

**CREALITY**

3D Printing Industry Evangelist

# HALOT SERIES

3D Printing Application in Digital Dental Solution



# 3D PRINTING

Application in Digital Dental Solution



- ▶ COMPANY INTRO

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- ▶ PRODUCT FEATURES

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- ▶ DENTAL APPLICATIONS



# COMPANY INTRO

Shenzhen Creality 3D Technology Co., Ltd. is a national high-tech enterprise in China and a leading brand in printing industry around the world. Creality has been focusing on the R&D and manufacture of 3D printers on LCD, DLP and FDM series, as well as more than 420 patents on industrial, educational and consumer-grade 3D printer.

Creality is headquartered in Shenzhen and has many local supports in Germany, USA, Brazil, Chile, France, Italy and other countries. In addition, Creality has established industry-university-research teaching practice bases in cooperation with many universities, we have complete R&D, manufacturing, after-sales system and strong technical strength. Creality has more than 1,700 employees, a total production area of nearly 50,000m<sup>2</sup>, and an annual production capacity of over 1,000,000 printers. We have built advanced large-scale R&D centers, 3D printing laboratories, Creality Research Institute, and modern production lines.



**420+**

3D Printing patents

**500+**

Professional R & D Personnel

**50,000+** m<sup>2</sup>

Total Production Area

**192**

Countries and Regions

**2,500,000+**

Global Users

**1,000,000+** units

Annual shipments

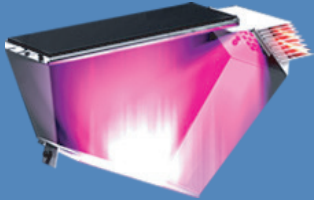


# High Precision and Uniformity

The self-developed integral light source adopts the reflection & refraction to make the light intensity distribution of the whole screen uniform, and each dimension of the model with consistent accuracy.

## Integral Light Source

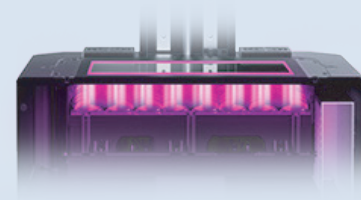
Crealty PATENT Technology



Uniformity: **91.9%** AVE:5739 MAX:5885 MIN:5408

## Matrix Light Source

Others



Uniformity: **68.6%** AVE:4570 MAX:5314 MIN:3648

At the heart of the HALOT series is Integral Light Source, a new type of resin 3D printing technology developed by Crealty.

Different from the well-known Parallel Emission, Integral Light Source's working principle is based on reflection and refraction. This process assures higher precision 3D printing by improving the lighting evenness and reducing the negative impact of broken or malfunctioning LED units.

If you need to print a highly-detailed model, whether it be a large or small design, HALOT series is right there to ensure the job gets done.

# Longer Service Life

## **Integral Light Source:**

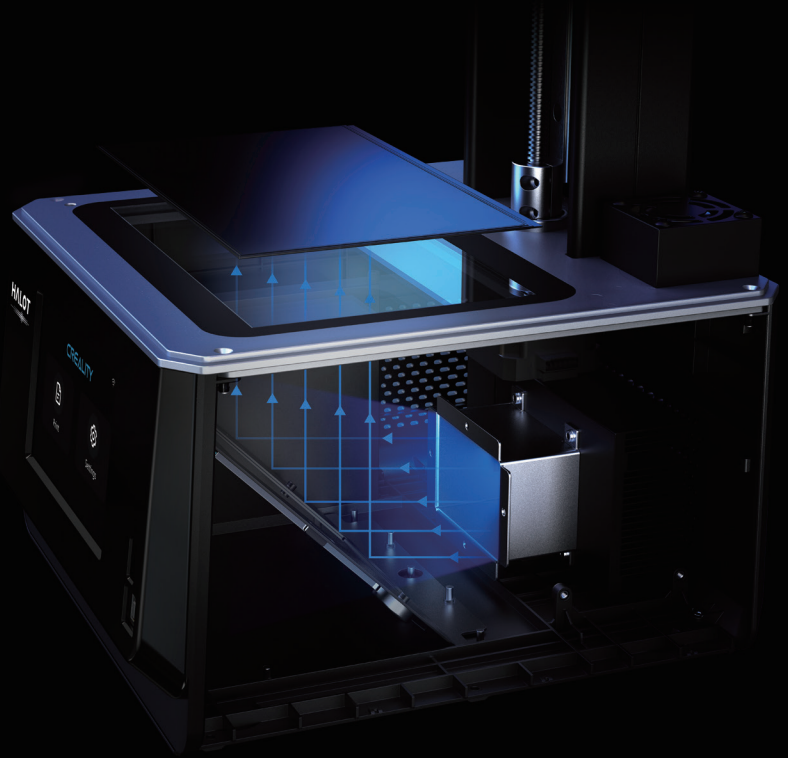
Comprised of five lights and each with four emission chips.

