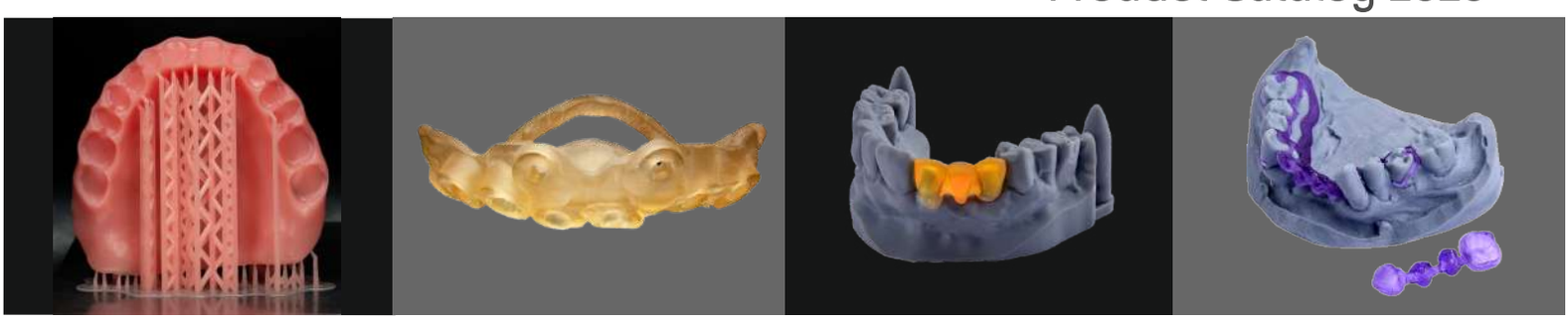
d-tech

3D ACCUPRINT ™

Product Catalog 2023



CE Certified manufacturer of 3D printing resins

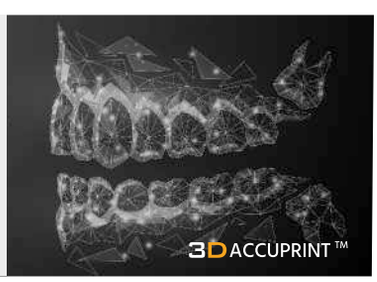
Our Back Story

D-Tech was born in the year 2000 with a small line of dental cements. We started with a humble beginning and this was followed by a period of slow, albeit steady growth until 2015. Since 2015 we have shifted gear and invested significantly in technology, research and infrastructure. Our research has resulted in the production of several high - performance UV cured 3D printing resins which are now selling successfully in several parts of the world.

Transformation to Digital

At team D-Tech we believe that “the future of dentistry is digital”. Several conventional dental work flows “are being” or “have been” already transformed by digital processes. New 3D printing materials are going to be at the forefront of enabling these changes. Dental impressions are being replaced by Digital scans. Consequently , models will be printed and not poured; wax patterns shall be printed and not carved. Surgical Guides have radically improved the precision and ease of surgery. Provisional & long term prostheses are now printed.

The Future of Dentistry is Digital



In line with this paradigm shift in dentistry, we are now increasingly focused on the digital future and have an exciting research pipeline of materials for this ever evolving digital dental space.

We are constantly improving & expanding our resin portfolio to push the boundaries of the possibilities with 3D printing.

Certifications & Clinical Evaluations

On January 22, year 2020, we got our CE MDD and ISO 13485 certification from TUV SUD Germany for our entire product line. We are now the first and only CE certified 3D resins manufacturer in India. Our resins have been very well accepted by top dental professionals and we have been able to generate a huge amount of clinical and lab data,thereby validating our product quality and performance in real life clinical and lab conditions.

