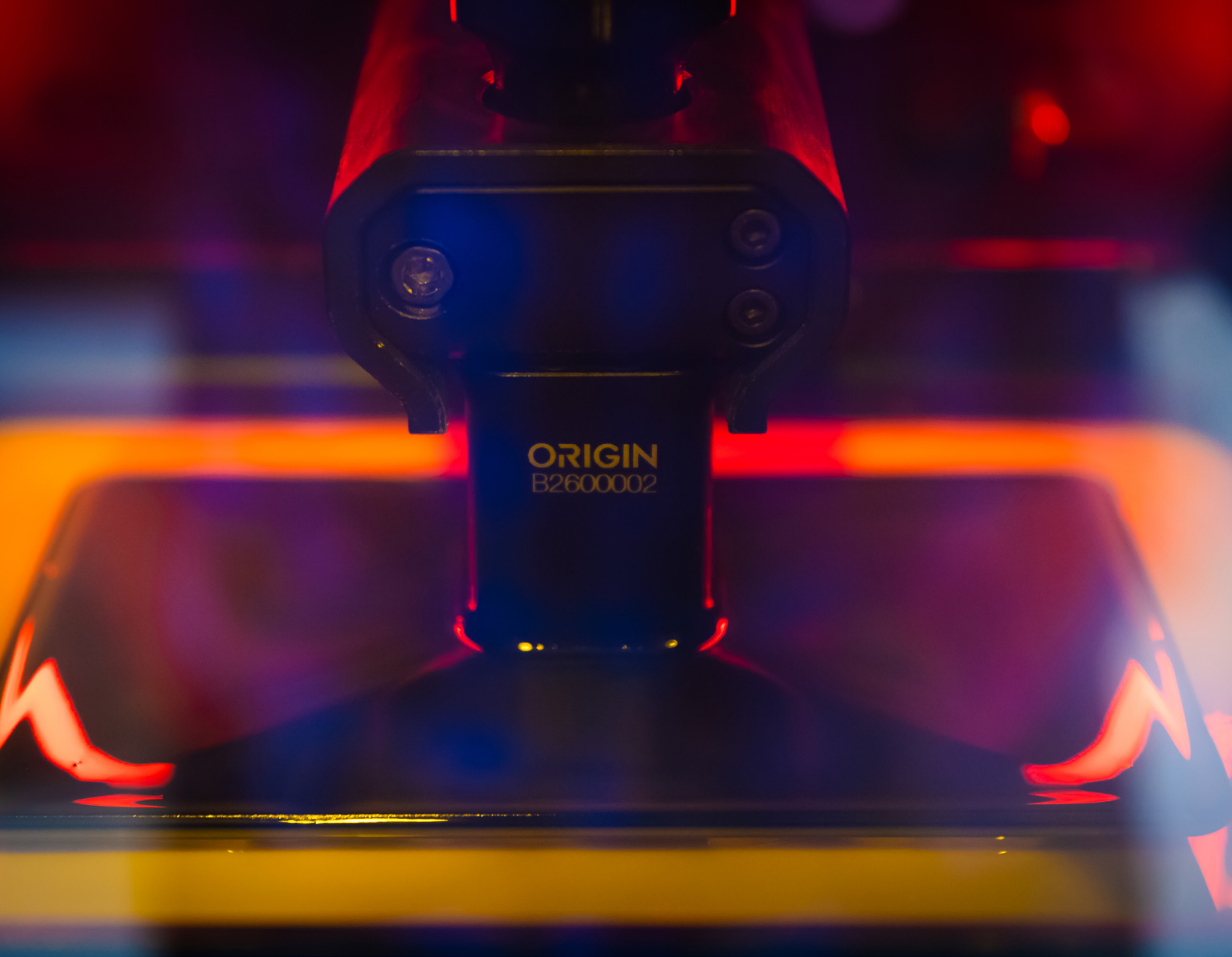




## Origin One Dental

When  
production  
counts.





# Stratasys

## Origin<sup>®</sup> One Dental

When production counts, Origin One Dental empowers you to scale your business and mass produce dental parts using a variety of high-performance materials. With user-friendly software that is simple to manage and learn, Origin One Dental streamlines your digital workflow and maximizes throughput.