Largely reduced the impacts from broken units, providing a more stable printing environment.

## **Parallel Emission:**

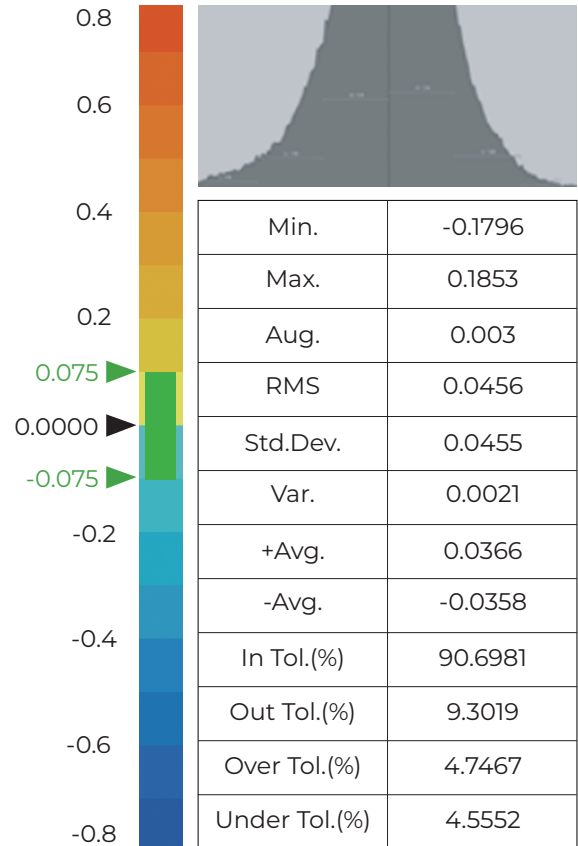
Adopts a UV LED matrix with less even emission.

More easily impacted by the broken units.



\*Statistics provided by Creality Lab, there may be minor deviations.

# Dental applications



# Halot Series 3D Printer



# HALOT SKY/L89



# HALOT SKY/L89

Self-developed Integral Light Source Technology



Build Size  
192\*120\*200mm

Machine Size  
340\*292\*552mm

Molding Tech: LCD

Print Speed: 1-4s/layer

Layer Thickness: 0.01-0.2mm

XY Axis Accuracy: 0.01~0.05mm



## Integrated Light Source

Self-developed light source with high evenness, high precision and high luster.



## High-stability Z-axis

Dual linear guide rails of Z-axis+ball screws to improve printing stability.



## AI Hardware Brain

Super data-processing mainboard improves printing efficiency.



## Sensitive Slicing

Self-developed slicing software with simplified user interface for easy operation.



## WiFi-APP Control

Creality APP intelligent control instantly monitors the printing status.



## 4K Monochrome Screen

Standard service life of 2000h with 1-4s curing time per layer.



# Product Parameters

▶ **Machine size:** 340\*292\*552mm

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▶ **Machine weight:** 16.5KG

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▶ **XY axes precision:** 0.01-0.05mm

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▶ **Printing speed:** 1-4s/layer

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▶ **Layer thickness:** 0.01-0.2mm

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▶ **Touch screen:** 5-inch color touch screen

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▶ **LCD resolution:** 3840\*2400

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▶ **Printing material:** Photosensitive resin

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▶ **Light source:** Integral light source

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▶ **Z-axis type:** Dual linear guide rails+ball screw

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▶ **Feeding holder:** Compatible with LD-006 feeding Groove

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▶ **UI style:** Creality UI style

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▶ **Packing weight:** 22.45KG

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▶ **Packing specifications:** 480\*425\*720mm

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▶ **Print size:** 192\*120\*200mm

▶ **Support language:** Support 12 languages

# HALOT ONE PLUS/L79

Smart Printer Large and Precise



Machine Size  
236\*243\*418mm

Print Size  
172\*102\*160mm

package size: 310\*300\*530mm

XY-axis precision: 0.04mm

Print speed: 1-4s / layer

working principle: Integral Light Source



## 7.9-inch 4K Mono LCD

Larger display,  
172\*102\*160mm build volume,  
vividly printing out every  
detail of big models.