Accreditations

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

EN ISO 13485 : 2016

DAkkS Deutsche Akkreditierungsstelle D-ZM-11321-01-00

TÜV SÜD Product Service

Certificate

No. Q6 101752 0009 Rev. 00

Holder of Certificate: **D Tech Dental Technologies**
62, Reality Warehousing Gat No 1337/1
Pune Nagar Road, Wagholi
Pune 412207
INDIA

Certification Mark:

Scope of Certificate: **Manufacturing and Distribution of Non-Sterile Dental Composite, Bonding, Dental cements & Liners (Restorative & Luting), (Resin & water based), Glass Ionomer Cements, Etching Gels, Temporary Cements & Protective Coatings, Glass Ionomer Liquids, Cements Accessories, Endodontic Accessories, EDTA, Dental 3D Printings Resins, Orthodontic Adhesive, Brackets, Buccal Tubes, Molar Bands, Wires & Springs.**

The Certification Body of TÜV SÜD Product Service GmbH certifies that the company mentioned above has established and is maintaining a quality management system (excluding subclause 7.3), which meets the requirements of the listed standard(s). All applicable requirements of the testing and certification regulation of TÜV SÜD Group have to be complied with. For details and certificate validity see: www.tuvsud.com/ps-cert?q=cert:Q6 101752 0009 Rev. 00

Report No.: IND2022037

Valid from: 2022-05-03
Valid until: 2025-04-19

Date, 2022-05-03

Christoph Dicks
Head of Certification/Notified Body

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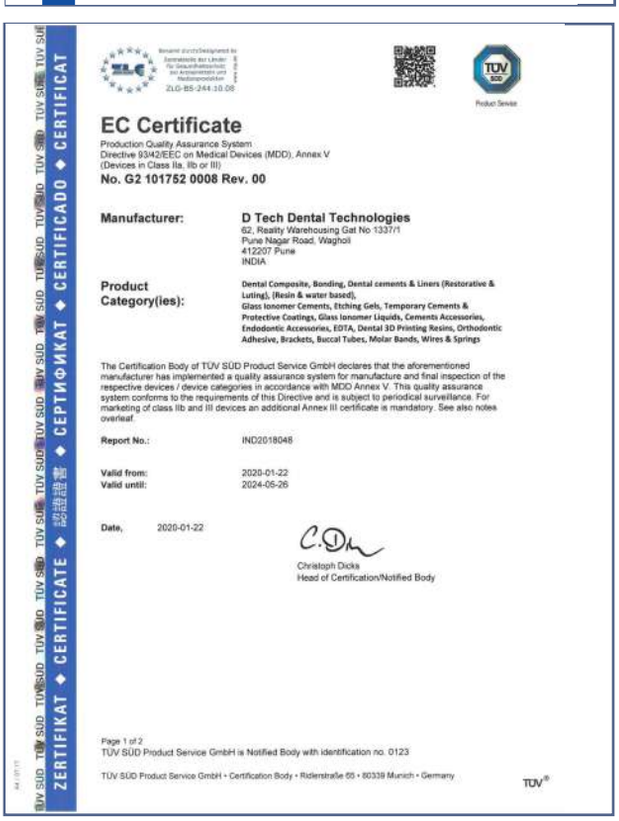
TÜV®



ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

CE-MDD 93/ 42 / EEC

ZLG-BS-244-10.08

TÜV SÜD Product Service

EC Certificate

Production Quality Assurance System
Directive 93/42/EEC on Medical Devices (MDD), Annex V
(Devices in Class IIa, IIb or III)

No. G2 101752 0008 Rev. 00

Manufacturer: **D Tech Dental Technologies**
62, Reality Warehousing Gat No 1337/1
Pune Nagar Road, Wagholi
412207 Pune
INDIA

Product Category(ies): **Dental Composite, Bonding, Dental cements & Liners (Restorative & Luting), (Resin & water based), Glass Ionomer Cements, Etching Gels, Temporary Cements & Protective Coatings, Glass Ionomer Liquids, Cements Accessories, Endodontic Accessories, EDTA, Dental 3D Printing Resins, Orthodontic Adhesive, Brackets, Buccal Tubes, Molar Bands, Wires & Springs**

The Certification Body of TÜV SÜD Product Service GmbH declares that the aforementioned manufacturer has implemented a quality assurance system for manufacture and final inspection of the respective devices / device categories in accordance with MDD Annex V. This quality assurance system conforms to the requirements of this Directive and is subject to periodical surveillance. For marketing of class IIb and III devices an additional Annex III certificate is mandatory. See also notes overleaf.

