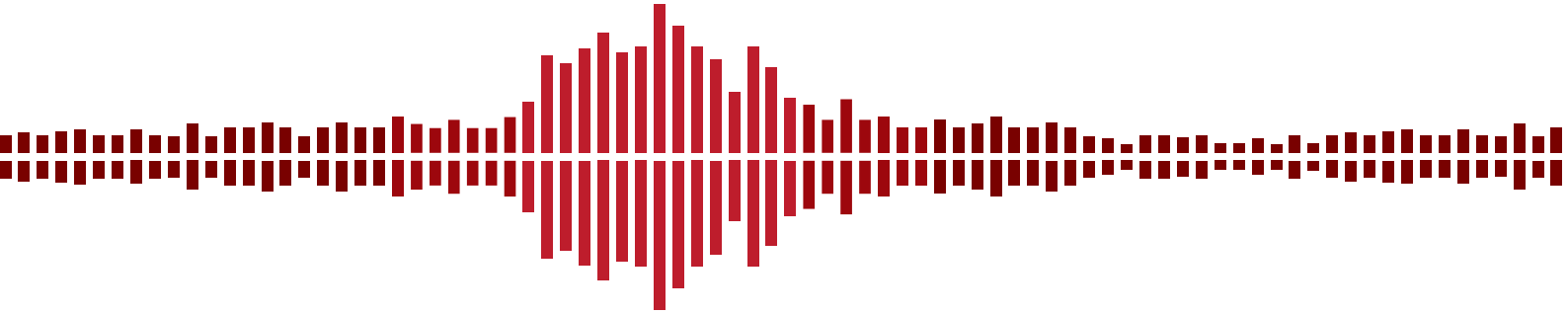
Professional 3D printing solutions for perfectly printed hearing aid parts

2022



rapidshape
HEARING

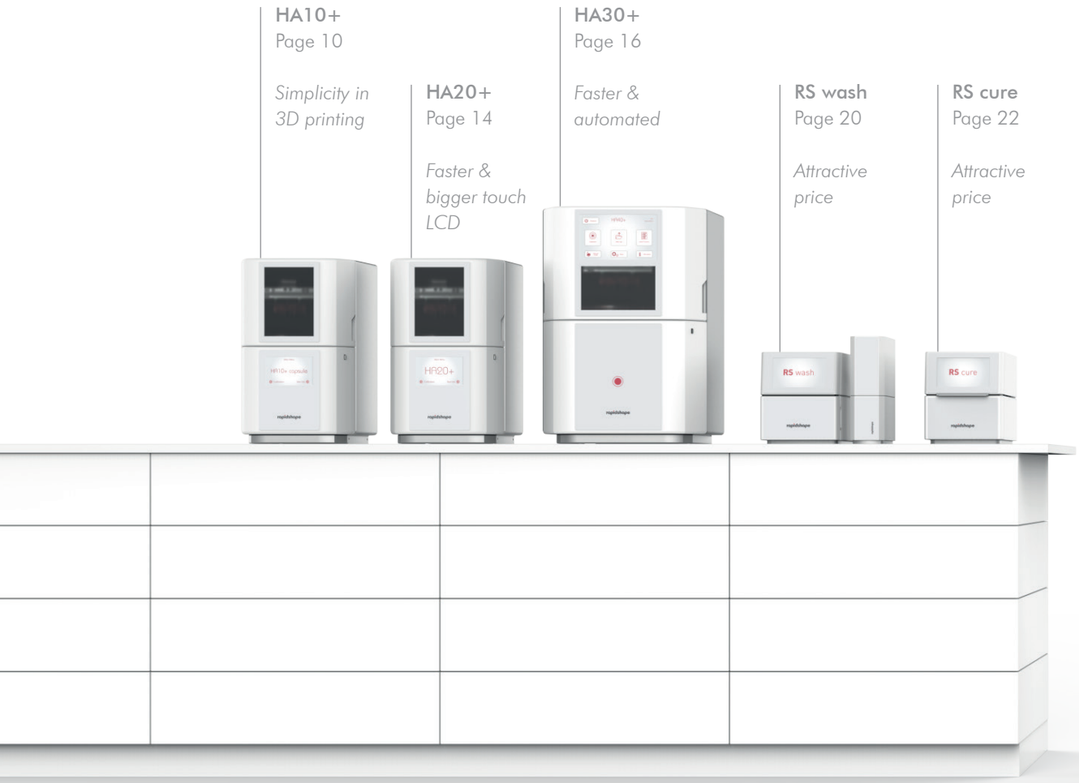
Andreas Schultheiss
CEO Rapid Shape GmbH

