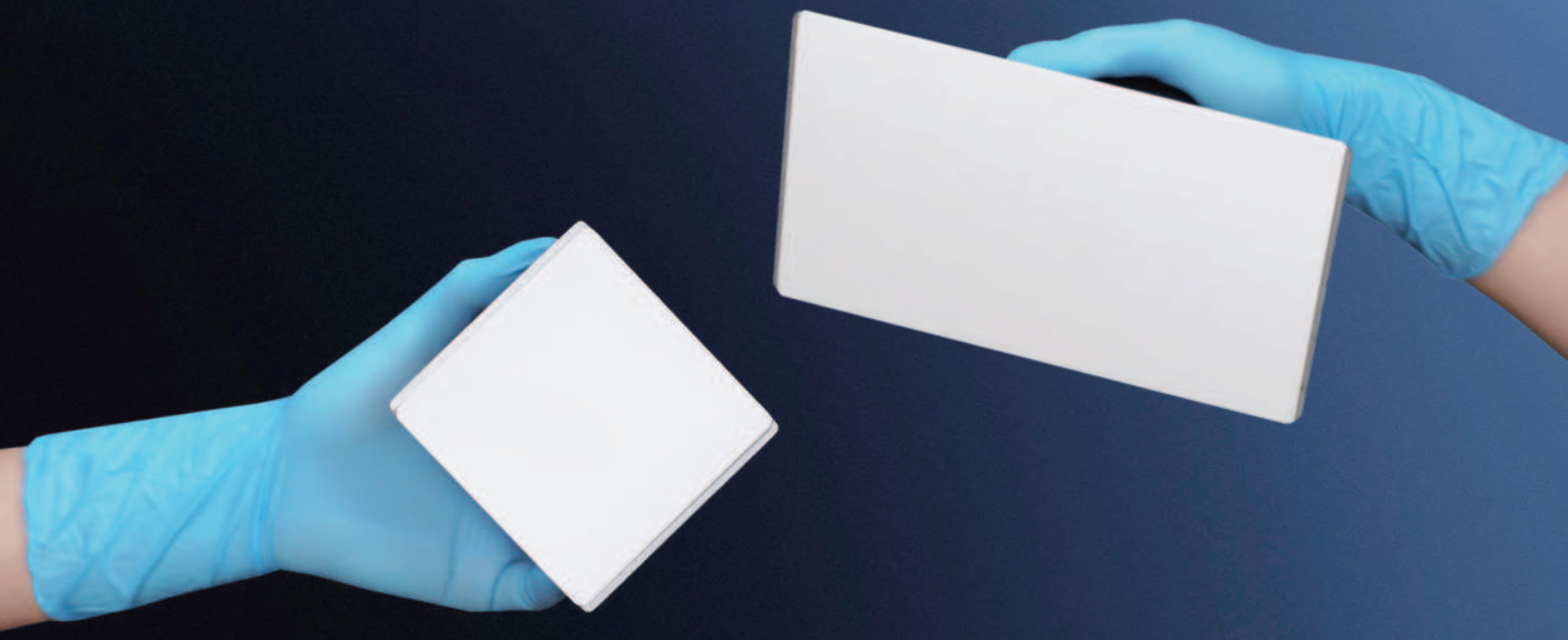
*Please note that printing time may vary based on different layer thicknesses and the number of printable layers.

Multi-Size Ceramic Platform

SHINING 3D is the first company to design a ceramic platform, which not only enhances a longer durability but also improves the user experience.

