

3D PRINTER FOR DENTAL APPLICATIONS

D40



Specifications

Refer to accessories pricelist for part numbers and prices. This document refers to these part numbers

Dental 3D Printer D40

The D40 additive manufacturing system generates precise 3D printed parts such as surgical guides, waxes for partial frameworks and bridges, night guards, bite splints, temporary crowns & bridges, implant models, ortho models and more. Made for professional use in dental laboratories and clinics Dental Wings offers D40 within a total solution in cooperation with its certified software and certified material partners. Biocompatibility approval under CE and/or FDA regulations allow use of the printed parts in the patient's mouth. With this professional solution, you have access to personal support and training from the service team. The D40 is an open platform providing full flexibility to its users.

The D40 generation sets the benchmark in professional dental printing in terms of speed, precision and certified open solution. The D40 generation tops this and provides further benefits such as:

- ✓ highly esthetic prints with pure color / pure transparency based on professional 385nm UV LED
- ✓ precise non-stop-work based on direct resin temperature regulation
- ✓ ease of use thanks to resin handling system (RSH), automatic door and control features
- ✓ certified auto calibration sensor (ACCS)
- ✓ fastest print speed makes short lab response possible by force-feedback (patented)
- ✓ design suitable for dental labs & clinics with flat, easy-to-clean surfaces and controls

Performance Parameters

build area: Two build areas, each 130 * 75 * 110 mm (+/- 1 mm)
 native pixel: +/- 34 µm, (two projection systems, each HD 1920 x 1080 px),
 layer thickness: 50 and 100 µm standard (highest z-resolution 0,5 µm)
 projector: UV 385nm, high power LED
 speed: *surgical guide*: down to 16 min; *other*: 30–60 min
 (up to 100 mm/h by force feedback)

Application	Content one platform	Time (+/-5 min)	weight (gr)	approx. material cost
Model Implant or stump	1x upper & 1x lower <u>incl.</u> stumps	00:45	20	6,0 €
Cast – Partial	15 x bridge with 4 elements	00:40	1	0,7 €
Cast – Partial	4x partial framework	00:50	4	2,8 €
Drill Guide	2x surgical guide	00:16	6	4,2 €
Tray	6x trays	01:00	16	4,8 €
Splint	8x splint	01:00	5	2,5 €
ortho model	6x ortho model	01:00	15	3,6 €
Bonding Tray	2 x indirect bonding tray	00:15	3	2,1 €
Provisional C&B	15 x C&B with up to 4 elements	00:18	1	1,1 €
Denture	4x denture	01:15	11	5,7 €
Gingiva	15x gingiva	00:15	1	0,6 €

Control & Systems

control & connect: 10' touch LCD & 7' status indicator; WLAN, TCP/IP, USB
 ease of use: automatic door, resin handling system, dual RFID sensor

Installation

electrical supply: 110 – 250 V, 50/60 Hz
 size (w* d* h): 480 * 410 * 690 mm
 weight: approx. 42 kg

Manufacturer

Rapid Shape GmbH
 Römerstrasse 21
 71296 Heimsheim
 Germany

DWP Part Number
D40
A.DWP.D40
Delivery Content

1x 3D printer D40; 1st year maintenance contract; 8h partner remote installation support;
 1x slicing software; 1x tray; 1x build platform; 1x calibration sensor; 1x spatula; 1x scraper; 1x UV
 safety goggles; 1x tools; 1x lens cloth; 1x USB memory stick; 1x gloves.

Dental Wings printer starter kit
A.DWP.STAKIT

Liquid for cleaning (Shera clear-p, Shera ultra-p)
 1 Liter material (model or guides)
 1 resin reservoir
 1 light curing machine
 1 small ultra sonic circle plastic box for cleaning the printed parts
 1 big ultra sonic circle plastic box for cleaning the printed parts
 1 plastic box for the white light machine

Accessory Package D40
DWP001196

Consisting of: 3x tray; 1x tray cabinet; 1x build platform; 1x build platform handling device;
 0.5l part cleaner; 1x surface cleaner; 1x ultrasonic glass; 25x resin filter;
 1x funnel for resin filter; 1x set of handling tools (package discounted by 10%)

Extras / Consumables

Training at Rapid Shape or Dental Wings premises: 3 days group training

A.DWP.TRAIN

Remote Maintenance Contract (annual fee, starting from year 2, mandatory)

DWP001358

Firmware -, slicer - and material library update; sensor send-in calibration; hotline;
 one remote online check of 3D printer and slicer computer

Packaging (special wooden package, shock- & tilt protection, mandatory)

DWPCRATE000041

Tray / Resin Reservoir D40

DWP001199

Cover for Tray / Resin Reservoir D40

DWP001223

Building Plate D40

DWP001211

High performance photopolymers from Certified Material Partners (CMP)

Note: Rapid Shape and certified material partners collaborate in order to optimally tailor the 3D printers to the 3D printing materials and vice versa.

Note: Dental Wings and Shera collaborate in order to streamline the workflows associating Dental Wings scanners and software with Dental Printers and Shera material. This includes formulation & hardware as well as process parameters definition within DWOS.

Shera Print® materials of SHERA available directly via Dental Wings at special prices
www.shera.de

FotoDent® materials of company DREVE available directly via Dreve GmbH / Depots
www.dreve.com

3Delta materials of company DELTAMED available directly via Deltamed GmbH / Depots
www.deltamed.de

FreePrint® Materials of company DETAX available directly via Detax GmbH / Depots
www.detax.de

PRINT4D Materials of company GC available directly via GC AG / Depots
<http://www.gceurope.com/>