rapidshape

3D Printers for Digital Dentistry & Orthodontics

proto3000
ISO 9001:2015

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Shape Your Lab!

Every Machine is an All-Rounder

It can happen that fast*

2 surgical guides
printed in ~ 20 minutes

4 indirect bonding tray
printed in ~ 15 minutes

28 Permanent or temporary crown and bridge units
printed in ~ 20 minutes

4 Grinding splints/trays
printed in ~ 25 minutes

2 trays
printed in ~ 20 minutes (horizontal)

6 trays
printed in ~ 50 minutes (vertical)

2 master models
printed in ~ 30 minutes

2 ortho models
printed in ~ 25 minutes

28 gingiva mask units
printed in ~ 20 minutes

4 cast partials
printed in ~ 45 minutes

4 denture bases
printed in ~ 65 minutes

* All mentioned printing times are based on jobs done on a D20+ equipped with Force Feedback System.

Dental indications printed with the 3D printer

Why are we so fast?

Why DLP?

With so many 3D printing technologies on the market, the ques - tion naturally arises as to why we chose Digital Light Processing (DLP) over any other technology. The answer is quite simple: Because only this technology enables us to print high-resolution parts with repeat accuracy over a long period of time, the han - dling is manageable, and in the end the system also remains inexpensive for you.

Speed and precision with Force Feedback technology

Rapidshape's patented Force Feedback technology is making the difference. During the normal separation process of the exposed component layer from the reservoir bottom, undefined forces act. To avoid damaging the component, it is necessary to pro - ceed slowly so that the layer is carefully detached from the res- ervoir surface.

We do not drive blind! With our Force Feedback technology, the forces on the component are measured. This allows the 3D printer to always travel at maximum speed, albeit safely(!) for the object in question. In addition, support structures can be real - ized thinner and rework is simplified. The result is very fast print times with consistently high print quality.

First-class image quality

Detailed print results

Durable and proven components

Wide range of materials

Cost-effective materials

Easy handling

Fast results

Low entry costs

Intelligent Connectivity

Intelligent Connectivity

The Intelligent Connectivity feature enables communication between your printer and RS wash and RS cure post-processing devices. Once a connection is established between these devices, the printer can forward completed print jobs to the finishing devices for further processing. There, the cleaning and exposure process is carried out on the basis of the transmitted data. That means: Lower costs and higher process reliability.

Post-processing devices

Our customers can rely on certified processes between material and system manufacturers. Not only 3D printing, but also cleaning and post exposure are done automatically with validated parameters. The risk of incorrect processing is excluded. And it's automated!

Workflow dentist

Our Solutions for increased Productivity

Automatic Separation Module (ASM)

Increase your productivity by seamlessly printing adjacent jobs, without interruption. The Automatic Separation unit allows you to produce multiple print jobs in a self-determined sequence one after the other (Job Queues) without having to remove the build platform from the printer and detach the print job.* Less downtime, more productivity.

Automatic Resin refill

Is there enough material left in the reservoir? With the Automatic Refill unit, this question becomes superfluous. Modern sensor technology checks the filling level in the reservoir with split-second precision and automatically starts filling material via a connected material bottle if the filling level should reach a critical minimum mark.*

* Not available on all machine types.

RFID – Tracking for your validated Workflow

Our products support advanced RFID technology to assist you with compliance and workflow tracking. All devices and consumables are equipped with RFID technology. After filling and inserting the material reservoir into the printer, simply scan the bottle and check on the printer display that you have selected the correct material and that the best-before date has not passed.

In addition, when the print process is started, it is automatically checked whether the material selected in the CAM software matches the material in the reservoir in order to avoid incorrect print jobs.

RFID Material identification

The resin bottle is scanned at the printer. The material designation and the best-before date of the material immediately appear on the display of the printer.

Workflow laboratory

D10+

The fast and clean solution for dental practices

RS wash
RS cure

The D10+ gives you instant availability of locally printed 3D parts in the dental office. No special 3D printing knowledge is required here. Thanks to the very simple handling of the system, the costs per print are transparently traceable and can be easily recalculated. Local data preparation or cloud connection to laboratories or design centers enable unique workflows in the process.

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and validated end result.