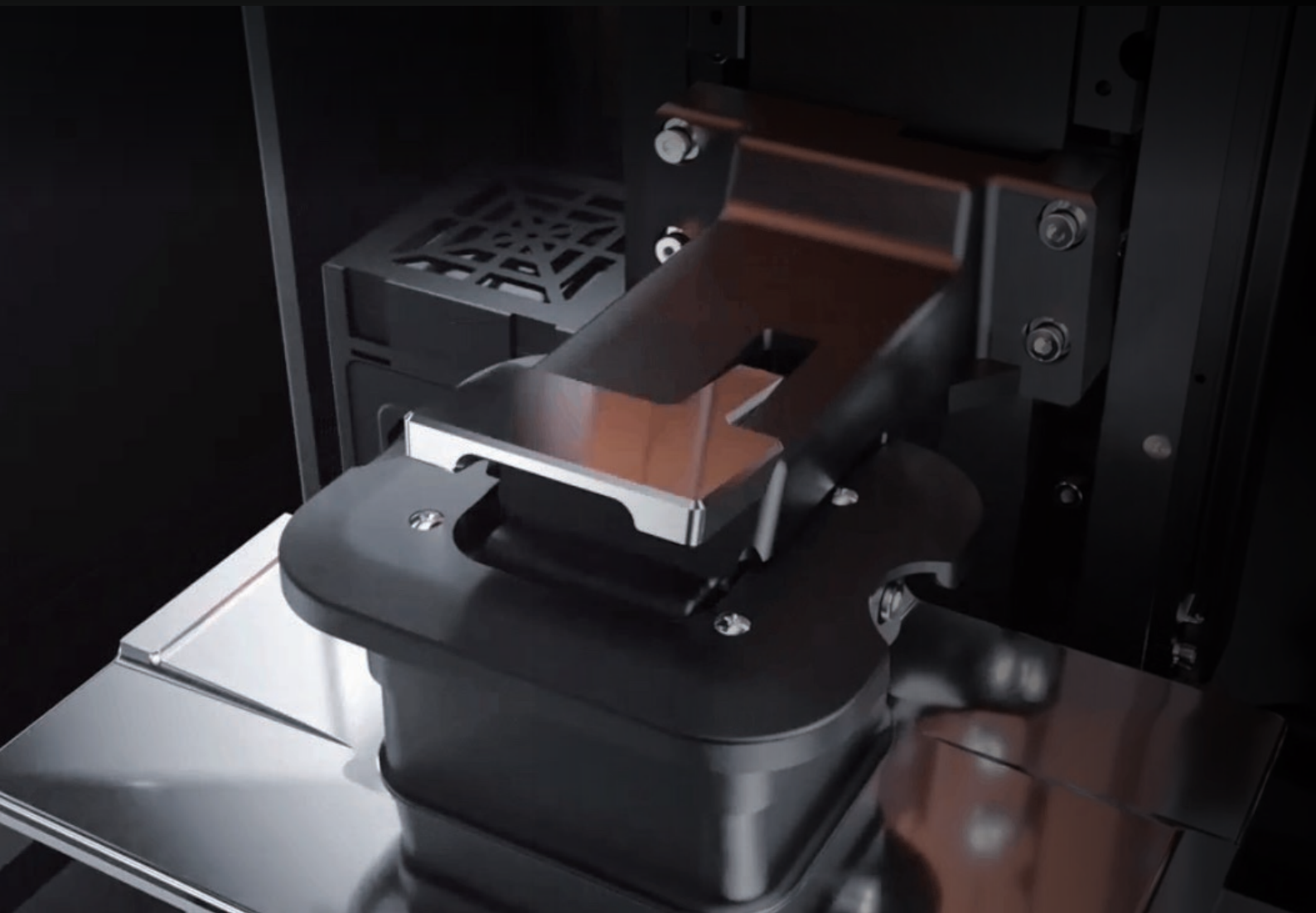
Choosing AccuFab-CEL provides the option of small and large ceramic platforms. The chemically inert and biocompatible ceramic layer ensures safety during printing and prevents any residues from attaching to the printed products, making them non-toxic and safe when placed in the client's mouth. The use of a ceramic platform also improves the overall print quality by reducing contamination.

Both small and standard ceramic platforms have a longer lifespan compared to platforms made from other materials, providing customers with an unparalleled user experience.