Report No.: IND2018048

Valid from: 2020-01-22
Valid until: 2024-05-26

Date, 2020-01-22

Christoph Dicks
Head of Certification/Notified Body

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TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

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RANGE OF 3D PRINTING RESINS

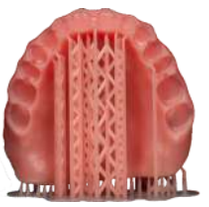
Material	Type	Color
TEC	Model Pro	Beige / Grey
TEC	Model Standard	Various
TEC	Model Basic	Grey
TEC	Model Hard	Ivory
TEC	Cast	Purple
MD	Guide	Orangish Translucent
		* Turns clear after autoclaving
MD	IBT	Translucent
MD	Splint Soft	Translucent
MD	Splint Hard	Transparent Clear
MD	Denture Base	Light Pink / Dark Pink
MD	C & B	BL, B1, A1, A2, A3
		* Available in all tooth shades
MD	C & B Pro	BL, B1, A1, A2, A3
		* Available in all tooth shades









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3D ACCUPRINT™

Model Pro BEIGE / GREY

INDICATIONS FOR USE

3D Accuprint Model Pro resin is a “specially for prosthetics “ formulation for printing highly accurate master models. Ideal for printed removable dies which is a great time-saver. The colour and surface of this resin mimics die stone, resulting in pleasant haptics

FEATURES

- Very High Accuracy
- Ideal for Master Models & Removable Dies
- Die Stone like pleasant Haptics & Sandy Beige Colour
- Does not contain MMA

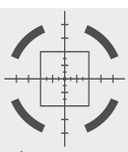
BEST FOR MASTER MODELS

TECHNICAL DATA

Colour	Beige/Grey
Wavelength	385~405
Odour	Low

PACKAGING

1000g Bottle Net


Accurate


Scratch Resistant


High Strength


Safe


Ultra
Low shrinkage

Model Standard GREY/ BEIGE

INDICATIONS FOR USE

3D Accuprint Model Standard is a resin designed for daily use dental models for prosthetics, thermoforming and all dental model related needs. Surfaces are smooth and glossy and reproduction of detail is excellent. Available in a variety of colours.

FEATURES

- Good Heat resistance
- Can withstand thermoforming forces and temperature
- Contains safe resins with little or no odour

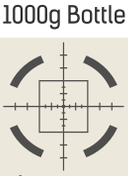
SUITABLE FOR THERMOFORMING

TECHNICAL DATA

Colour	Various colours
Wavelength	385~405
Odour	Low

PACKAGING

1000g Bottle Net


Accurate


Smooth Surface


Heat Resistent


High flexural strength


Low shrinkage

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3D ACCUPRINT™

Model Basic GREY

INDICATIONS FOR USE

3D Accuprint Model Basic is a low viscosity resin that can be used in both DLP & LCD printers. It is quite economical and yet reasonably accurate.
It can be effectively used in DLP printers as well as high & moderate intensity LCD printers.

FEATURES

- Low Viscosity Resin
- Captures fine detail
- Can withstand thermoforming forces

LOW VISCOSITY. CAPTURES HIGH DETAIL.

TECHNICAL DATA

Colour	Grey
Wavelength	385~405
Odour	Low

PACKAGING

1000g Bottle Net

Low viscosity | High Detail | Economical | Hollow Model | Thermoforming

Model Hard IVORY

INDICATIONS FOR USE

3D Accuprint Model Hard resin is designed especially for printing low -cost hollow models which are hard enough to withstand thermoforming forces. Even with reduced base surface area due to hollowing of models, it adheres to the build platform quite well.

FEATURES

- Economical & high hardness models
- Specially designed for hollow thermoforming models
- Can withstand thermoforming forces

ULTRA HARD

TECHNICAL DATA

Colour	Ivory
Wavelength	385~405
Odour	Low

PACKAGING

1000g Bottle Net

Ultra Hard | Scratch Resistant | Economical | Hollow Model | Thermoforming

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3D ACCUPRINT™

Dental Cast PURPLE

INDICATIONS FOR USE

3D Accuprint Cast resin is a specifically formulated, ash free resin, for printing high strength patterns. This ensures no deformation post printing which results in highly accurate “first time right” dental castings. Castable resin is suitable for pressable Lithium disilicate Ingots or any injectable material.