Performance parameters	D10+	
Building area	90 x 60 mm and 30 x 60 mm	(depending on building platform and reservoir)
Native pixel	+/– 34 µm	
Max. part height	90 mm	
Light source	385 nm UV LED	
Resolution	1280 x 720 px	
Dimension (W × H × D)	335 x 541 x 349 mm	
Connections	WLAN, TCP/IP, USB	
Control	7" LCD-Display, touch-screen	
Consumables	Multiple use possible	

Tailor-made for dentists & practice labs

Clean & environmentally friendly disposal

Open system

Quick & easy system

Zero cleaning effort

Optional Force Feedback

Certified auto calibration (ACCS)

Remote Access available

D20+

Tailor-made for small labs

Low acquisition cost

Open system

The smart printer for laboratories

More flexibility: The D20+ offers a flexible and certified 3D printing solution for laboratories through its open material sys - tem with validated workflows. The printer not only features first-class quality, but also a large printing area and short produc - tion times. The optional high-speed Force Feedback technology further reduces your print times to a minimum.

RS wash
RS cure

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and val - idated end result.

Performance parameters	D20+
Building area	130 x 75 mm
Native pixel	+/– 34 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	HD 1920 x 1080 px
Dimension (W × H × D)	335 x 541 x 349 mm
Connections	WLAN, TCP/IP, USB
Control	7" LCD-Display, touch-screen
New features	Faster print speed Larger LCD screen Touch control

Optional Force Feedback

Material identification (RFID)

Certified auto calibration (ACCS)

Remote Access available

D30+

The powerhouse thanks to automation

The powerful D30+ has been setting new standards in quality and productivity for some time. Thanks to the integrated, patented Automatic Separation unit, your printed parts are automatically separated from the build platform after the printing process is finished and collected in a collection basket. The next print job is started immediately, without manual intervention. Fast and half-automated.

RS wash
RS cure

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and validated end result.

Performance parameters	D30+
Building area	133 x 75 mm
Native pixel	+/– 34 µm
Max. part height	110 mm (with ASM 40 mm)
Light source	385 nm UV LED
Resolution	HD 1920 x 1080 px
Dimension (W × H × D)	480 x 690 x 410 mm
Connections	WLAN, TCP/IP, USB
Control	10" touch-screen
New features	Faster print speed Automatic Separation Module (ASM)

Automatic Separation Module (ASM)

User friendly

Open system

Resin temperature control

Integrated Force Feedback

Material identification (RFID)

Certified auto calibration (ACCS)

Remote Access available

Knowledge Center Access

D50+

The workhorse for professional laboratories

The D50+ is our new workhorse for printing any indication. With a print range three times (!) larger than the D30+ and the optional, patented separation unit, you can catapult the number of pieces per day many times over. Your printed parts are automatically separated from the build platform after printing is finished and collected in a big collection basket. The next print job is then started immediately, without manual intervention. An Automated Refill unit ensures that there is always a sufficient level of printing material in the reservoir.

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and validated end result.

RS wash
RS cure

Performance parameters	D50+
Building area	231 × 130 mm
Native pixel	+/– 30 µm
Max. part height	300 mm (with ASM: 100 mm)
Light source	385 nm LED
Resolution	4K 3840 × 2160 px
Dimension (W × H × D)	600 × 1660 × 570 mm
Connections	WLAN, Ethernet, USB
Control	10" LCD-Display, touch-screen

Automatic Separation Module (ASM)

Automatic Resin Refill unit

Open system

Automatic Separation Module (ASM)

Resin temperature control

Automatic door opener

Material identification (RFID)

Certified auto calibration (ACCS)

Integrated Force Feedback

Remote Access available

D70+

The stand-alone solution for industrial production

The D70+ has everything you need to get your industrial produc - tion of high-quality printed parts up and running. The printer was designed and built for continuous, 24/7 production. Modular high-performance subsystems with a dual-circuit cooling system and heat exchanger ensure optimum operation. An Automatic Refill unit is available as an option and ensures that there is al - ways a sufficient level of print material in the reservoir.

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and val - idated end result.

