

3D Systems Solutions for Clear Aligner Thermoforming Tools

Digital Dentistry Solutions for
Accurate, Scalable, Repeatable
Models for Thermoformed Aligners



SLA 750

*Scale with Precision.
Lead with Confidence.*

Deliver **clinically excellent** aligners at **unmatched speed and accuracy**. Whether producing 200 or 200,000 models per day, SLA technology ensures **zero compromise** on quality, yield, or scalability.

Ultra-High Accuracy

- Closed-loop laser control for dimensional precision
- Non-contact process — no peeling, no warping, no distortion
- Industrial-grade consistency and repeatability for mass-production

Maximum Yield

- Ultra-high statistical yield supports scaling with confidence
- Optimized material efficiency for low waste
- Zero-contact, bouyant-neutral process yields unmatched high-volume consistency

COMPATIBLE
WITH ACCURA®
ORTHO WHITE™





Built to Scale

- Supports mass production scaling
- Industry leading downstream post-processing automation compatibility
- Trusted by industry leaders worldwide

Printer	SLA 750 Dual	SLA 750
Parts per build	~200 models	~200 models
Print time	~3 hrs 45 min	~5 hrs 10 min

PSLA 270

***Precision Performance.
Scaled to Fit.***

Clinical-Grade Accuracy

- Vat based non-contact process delivers high yield and consistency
- Fast printing of dental models with optimized surface structure and minimal layer lines
- Easy post-processing due to platform size and number of models per run

High Yield. Low Waste.

- High accuracy and part yield
- Low maintenance, non-stop continuous production
- Fast nesting of dental models using proprietary 3D Sprint software

Modular & Scalable

- Compact footprint, ideal for lab-based scaling
- Add units as demand grows — expand capacity without downtime
- Short run batches to streamline your aligner process

The **PSLA 270** delivers the same industrial-grade SLA accuracy and material efficiency in a **compact, modular system**—perfect for aligner producers looking to scale smart and fast.



Printer	PSLA 270
Parts per build	~30 models
Print time	~30 min

NextDent 5100

Fast. Flexible. Formulated for Dentistry.

High-Speed Precision

- Powered by Figure 4™ technology for ultra-fast build speeds
- Fine detail resolution for accurate aligner models and appliances
- Minimal post-processing time for faster turnaround, fewer bottlenecks

Certified Material Versatility

- Compatible with a wide range of NextDent biocompatible materials
- Easily switch between materials and applications
- Optimized for dental workflows

Affordable, Scalable Access

- Compact system perfect for chairside, small labs, or multi-site scaling
- Low total cost of ownership with efficient resin usage
- Ideal entry point into digital dental production without compromise

The **NextDent 5100** is purpose-built for **rapid, chairside or lab-based dental production**. With industry leading print speeds, affordable workflows, and certified dental materials, it's the smart solution for agile aligner manufacturing and more.



Printer	NextDent 5100
Parts per build	~30 models (stacked)
Print time	~2 hrs

Our Solutions starts with our Software

Sp 3D Sprint®

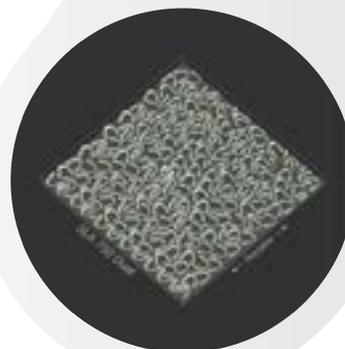
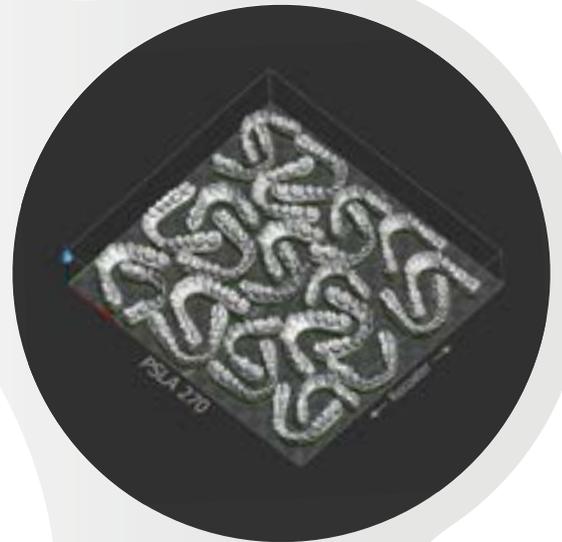
From scan to print—streamlined, simplified, scalable.

3D Systems' proprietary **3D Sprint®** software streamlines preparation, optimization, and production management, providing efficiency and precision while reducing reliance on high-cost external software.



3D Sprint® – Advanced Print Preparation Software

- **One platform** for file repair, nesting, support generation, and slicing
- **Optimized for dental workflows**, reducing print prep from hours to minutes
- Seamlessly integrates with SLA 750, PSLA 270, and NextDent 5100
- **Improves throughput** and part consistency at scale



Sp 3D Sprint® TruShell™

Single-click optimization of orthodontic dental models.

Developed specifically for **orthodontic thermoforming workflows.**

- Automatically generates **shell geometries** tailored to material performance
- Eliminates the need for manual optimization or in-house custom scripting
- Reduces variability and improves fit — **every print, every time**

Self-Supporting Uniform Shell

- Definable wall thickness
- Gusset feature ensures self-supporting internal structure

Scaffold

- Optimized single vector triangulated grid
- Resists deformation during thermoforming
- Captures part ID information on down facing surface

High Efficiency

- Optimized single-click workflow
- Shelling, scaffold and support generation

Optimized Volume

- Average part weight of 8.6g
- Reduce material cost

— Without TruShell
 With TruShell

	SOLID ARCH	vs	TRUSHELL	→	COMPARISON*
Weight (Average):	14.3 g		8.6 g		40% Reduction

*Based on 2mm wall thickness of hollowed model with integrated scaffolding. Results vary based on geometries and specifications.

High Precision

• +90% Accuracy ±100 µm*



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