Quick print times help expand production without delays, so you can respond flexibly to shifts in demand and achieve industry-leading returns on your investment in 3D printing.

Origin One Dental is powered by leading-edge Programmable PhotoPolymerization (P3™) technology, which achieves unrivaled accuracy, consistency, and detail.

When production counts, count on Origin One Dental. Print best-in-class models, soft splints, and surgical guides faster, at lower cost and with greater accuracy.

# When production counts, count on Origin One Dental.

The Stratasys Origin One Dental manufacturing-grade 3D printer provides an industrial production solution powered by cutting edge P3 technology.

## Future-proof your investment.

A new production method based on open materials supports a variety of applications. The open software architecture will support additional new materials over time, protecting your investment in the printer hardware.

## Produce exceptionally accurate, consistent parts.

Cutting-edge P3 technology paired with a true 4K light engine precisely orchestrates conditions like light and temperature to automatically optimize prints in real-time. The unique Origin One Dental print process ensures precision accuracy and part-to-part consistency with every print.

## Scale to industrial production.

Built for 99% uptime, Origin One Dental enables higher throughput and a lower cost per part using best-in-class materials. Faster print cycles and simple post-processing offer an optimized workflow that will facilitate overall better performance and lower costs.

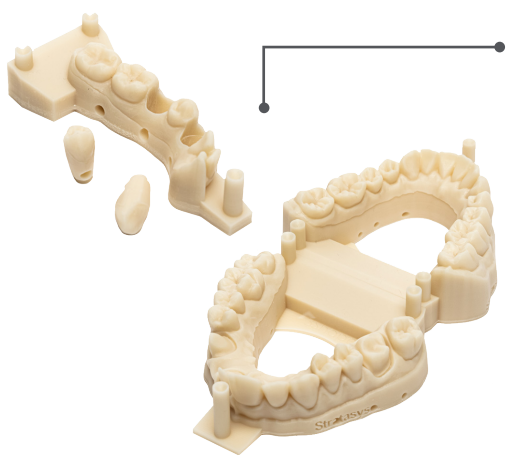
## Connect to the cloud for updates and support.

Secure remote connectivity enables over-the-air software updates that unlock new advanced materials and workflow optimizations. Remote service and support maximize uptime to ensure your print production runs smoothly. GrabCad print features fleet and queue management functionality to further streamline operational tasks.



# Robust 3D Printing Solution for **Dental Applications**

Origin One Dental's open platform offers leading application with certified materials from the Stratasys network of strategic partners including BASF, Keystone Industries and Dreve. With P3 technology, you can attain excellent print speed without sacrificing strength, accuracy, or surface finish.



## Dental Models

Model printing is the largest application in the Dental lab. The Origin One Dental enables high accuracy for both restorative models and Orthodontic models. With competitive resin prices and high throughput, the Origin One Dental printer is a perfect match for this demanding application

### Available materials:

Origin DM100™ - A tailored solution for dental models developed by BASF

Origin DM200™ - High accuracy, high throughput material for all dental models, developed by Stratasys

## Soft Splints

The use of occlusal appliances is quickly becoming the standard of care. Flexible splints, night guards, and bleaching trays printed with the Origin One Dental provide a comfortable fit, flexibility to engage undercuts, and excellent resistance to wear.

### Available Materials:

KeySplint Soft® by Keystone is a fully biocompatible, robust, accurate, and stain-resistant material for printing of soft splints.

KeySplint Soft Clear® by Keystone – is a fully transparent, strong, flexible resin for the printing of clear soft splints.



## Hard Splint

Fabricate rigid dental splints for bruxism therapy, retainers, and other cases where tooth immobilization is needed.

### Available Materials:

KeySplint Hard® By Keystone Industries is a fully biocompatible, easy-to-polish and clean, strong, and abrasion-resistant resin.

## Surgical Guides

Fabricate transparent, highly-accurate surgical guides to help your customers place implants at a precise location, angle and depth.

### Available Materials:

KeyGuide® by Keystone Industries is strong, fully biocompatible, easy to polish, and autoclavable





## Indirect Bonding Tray

Used for printing orthodontic transfer trays for precise positioning during bracket placement. Drastically reduce chair time and increase patient comfort during the orthodontic bracket setting process.