RS wash
RS cure

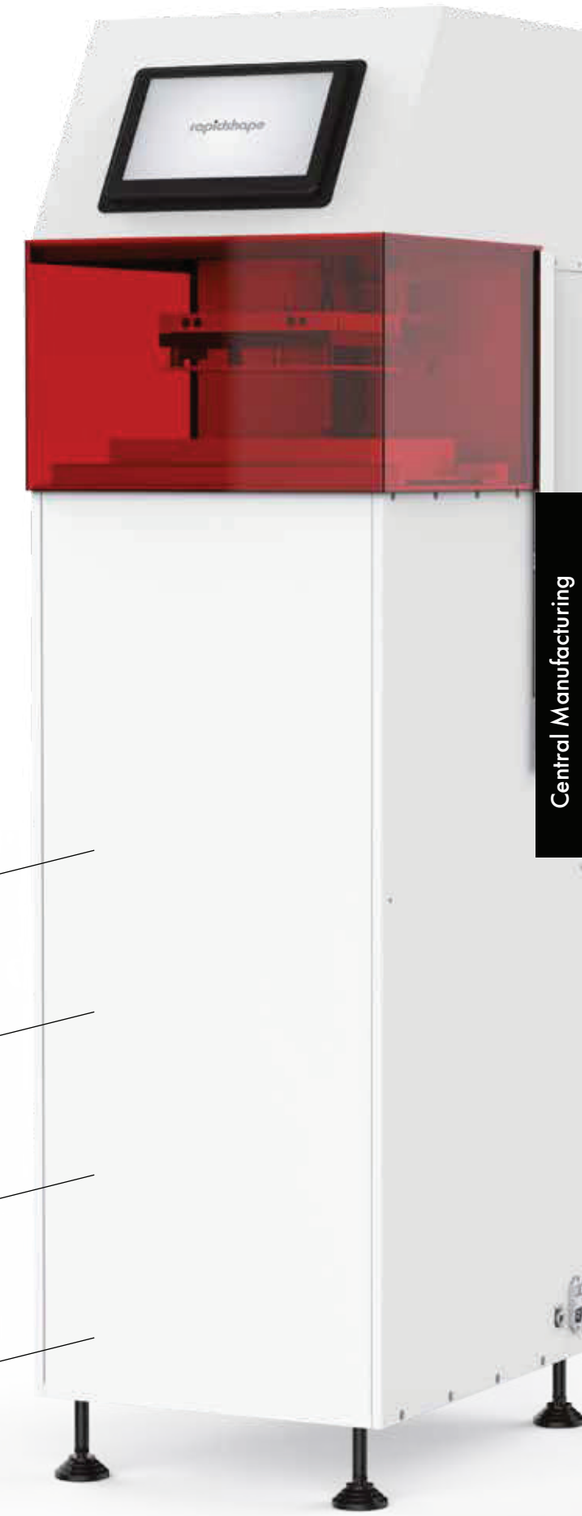
Performance parameters	D70+
Intended use	General dental
Building area	232 x 137 mm
Native pixel	+/– 23 µm
Max. part height	125 mm
Light source	385 nm, ultra high power UV LED
Resolution	4K 3840 x 2160 XPR
Dimension (W × H × D)	443 x 1593 x 625 mm
Connections	TCP/IP, USB
Control	10" touch-screen

Designed for industrial continuous manufacturing

Lowest cost per part

Joint development of applications

Automatic Resin Refill unit



AC controlled interior for continuous use

Certified auto calibration (ACCS)

Optional Automatic Refill

Remote Access available

Central Manufacturing

D90+ with cabinet or inline

Efficient, automated, reliable – Perfect work - flow, maximum speed, and consistent quality

RS wash
RS cure

As a stand-alone solution with connected cabinet or in conjunc - tion with a production line, the D90+ reliably delivers perfect results, day after day. The integrated Automatic and patented Separation unit transports the finished print job after separation either to the connected cabinet with a large collection container or to a downstream conveyor system for direct post-processing. In this way, true in-sequence production is made possible with - out unnecessary downtime.

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and val - idated end result.

Performance parameters	D90+
Building area	232 x 137 mm
Native pixel	+/– 23 µm
Max. part height	80 mm
Light source	385 nm, ultra high power UV LED
Resolution	4K 3640 x 2160 px XPR
Dimension (W × H × D)	625 x 1593 x 443 mm
Connections	TCP/IP, USB
Control	10“ touch-screen
New features	Automation functions High resolution projector Larger print area

Automatic Separation Module (ASM)

Designed for industrial continuous manufacturing

Optional with cabinet or conveyor belt

Automatic Resin Refill unit

Automatic Separation Module (ASM)

Storing for large quantity of printed parts

Automatic Resin Refill

AC controlled interior for continuous use

Certified auto calibration (ACCS)

Remote Access available

D30+ ortho

Print up to 6 models in 25 minutes*

RS wash
RS cure

The D30+ is optimized for producing ortho indications and offers you a customized solution for your applications. Use the extra-large build area for fabricating validated ortho models, as well as custom trays. The temperature-controlled material reservoir ensures high process stability and consistent printing results even during continuous operation.