FEATURES

- Ash Free Burnout
- Results in Perfectly Fitting Castings
- Rigid pattern prevents deformation during investing
- Does not contain MMA & THF-MA

TECHNICAL DATA

Colour	purple-translucent
Wavelength	385~405
Odour	Low
Ash Content	< 0.1%

PACKAGING

1000g Bottle Net

Accurate | Ash free | Rigid | Safe | Low shrinkage | Easy to cast

Surgical Guide

INDICATIONS FOR USE

3D Accuprint Guide resin is a tough and Biocompatible resin for printing surgical guides. This allows for perfect drilling and precise placement of implants

FEATURES

- Biocompatible
- Autoclavable at 121°C cycle
- Highly accurate for perfect fitting of drill sleeves
- Does not contain MMA

TECHNICAL DATA

Colour	Clear- translucent orange
Wavelength	385~405
Odour	Low

PACKAGING

500 g Bottle Net

MD

* Turns clear after autoclaving

Accurate | Biocompatible | Low viscosity | Safe | Low shrinkage | Autoclavable 121°C

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3D ACCUPRINT™

Crown & Bridge

INDICATIONS FOR USE

3D Accuprint C & B resin is a biocompatible highly aesthetic formulation with inert fillers. It mimics tooth like aesthetics.

FEATURES

- High strength
- High polishability for tooth like aesthetics
- Biocompatible tooth coloured filled resin for provisionals
- Can be finished with D Tech Pro Glaze, a Nano filled Light activated glazing system

TECHNICAL DATA

Shades	BL,B1,A1,A2,A3
Wavelength	385~405
Odour	Low
* Compressive strength	> 180mpa
* Flexural Strength	> 100mpa

* ***Strength values depend upon adhering to recommended printing and post curing protocol***

PACKAGING
500 g Bottle Net

MD

*Indirect Use Only

NANO FILLED LIGHT ACTIVATED "ONE FOR ALL" GLAZING SYSTEM

Accurate | Biocompatible | Low watersorption | High polishability | Stable colour

Crown & Bridge Pro

INDICATIONS FOR USE

3D Accuprint C&B (Pro) resin is a Bio compatible exceptionally aesthetic and strong resin for long term prosthesis.

FEATURES

- Exceptional Strength & wear Resistance
- Exceptionally high aesthetic results after polishing
- Biocompatible Tooth colour Resin for long term prostheses

TECHNICAL DATA

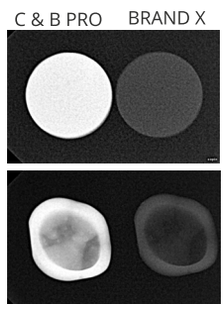
Shades	BL,B1,A1,A2,A3
Wavelength	385~405
Odour	Low
* Compressive strength	> 225mpa
* Flexural Strength	> 150mpa

* ***Strength values depend upon adhering to recommended printing and post curing protocol***

PACKAGING
500 g Bottle Net

MD

ENHANCED RADIOPACITY



Accurate | Biocompatible | Durable | Exceptional polishability | Stable colour

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3D ACCUPRINT™

Denture

INDICATIONS FOR USE

3D Accuprint Denture resin is designed especially for printing denture bases. It has a high surface cure and can be polished to high aesthetics.

FEATURES

- Enhanced surface cure
- Available in light and dark pink
- MMA free

TECHNICAL DATA

Shades	Light,Dark Pink
Wavelength	385~405
Odour	Low
Flexural Strength	> 100mpa

PACKAGING

500 g Bottle Net

MD

Accurate | Biocompatible | Safe | High polishability | Low watersorption

Splint Resin

INDICATIONS FOR USE

D Tech Accuprint Splint resin is available in two versions, Splint Hard & Splint Soft. Both resins are designed for better results on DLP 385nm wavelength systems.

FEATURES

- Splint hard can be polished to a very high gloss and extreme clarity.
- Splint soft is translucent and retains its softness overtime
- Exceptional strength and wear resistance

TECHNICAL DATA

Shade (Hard)	Clear
Shade (Soft)	Translucent
Wavelength	385nm (preferred)
Polishability (Hard)	High
Water Sorption	Low

PACKAGING

500 g Bottle Net

MD

Splint Soft

Splint Hard

Accurate | Biocompatible | Durable | Polishable (Hard) | Flexible (Soft)

SECTION : MODEL RESINS

Q : What are the main differences in your various model resins - Model Pro, Model Standard ,Model Basic & Model Hard ?