### Available Materials:

KeyOrtho IBT® by Keystone Industries is a biocompatible, tasteless, and odorless material that combines the strength and precision to accurately set brackets, with the flexibility and non-stick formula needed for easy release.



## Custom Tray

Fabricate customized, individual impression trays.

### Available Materials:

KeyTray® by Keystone Industries is a strong, biocompatible (Class I) material designed to create precise and durable trays, compatible with all types of impression material



## Custom Cast

Fabricate customized, individual casting molds.

### Available Materials:

KeyCast® by Keystone Industries is a low shrinkage, accurate material that is compatible with rapid burnout and gradual temperature ramp workflows, with no residual ash.

## Gingiva Mask

Simulates the look and feel of natural gums for printing gingival masks.

### Available Materials:

KeyMask® by Keystone Industries is a flexible yet firm gingival mask material that is perfect for digital restoration planning.



## Denture Base

Used to fabricate a precise denture base.

### Available Materials:

Dreve FotoDent® 385 Denture is a light-curing resin for denture bases. The material provides accurate results with an outstanding dimensional stability.



## Denture Try In

Fabricate short-term trial dentures, intended for evaluation of fit, occlusion, and esthetics before the fabrication of the permanent denture.

### Available Materials:

KeyDenture Try In® by Keystone Industries is a precise, biocompatible material, designed to create efficient, high-surface-quality denture try ins.



# Count on Programmable PhotoPolymerization P3™ for unrivaled quality.

Origin One Dental is powered by proprietary P3 Digital Light Processing (DLP) technology. The tightly synchronized P3 print process includes pneumatic controls to reduce pull forces during the print process, resulting in exceptional surface quality, without sacrificing speed or isotropy. Coupled with an advanced true 4K light engine, P3 enables one of the highest 3D printed part quality and throughput in the industry.



Origin One Dental's P3 technology utilizes computer vision and 25+ environmental sensors to monitor and respond to every aspect of the print process. In situ analytics, combined with automatic pressure, pull force and temperature regulation ensure the first part is the same as the last. See powerful product improvements over time, with over-the-air software updates that unlock new advanced materials and workflow optimizations.

**Pneumatic process for layer separation:**

Reduced pull forces for fine features, large cross-sectional models and superb surface finish.

**Computer vision utilizing 25+ sensors:** Monitor every important aspect of the print process. Utilizing closed-loop controls, Origin One Dental predicts and resolves issues before they happen.

**Motion control:** Precise control over printer movements results in exceptional accuracy, repeatability, and geometry-specific optimization.

**Precision optics:** Origin One Dental features a 4K 385UV projector light engine for superior accuracy.



When our inbound digital impressions really started to increase, we knew that we needed a production printer. In the Origin One Dental printer, we found the unique combination of accuracy, detail reproduction, and the lowest cost per part. We have been using our printer 10+ hours per day, and the reliability has been the best that we have ever had.”

Chris Waldrop

**President, Burdette Dental Lab**

# Stratasys Origin<sup>®</sup> One Dental

## General

Technology	Programmable PhotoPolymerization P3™
Materials	Materials from Stratasys ecosystem material partners. Refer to Stratasys website for an up-to-date selection.
Build Envelope (XYZ)	192 x 108 x 370 mm / 7,672 cm3 (7.5 x 4.25 x 14.5 in. / 462 in3)
Resolution	4K light engine
Process	Energy UV (385nm) and thermal
Software	GrabCad Print
Regulatory Compliance	CE, FCC, KC, RCM

## Facility Requirements

Power Requirements	100-240 VAC, 50–60 HZ, 7.1 A, 1Ph or 200-240 VAC, 50–60 HZ, 3.5 A, 1Ph
Network Connectivity	Ethernet
Ventilation	Refer to photopolymer material MSDS or contact Stratasys rep for guidelines.
Operating Conditions	Operating temperature 15°C to 30°C (59°F to 86°F) Operating Humidity 30% to 70%
Gas Input (optional)	Facility air or inert gases
Gas Exhaust (optional)	Facility exhaust

## Material Handling

Resin Tray Capacity	2L
Resin Storage Temp	Typically 15°C to 30°C (59°F to 86°F)

## Security Features

Printer Authentication	Cryptographically-secure handshake
Network Security	Industry-standard end-to-end encryption



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