Clean and cure your parts directly after printing with the RS wash and RS cure post-processing units for an optimal and val - idated end result.

Performance parameters	D30+ ortho
Building area	165 x 93 mm
Native pixel	+/– 42 µm
Max. part height	110 mm
Light source	405 nm UV LED
Resolution	HD 1920 x 1080 px
Dimension (W × H × D)	480 x 690 x 410 mm
Connections	WLAN, TCP/IP, USB
Control	10“ touch-screen

* Time specification based on optimal build platform utilization and standard print models.

24/7 Designed for industrial continuous manufacturing

User friendly

Open system

Resin temperature control

Integrated Force Feedback

Material identification (RFID)

Certified auto calibration (ACCS)

Remote Access available

D100+ ortho with cabinet or inline

Up to 24 ortho models in approx. 30 minutes*

Industrial ortho model production at the next level

The D100+ meets the requirements with a wide pressure range and validated ortho-model as well as aligner precision. Long-lasting reproducible quality make it a 24/7 production unit with industrial projection system and internal cooling for system components. As a stand-alone solution or in conjunction with a production line, it delivers perfect results. For true in-sequence production without breaks and unnecessary down-time.

	RS inline	models in 10 hrs.	models in 24 hrs.
Realistic (measured at the customer)	1 x D100+ 5 x D100+	300 1500	800 4000
Best Case (standardized, flat models)	1 x D100+ 5 x D100+	500 2500	1200 6000

Performance parameters	D100+ ortho
Building area	338 x 190 mm
Native pixel	+/– 44 µm
Max. part height	80 mm
Light source	405 nm, ultra high power UV LED
Resolution	4K 3840 x 2160 XPR
Dimension (W × H × D)	625 x 1593 x 443 mm
Connections	TCP/IP, USB
Control	10" touch-screen
Versions	Cabinet Inline (Specifications on request)

*based on optimal build platform utilization

- Automatic Separation Module (ASM)
- Designed for industrial continuous manufacturing
- Optional with cabinet or conveyor belt
- Lowest cost per part
- Automatic Resin Refill unit

Automatic Separation Module (ASM)

Automatic Resin Refill

AC controlled interior for continuous use

Certified auto calibration (ACCS)