## Self-developed Integral Light Source

Enhanced printing  
precision by vastly improving  
the lighting evenness.



## Creality Cloud App

Cloud slicing and  
one-click printing  
anytime and anywhere.



## Z-axis with Dual Linear Rails

Guarantee stable  
movement, largely  
improving the success rate.



## 5-inch HD Touch Screen

Support 14 languages  
with clear model  
preview and selection.



## High-performance Mainboard

Powerful inner  
strength in data  
and images processing.

# HALOT ONE/L60

High-performance Integral Light Source 3D printer



Machine Size  
221\*221\*404mm

package size: 295\*295\*545mm

Print Size  
127\*80\*160mm

XY-axis precision: 0.01-0.05mm

Curing speed: 1-10s / layer

Printing filament: Photosensitive resin



## Integral Light Source

Unique integral reflection light source structure with the uniformity of above 90%.



## Powerful Kernel

Self-developed mainboard embraces strong computing and image processing capabilities.



## Slicing Software

Self-developed slicing software with simplified interface for easy operation.



## New Operating Software

5-Inch new touch screen, simple interface, easy to control.



## OTA Online Upgrade

Support online cloud upgrade and local upgrade.



## Precision Z-axis Module

Precision Z-axis control system for micron-level precision control.

# Washing/Curing machine



# UW-01

## 2-in-1 Washing and Curing Machine



Washing Size  
170\*120\*160mm

Curing Size  
ø165\*200mm

UV Lamps : 405nm9pcs+385nm9pcs

Mode: wash/Cure

Time: 2min-90min

Speed: Quick/Normal/Slow



### Dual-band UV Light Beads

18 LED light beads.



### Three-gear Speed

Regular,fast,slow  
can be optioned.



### 2-90mins Optional

Choose the right  
time for printing



### Rotating Platform

Curing rotating platform  
with 360°constant rotation.



### Suspended Function

Remove hood,  
stop working.



### Two Washing Ways

Clean in container  
respectively or together  
with the printing board.



# UW-02

All-in-one Washing/Curing Machine with large size

Washing Size  
240\*160\*200mm

Curing Size  
ø200\*300mm

UV Lamps : 405nm9pcs+385nm12pcs

Mode: Wash/Cure

Time: 2min-30min

Speed: Quick/Normal



## Washing&Curing Machine

Large space for washing and curing meets the larger size processing demand.



## 360°all-around curing

360° specular reflection curing rotating platform with dual band LED beads.



## Multi-cleaning Modes

Two model cleaning modes: Washing basket cleaning+ platform hanging cleaning.



## Rotating Platform

Customized magnetic large fan blade for super large vortex high-speed cleaning.



## Sealable Washing Basket

Accommodate to larger-size model cleaning.



## Optional Speed&Time

Adjustable fast and medium speed for more time choices.

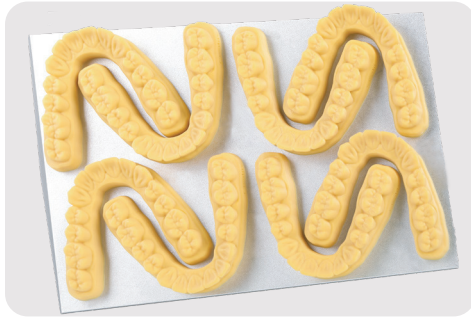
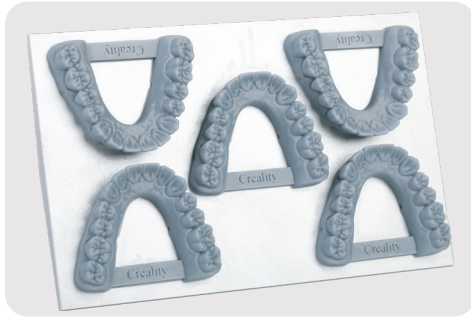


