stratasys

FAQs
DENTAL

Frequently Asked Questions

TrueDent®

Product Basics

What is TrueDent?

TrueDent is an FDA-cleared (Class II) and CE-marked (Class IIa) light-curable resin developed for producing monolithic, full-color 3D printed dentures on the Stratasys J5 DentaJet® 3D printer. It enables the fabrication of durable, lifelike prostheses that replicate the aesthetics and function of natural dentition.

What makes TrueDent unique?

TrueDent is the first and only resin capable of printing polychromatic, monolithic full dentures directly on the J5 DentaJet 3D printer. The denture base and teeth are printed simultaneously as a single, seamless structure with multiple shade and internal aesthetic variations—eliminating manual assembly or risk of tooth debonding. TrueDent delivers high-fidelity replication, consistent accuracy, and lifelike aesthetics that can be reproduced for each patient.

What are TrueDent's indications for use?

TrueDent is indicated for the fabrication of removable complete dentures, provisional partial dentures, denture bases, duplicate dentures, and denture teeth in dental laboratories. It is not currently indicated for implant-supported dentures.

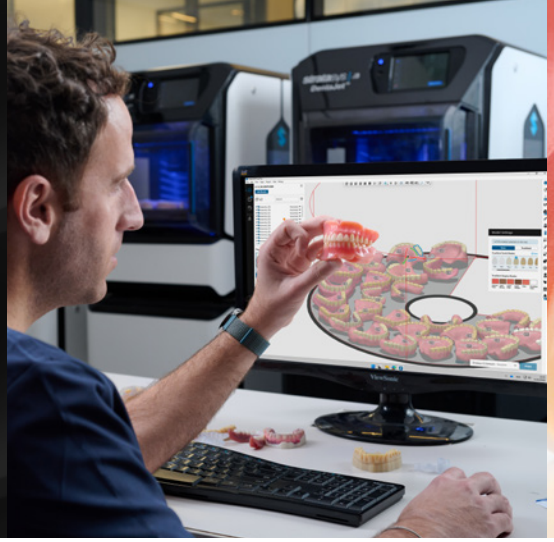
Can TrueDent resin be used for final dentures?

Yes. TrueDent resin is suitable for both final and provisional dentures, providing strength, precision, consistent fit and exact reproducibility when needed.

stratasys

Frequently Asked Questions

TrueDent®



Design & Workflow

What CAD software is compatible with TrueDent dentures?

TrueDent dentures can be designed using industry-standard dental CAD software that outputs STL files, such as exocad or 3Shape.

Is an intraoral scanner required?

No. TrueDent integrates seamlessly into your existing workflow. Traditional impressions can be cast and scanned in the lab to generate the required digital STL file.

How many TrueDent teeth and base shades are available?

TrueDent offers a comprehensive digital shade system for both teeth and base. TrueDent resin comes in five foundational colors - cyan, magenta, yellow, white and clear. The GrabCAD Print software precisely combines these in variable ratios to provide a wide range of tooth and base shades with various levels of translucency. Additional shade presets and aesthetic options are regularly added through software updates and do not require the purchase of any additional resins.

What is TrueVoxel™ Advanced Aesthetics for TrueDent?

TrueVoxel Advanced Aesthetics are premium aesthetic enhancements available for TrueDent dentures in GrabCAD Print software. Internal structures, cervical gradients, and incisal edge translucency can all be added with just a click and are printed directly into the tooth structure itself using Stratasys's multi-material PolyJet technology. There's no hand-staining, no post-print painting, and no added lab steps. The result is a denture that looks natural from the inside out.

What training is available for TrueDent?

Stratasys and certified partners provide comprehensive training on TrueDent digital design, J5 DentaJet operation, post-processing, and best practices.

How does production time compare to traditional dentures?

TrueDent dentures can be produced significantly faster than traditional or manually assembled digital dentures. The process includes unattended printing, minimal post-processing, and no tooth bonding steps.

Can TrueDent reduce remakes and adjustments?

Yes. The digital workflow and monolithic design minimize human error, ensure consistent accuracy, and prevent tooth debonding, leading to fewer remakes and improved patient satisfaction.

stratasys

Frequently Asked Questions

TrueDent®

Product Performance

Can teeth debond in a TrueDent denture?

No. Because TrueDent dentures are printed as a single monolithic piece, there is no interface between base and teeth that can separate or debond.

Can TrueDent dentures be relined and repaired?

Yes. TrueDent dentures are compatible with most conventional reline and repair materials used in both laboratories and clinical environments. Printing with the J5 DentaJet 3D printer creates a high-fidelity fit so it's recommended, if time allows, to re-print instead of traditional analog relining.

What is the expected lifespan of a TrueDent denture?

When properly maintained, TrueDent dentures offer a comparable lifespan to conventionally fabricated final dentures. Their monolithic structure eliminates the primary cause of premature failure—debonding of denture teeth.

Patient Care

How should TrueDent dentures be stored when not in use?

After cleaning the denture thoroughly, fully immerse it in clean tap or distilled water or in a denture-soaking solution inside a closed, labeled container. Refresh the water every 24–48 hours or sooner if it becomes cloudy.

How should TrueDent dentures be cleaned?

Clean TrueDent dentures as you would conventional dentures: rinse after meals, brush gently with a soft-bristled brush, and avoid abrasive cleaners.

How should TrueDent dentures be handled when not in use?

TrueDent dentures are printed with exceptional accuracy, resulting in a better-fitting prosthesis. As with any denture, handle with care outside the mouth, especially during cleaning and brushing. Avoid dropping or applying excessive pressure.

How should TrueDent dentures be stored when traveling or transporting a spare?

For travel, store the denture in a leak-proof, labeled container with a small amount of clean water or denture-cleaning solution. Seal the container tightly and use a secondary bag to prevent leaks. If water is impractical, store dry for short periods and rehydrate before use.

stratasys

Frequently Asked Questions

TrueDent®

Technical Specifications

What kind of material is TrueDent resin?

TrueDent resin is a biocompatible, acrylic-based photopolymer that cures during printing on the J5 DentaJet® 3D printer. It contains no MMA, PMMA, or TPO.

How do TrueDent's physical properties compare to other denture materials?

TrueDent is FDA-cleared (Class II), CE-marked (Class IIa), and ISO 20795-1 compliant, meeting standards for flexural strength, modulus, residual monomer, and water sorption.

What are the ISO 20795-1 standards?

ISO 20795-1 defines performance requirements for denture base polymers, including flexural strength, modulus, residual monomer, sorption, and solubility.

What does 'Type 4 material' mean under ISO 20795-1?

Under ISO 20795-1, light-activated materials cured during additive manufacturing are classified as Type 4. TrueDent falls within this category.

stratasys

stratasys.com
ISO 9001
ISO 13485

Stratasys Headquarters
5995 Opus Parkway,
Minnetonka, MN 55343
+1 800 801 6491 (US Toll Free)
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

1 Holtzman St.
Science Park
Rehovot, 7670401
Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

MKT-000004EN Rev C. FAQ_PJ_Dental_TrueDent_RevC_0426a