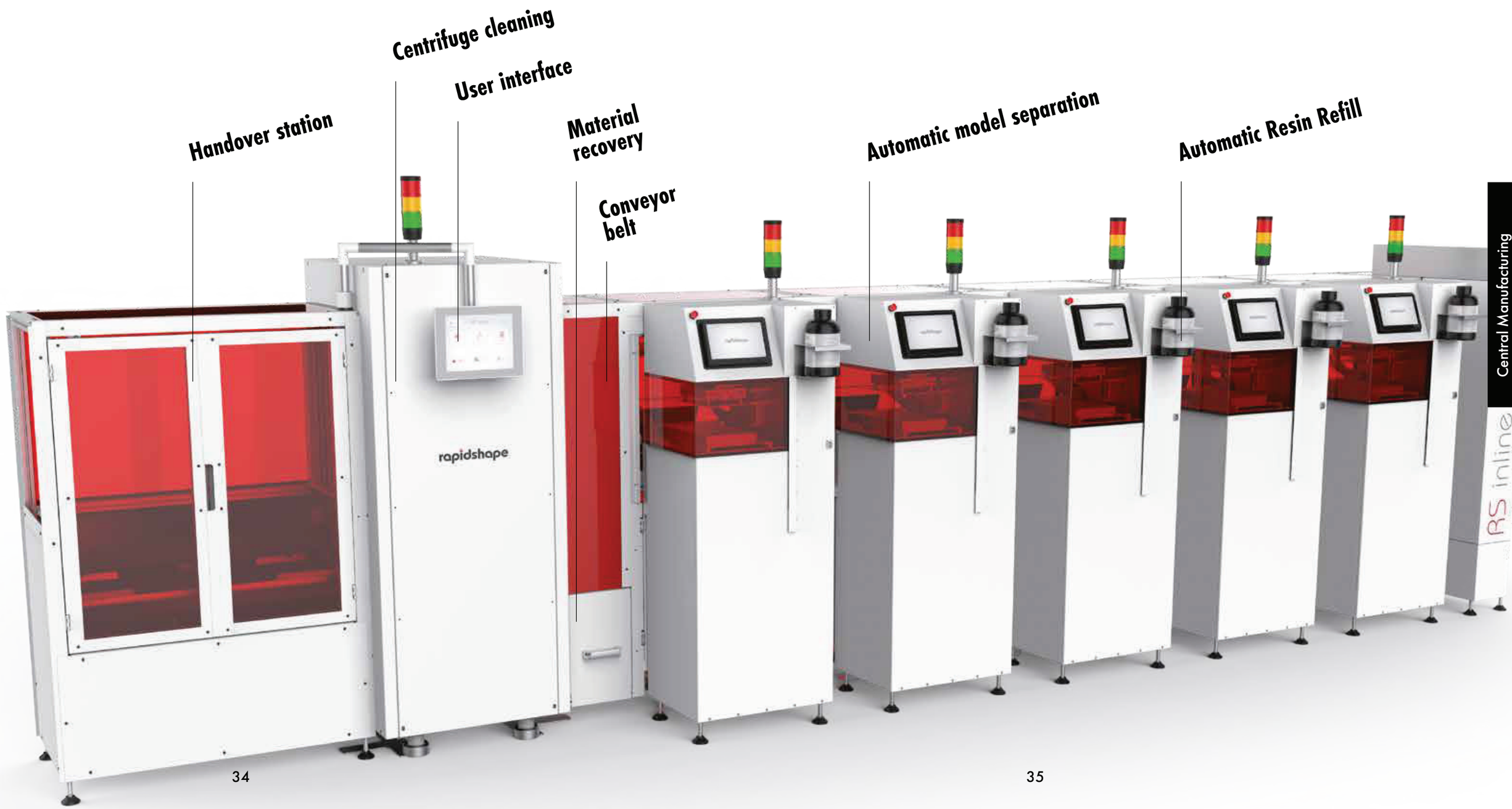
Remote Access available

RS inline

Scalable from 2-5, for 1-, 2-, or 3-shift operation

The fully automated system for up to 4,000 dental models per day for transparent aligners. Material recycling throughout the handling and cleaning process.

More than 90 percent of uncured material is recovered for 3D printing.