# Dental Resins

Water-washable Ortho Dental Model · Dental Model · Dental Cast Resin



# Water-washable Ortho Dental Model



- ▶ **Color:** Yellow, Gray
- ▶ **Usage:** Invisible aligner



Avoid dangers and troubles caused by alcohol cleaning



Rapid Curing



Heat Resistance



No Alcohol



Water Washable

# Dental Model:

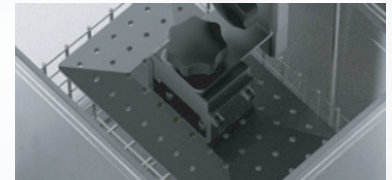
anti-scratch · high precision · low shrinkage



Oral scanning to get digital model



3D Printing



Cleaning and Curing



Invisible aligner

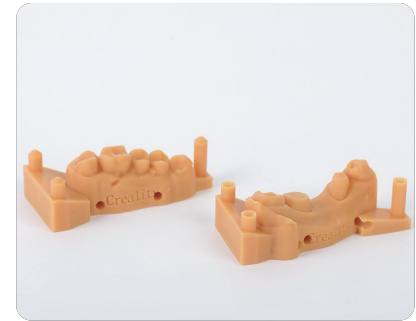


Post Process



Vacuum Forming

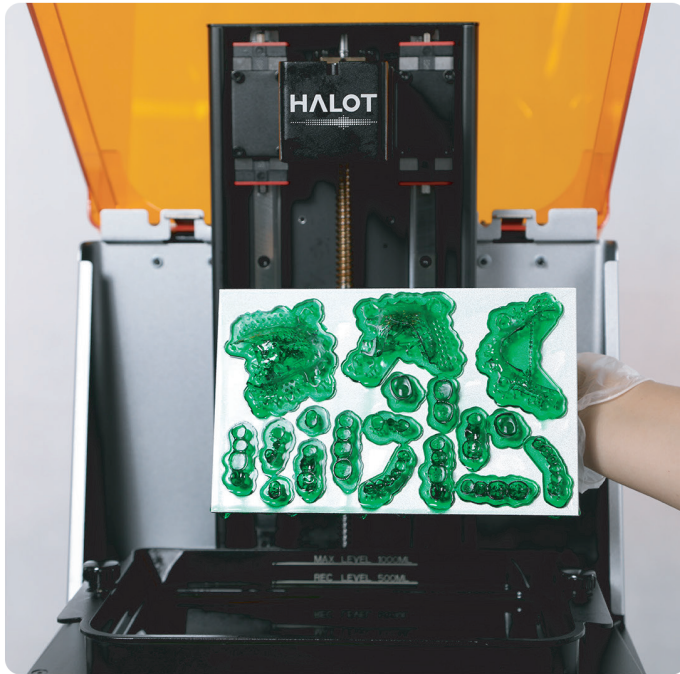
# Perfect for restoration and implant model



▶ **Color:** Orange brown

▶ **Usage:** 1. Invisible aligner (higher precision than Water-washable Ortho Dental Model);  
2. removable die dental model

# Dental Cast Resin



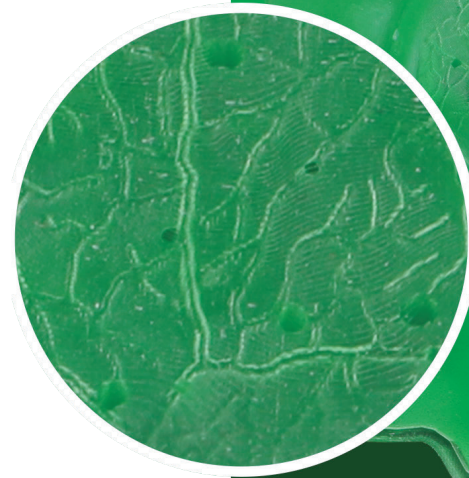
- ▶ **Color:** Green
- ▶ **Usage:** 1.Casting copings and substructures;  
2.Pressing and casting full contour crowns;  
3.Casting removable partial denture frameworks.



# Dental Cast Resin Details

## Vividly prints out every detail

Perfectly print out micro-holders of 0.1-0.3 mm for models with complicated structures.  
High precision and enhanced speed vastly improve the 3D printing experience.





# CREALITY



Scan the Code to Follow

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