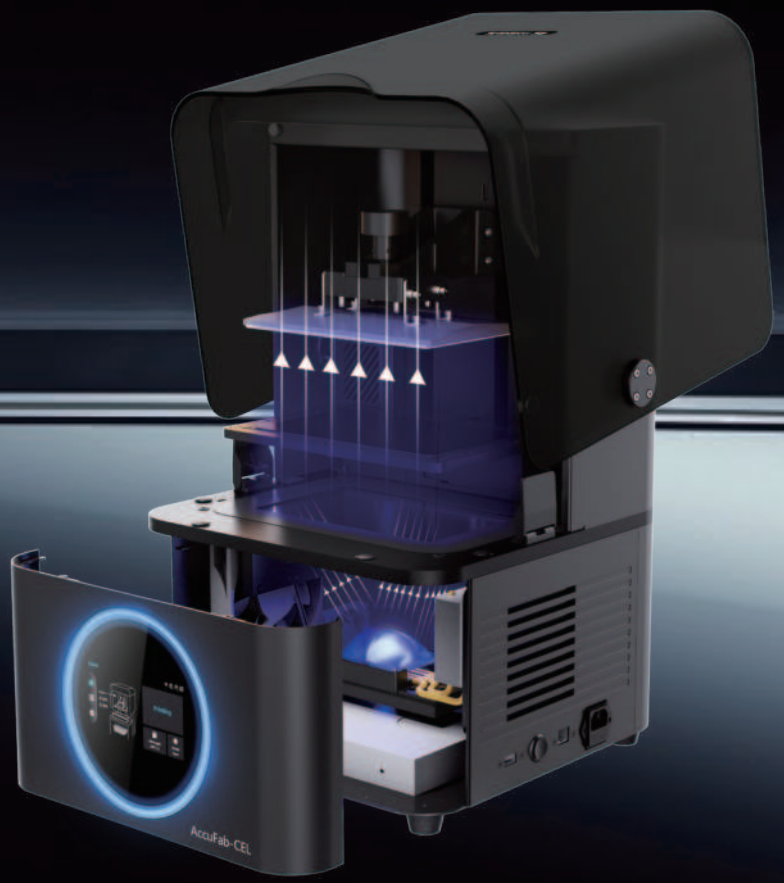
One-Click Lock

AccuFab-CEL has upgraded the platform lock from a knob to a one-click lock, enhancing the user experience. The one-click lock has only two status options: On or Off, providing clear visibility of the status and allowing clients to start printing easily.



Light Board Uniformity with High Accuracy

AccuFab-CEL has achieved a high level of printing accuracy, reaching ±35μm. The even distribution of light plays a crucial role in printing accuracy. Shining 3D has developed a new "Collimated Programmable Lithography" technology. When it is evenly distributed, the printed models have higher performance and accuracy.



Real-Time Cabin Environment Detection and Heating

The cabin temperature and humidity are continuously monitored during printing. The results are displayed on the printer's touch screen, warning users of any conditions that may cause printing failure.

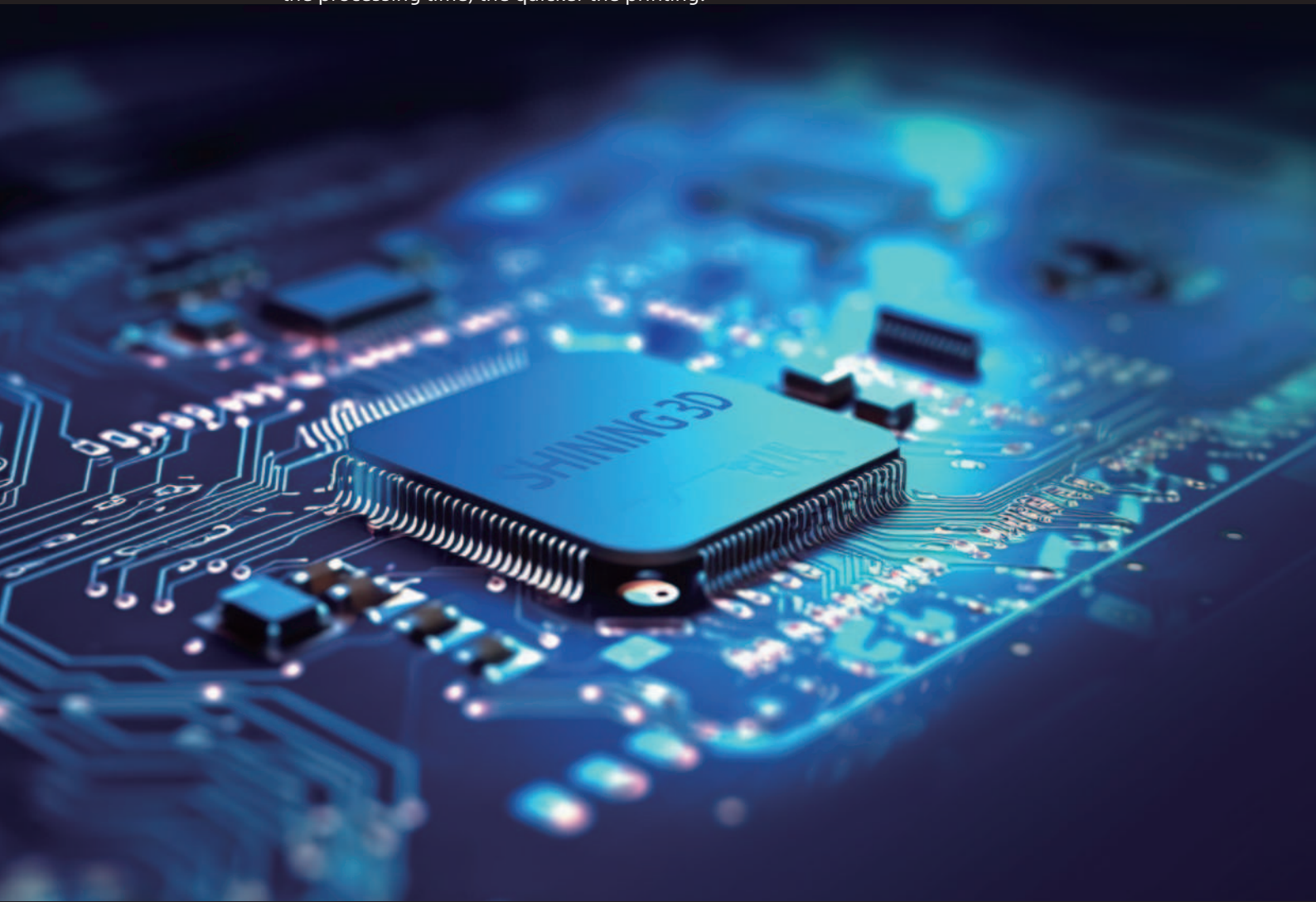
If the temperature is too low, the cabin will be heated up before printing. This heating function ensures accuracy and stability during printing, resulting in a higher success rate.