RS wash

Wireless connectivity to printer

Clean process, no handling of sticky resins

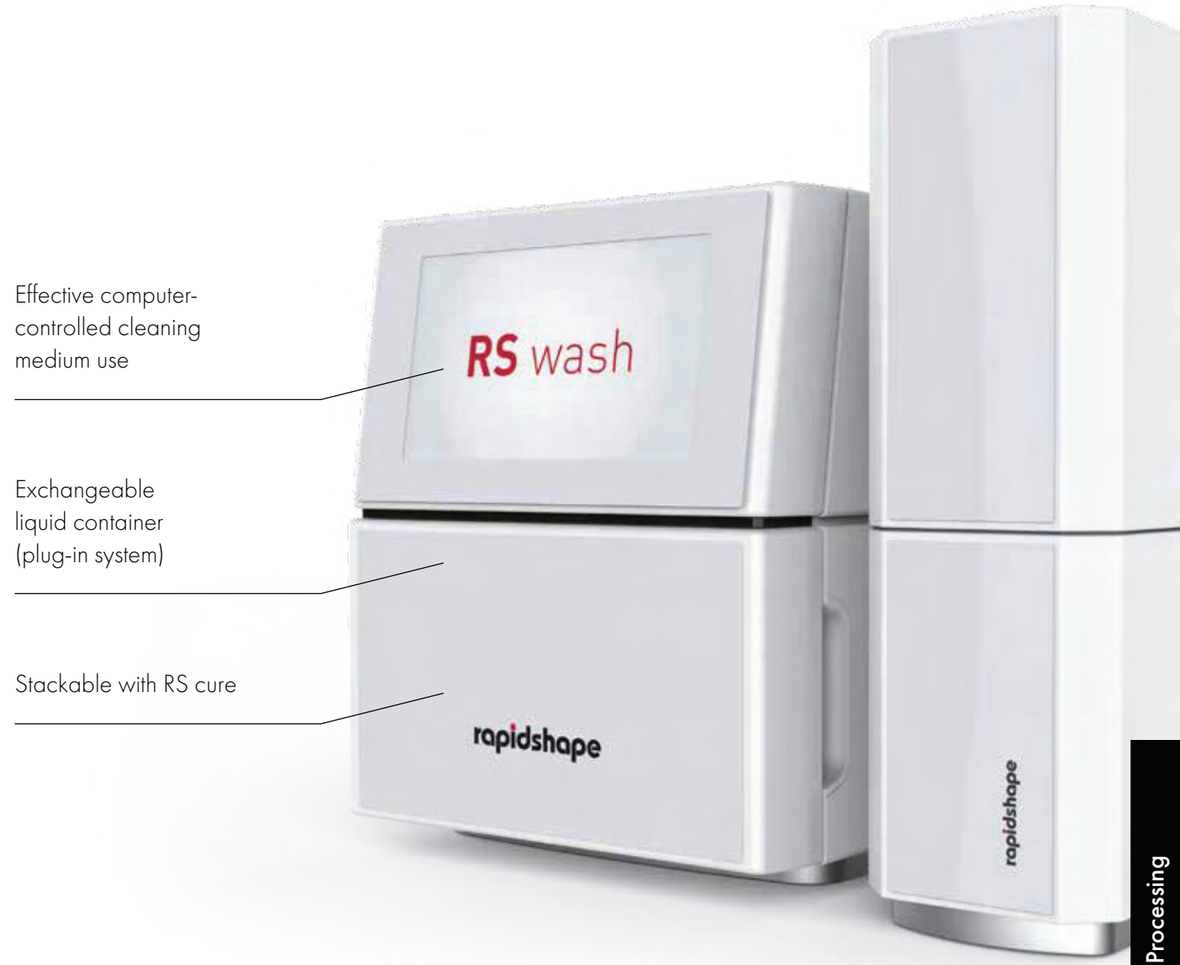
Reduced smell

For the perfect finish of your components – Automated and environmentally friendly cleaning

The RS wash automatic cleaning system excels thanks to its simple operation and process-controlled connection to your printer, for professional and validated post-processing of your printed parts.

Thanks to automatic selection of the appropriate cleaning pro - gram and cleaning medium, cleaning the printed parts is not only process-safe and simple, but also environmentally friendly thanks to a 2-step principle with pre-cleaning and final clean - ing. (patent pending)

Performance parameters	RS wash
Volume	130 x 75 x 60 mm
Cleaning time	approx 6–8 minutes (depending on material)
Cleaning medium	Isopropanol, ethanol
Connections	WLAN/LAN
Dimension (W × H × D)	230 x 270 x 450 mm



Effective computer-controlled cleaning medium use

Exchangeable liquid container (plug-in system)

Stackable with RS cure

RS cure

For the perfect finish of your components: 360° curing at the touch of a button

The RS cure automatic exposure system cures your printed parts homogeneously from all sides thanks to powerful LEDs. The integrated vacuum technology enables excellent curing of the materials. Thus, the materials can be processed validated by many material manufacturers. The process-controlled connection to your printer ensures that the correct program is always automatically selected and that the mechanical properties and biocompatibility of the end product are achieved. The pre-settings are tested and validated in close cooperation with the material partners to ensure process reliability.

Performance parameters	RS cure
Volume	130 x 75 x 60 mm
Curing time	approx 6–10 minutes (depending on material)
Connections	WLAN/LAN
Dimension (W × H × D)	230 x 270 x 380 mm
Version	with vacuum