A : Model Resins Line up from D Tech

Model Pro

- Top of the line resin for Master Models with removable dies
- "Matt" diestone like Haptics.

Model Standard

- Daily use resin with Good accuracy.
- Good for all applications including prosthetics and thermoforming

Model Basic

- Low viscosity and yet resonably accurate.
- Picks up fine details.
- Can also work with low light intensity printers

Model Hard

- Economical
- Hard and won't deform but a bit brittle.
- Works well for hollow models

Q : Are your resins compatible with all 3D printers ?

A: Yes, our resins work on all " open printers " . We always recommend to buy open printers. For dental use we recommend quality printers like Asiga (DLP /385nm) and Ackuretta (LCD /405nm). Our resins are officially validated on both.

*ASIGA

D Tech Accuprint material files are available for download from the Asiga material library: https://www.asiga.com/open-material-library/

*ACKURETTA

D Tech resin profiles are available in Ackuretta Alpha AI slicing software: Please Scroll within the software to find D Tech resin profiles.

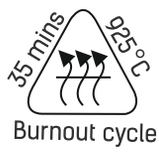
* ASIGA (Logo) is a trademark of Asiga ,Australia
*ACKURETTA (Logo) is a trademark of Ackuretta ,Taiwan

Our resins can also work on several low light LCD printers as shown below. Typically most of these printers use Chitubox or Lychee as the slicing software. Please connect / email to us for our "printer settings guidance sheets" for these printers and many more. You are advised to ask the manufacturers about the light intensity of the printer. For Bio-compatible resins, we recommend a light intensity of at least 5mw/cm² or more. Please test the light intensity of your printers periodically. Please avoid using large build plates to prevent Z axis errors.

SECTION : CAST RESINS

Q : Can you briefly detail the protocol for your castable resin including a suitable investment & recommended burnout cycle ?

A: After printing, post curing and cleaning up the pattern, please invest using a High temperature rapid Investment For example Brevest , Germany, Rapid 1 investment material . Vacuum mixing is strongly recommended. We also recommend (optional) that you use a pressure chamber to harden the investment. The burnout cycle that we recommend is 925°C with 35 mins of holding. Please use a good ventilated burnout furnace for example Nabertherm / Renfert



Burnout cycle

SECTION : SG RESINS

Q : Can you detail the main features of D Tech surgical guide resin ? Is it autoclavable?

D Tech Surgical guide resin has a unique feature of colour change. After printing it is pale yellow. After post curing it turns orange translucent .Finally upon successful autoclaving, it turns colourless translucent. This allows for proper monitoring of the success of each stage of the guide fabrication. ⚠ Please insert sleeves after printing but "before post curing". This will ensure a good passive fit.


YELLOW ON FIRST WASH AFTER PRINTING


ORANGE TINGED AFTER POST CURE


TRANSPARENT ON AUTOCLAVING

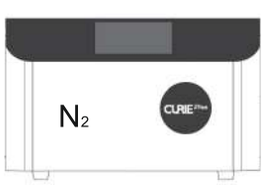
SECTION : C&B RESINS

Q : What is the difference between D Tech C&B and C&B Pro resin?

A: All Our C&B resins are based on advanced technology similar to high end dental composites and contain inert fillers composed of dental glass & ceramic nano particles. C&B Pro version contains ceramic nano fillers and has a higher filler loading percentage. This provides improved wear resistance as well as higher radio opacity in the Pro version. (Note- C&B resins are Class 2a medical device and very different from " tooth colour resins" which are simply coloured resins. Please choose your C&B solutions with care)

Q : Which printer and post cure do you recommend to print C&B resin?

A: ⚠ Results obtained with C&B resins are highly dependent on using the correct printing and post curing protocol in conjunction with the best resin. Printers must be of high light intensity & preferably 385nm wavelength. Asiga Max UV385 is recommended. After printing, Post curing has a very significant impact on the final properties of the prostheses. Ideally use a Nitrogen flushed or vacuum, high-power, flashing light post cure unit like Otoflash or Curie Plus.



Q: Is D Tech C&B Pro a "permanent C&B resin"?