Enhanced Z Axis Movement System

The enhanced Z-Axis movement system provides a quieter printing experience, creating a more comfortable working environment without excessive noise. The increased speed accelerates the printing process, delivering faster results to clients.

Six Core CPU Mainboard with 5G Hz Connection

The six core CPU mainboard supports a 5G Hz connection and ensures the long-term use of AccuFab-CEL. The proprietary CPU offers superior throughput for data-intensive tasks, enabling rapid and efficient processing during the slicing phase of printing. The more efficient the processing time, the quicker the printing.



Open Material System

SHINING Dent offers a wide range of materials for dental 3D printing applications, including splints, dentures, crowns & and bridges, dental models, surgical guides, and more. There are currently 11 resins available for different applications to meet users' needs.
Additionally, SHINING 3D partners with industry-leading brands in dental materials, providing more possibilities and flexibility in material selection.
Please note that some partners are still undergoing validation progress.

keystone Graphy SAREMCO NextDent
DETAX PacDent BEGO pro3dure

Professional Slicing Software

Built-In Design Software

Shining Design Modules including CreSplint, CreIBT, AccuDesign, CreTemp have been built into Accuware for an ease-to-use and smooth process.

One-Click Printing

Allows multiple one-click printing on different dental applications, such as restoration, C&B, splint, surgical guide, orthodontic model, etc. Advanced AI algorithm has been adopted to automatically recognize featured-surface for auto layout planning, auto support generation and auto slicing.

Printer on Cloud

Built-in access for Dental Cloud in AccuWare. Monitor, Control and Slice your printing file anywhere, anytime.

Advanced Printer Software

Post-Processing Units & Resin Parameter Auto-Match

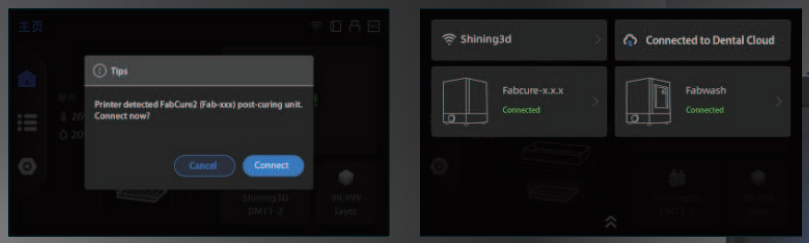
Post-Processing Units Auto-Match by being placed close to the printer. FabWash & FabCure 2 will automatically match the resin after the printer has finished printing. It also supports third party material for easy post-processing.

AI Mode

After giving feedback for the printing issue on printer's touch screen, AccuFab-CEL will automatically adjust the printing parameter to solve the problem.

Guided-Levelling

The operation guide inside the printer software will lead the users through the levelling process .



TECHNICAL SPECIFICATIONS
AccuFab-CEL

Printer Size	360 x 360 x 530 mm
Printer Weight	22 kg
Print Volume（x/y/z）	70 x 70 x 180 mm / 192 x 120 x 180 mm
Resolution	5760 x 3600
Print Speed	Max 100 mm/h (depend on different material and layer)
Layer Thickness	50 μm~100 μm (adjustable)
Accuracy	± 35 μm
Connectivity	USB/Wi-Fi/Ethernet

*Notice: SHINING 3D reserves the right to introduce modifications or alterations to any of the specifications and images used in this document.

SHINING 3D DENTAL

sales@shining3d.com
www.shining3ddental.com

AccuFab-CEL-EN 20240131 V0.6 | Copyright © 2004-2024 SHINING 3D. All Rights Reserved