Wireless connectivity to printer

Validated process

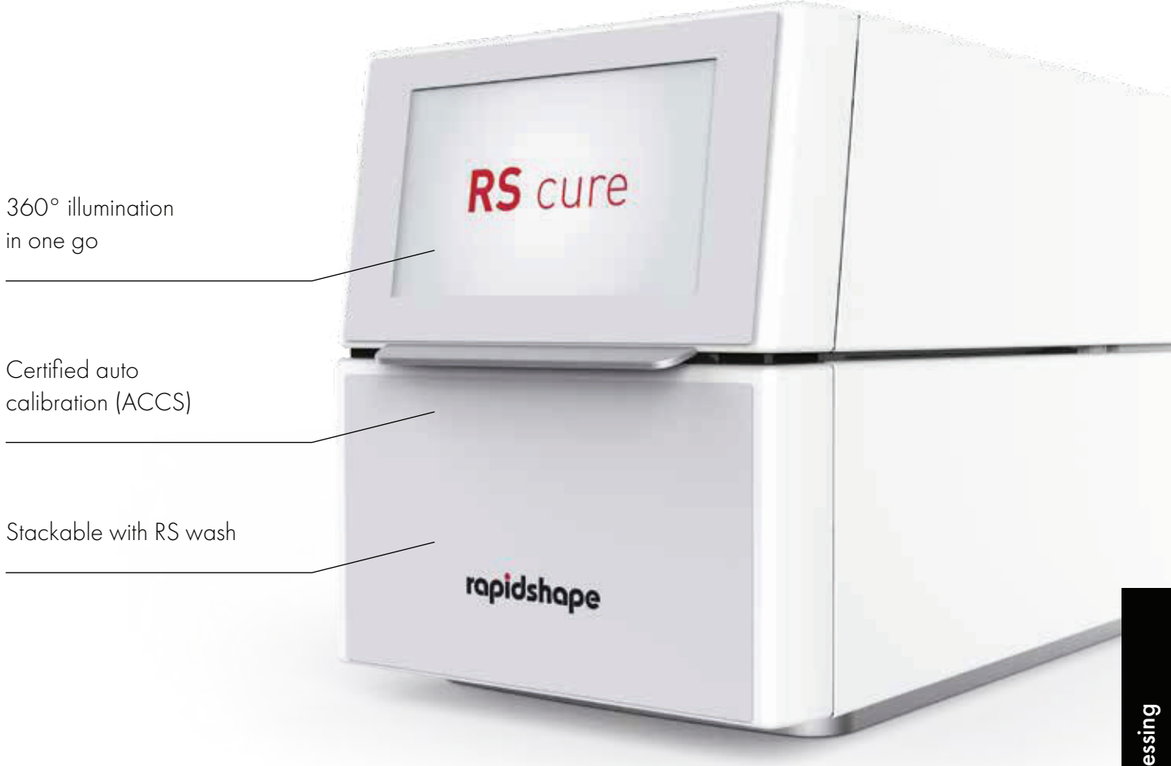
Compatibel with various material suppliers

Works with vacuum

360° illumination in one go

Certified auto calibration (ACCS)

Stackable with RS wash



For best Results

Material Partners

Rapid Shape and the leading material manufacturers combine their strengths for maximum flexibility and unlimited availability. This allows us to support a jointly validated workflow through - out. In close cooperation and at the highest level, new material parameters are created every day that are precisely matched to our products and that bring you the best possible end results.

Over 200 validated materials are available in our material li - brary, each with a tested and approved set of printing param - eters. You'll receive regular material updates for your material library to stay current and have the widest selection available.

Yet one thing always remains the same: You have the choice of which material you want to work with. With the free parameter sets, you can create and manage your own parameter sets.

An open system with over 200 validated materials included

An End-to-End Digital Workflow

Software

exocad

dental wings

straumann group
Digital Solutions

3shape

AUTODESK NETFABB

While the production of 3D-printed parts is always subject to the same workflow, with our strong workflow partners, all avenues are open to you. With the latest version of our Net - fabb CAM software, we offer a seamless connection to Dental Wings, 3Shape, and Exocad. That means: Design parameters, data transfer, and print preparation functions are preconfigured and automated.

Material pre-selection, part orientation and positioning on the build platform, adding necessary support structures, and the final creation of the print data - our software does it all for you. What else is there to do? Press “Start.”

Proven Performance

Satisfied customers

Over 3,000 satisfied customers worldwide can't be wrong. This is the best proof of quality and service. We maintain a trusting relationship with our customers. Many have been with us since our company was founded in 2011 and know how passionate we are about developing high-quality 3D printing machines. Our success is based on this passion, the comprehensive exper - tise of our engineers and that of all our employees.

clearcorrect

COREFRONT

LAXMI DENTAL GROUP

ORTHOS

straumann

DESIGN | SCANNING | 3D PRINTING | MILLING | MATERIALS | POST-PROCESSING

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EXPLORE DENTAL MILLING MACHINES