A: 3D printed Crowns and bridges are a relatively new technology worldwide. Several lab tests indicate that printed prostheses can last over 5 years in the mouth. However these tests are based on chewing simulation and fatigue tests and there is no long term clinical data available at this time. Mechanical testing and simulation shows that some 3D printed prosthesis are capable of being technically termed as permanent. However, we prefer to call them " long term provisionals". We advise the dental professionals to proceed conservatively after due clinical evaluation of the patient and technology limitations.

d-tech 3D

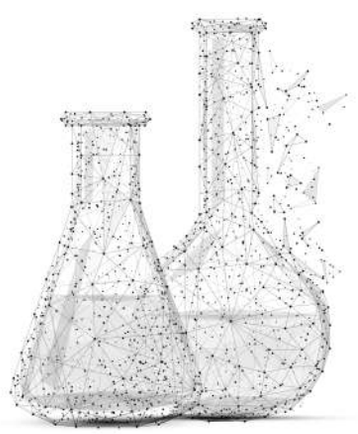
Factory & Capacity

We have recently completed an additional state of the art facility for production and R&D of 3D printing resins. With this added capacity we can produce up to 300 Tons of 3D resins per year.

Our Chemistry

ULTRA LOW VOC

NO MMA



OUR CHEMISTRY IS GUIDED BY THE PRINCIPLES OF SAFETY AND STABILITY

Unlike some low cost manufactures we do not use aggressive acrylates or products containing VOCs. All the materials are chosen with care with due attention to safety and quality.

Final formulations have low water sorption and therefore remain stable over time after printing. This is critical since models and prosthesis need to stay extremely stable over time.

Clinical Case Records

Extensive Clinical Feedback

To ensure quality assurance and successful performance in the field, we have a dedicated team that meticulously collects feedback from customers (both labs and clinics)

Case Records from Labs & Clinicians are photographically documented. We have hundreds of actual clinical and lab case records duly documented and available to share upon request. This also forms the backbone of our PCMF plan which is mandated by CE MDR. These inputs are relayed to our research team to form a closed loop of consistent improvement. Some selected case records are available to view on our website under the downloads section

OEM Service

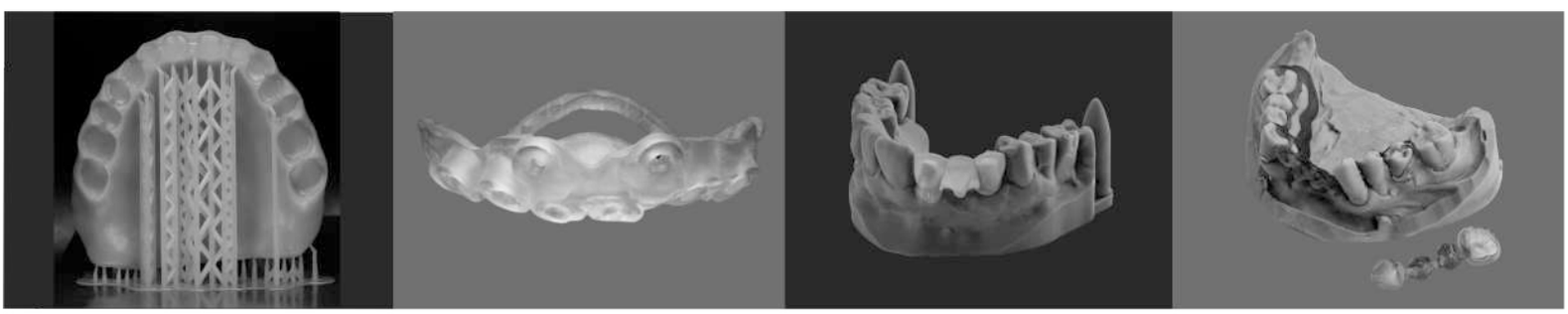
OEM service is available for customers who buy over 12 tons per year. OEM service is available only for Non Bio-compatible (TEC) resins. Please write in to us for further details. We can also provide bespoke resins with specific curing profiles and custom colours.
If you need a resin with specific mechanical or performance properties and are looking for a partner who can develop and supply, we could be the partner of choice.

MODEL RESIN OEM SHADE SELECTOR

Troubleshooting

In the event that you are using our resins and facing some challenges, we have a team standing by, who can help you troubleshoot via various online methods. We have most of the well known printers available in our own validation centre & our team is familiar with most printers, post curing units and slicing softwares.

3D ACCUPRINT™



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D-Tech Dental Technologies

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MAKE IN INDIA