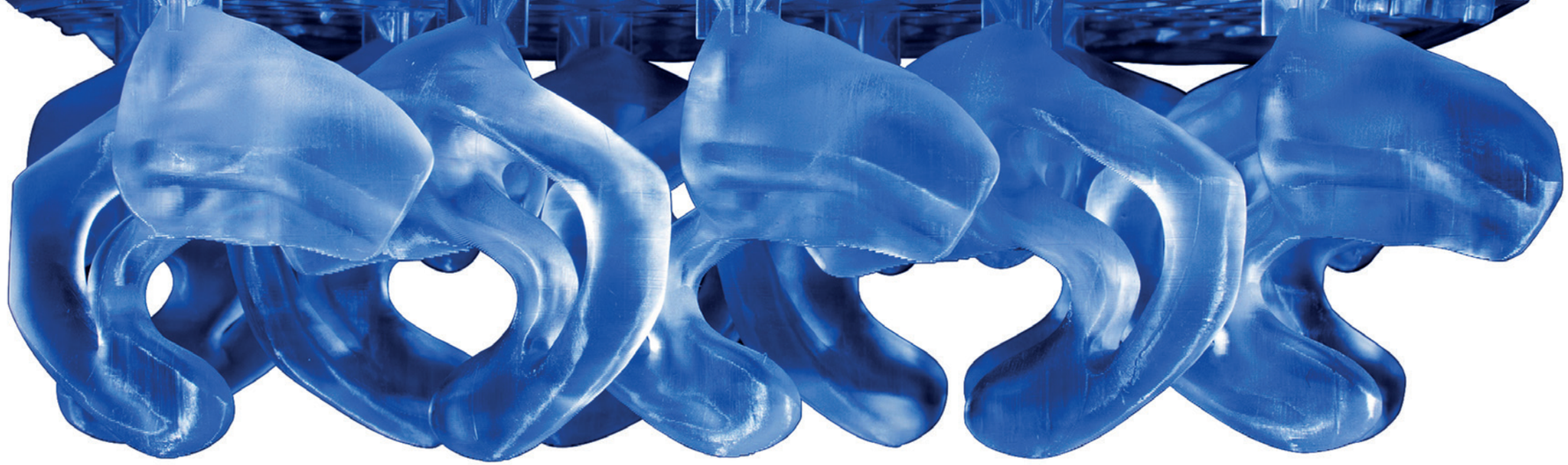
Andreas Geitner
CTO Rapid Shape GmbH

Our mission is to reinvent ourselves again and again. We listen to the needs of our customers and develop professional and certified solutions based on our strong experience.

Making everyday work easier for our customers through professional 3D printing, finding new solutions and innovating existing ones – that is our drive.

Professional solutions for audio retailers, shops, labs and producers





30 pieces printed in 35 minutes

Rapid Shape® 3D hearing aid printers are extremely versatile and are printing validated end products at top speed.

30 x **Ear molds with cone** printed in 35 minutes

30 x **Casts for silicon** printed in 35 minutes

33 x **Integrated faceplate** pieces printed in 30 minutes

33 x **Custom shell ITE's** printed in 30 minutes

33 x **Hearing protections** printed in 30 minutes

All mentioned printing times are based on jobs done on a HA20+ using Force Feedback Technology.

Simplicity in 3D printing at its best

HA10+

The easy to use solution for fast 3D printing of hearing aid parts in small labs, distant retailers or even shops.

The HA10+ enables immediate local availability of validated 3D printed parts. Validated workflows and a very easy handling allow onsite 3D printing without specialist knowledge. Local data preparation or cloud connection to labs or design centres make unique workflows possible.

Performance parameters	HA10+
Building area	30 × 60 mm and 60 × 90 mm
Native pixel	+/-34,5 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	1280 × 720 px
Dimension (W × H × D)	335 × 541 × 349 mm
Connections	WLAN, TCP/IP, USB
Control	7“ LCD-Display, touch control

Quick & easy system

Zero cleaning effort

Material identification (RFID)

Certified auto calibration (ACCS)

Remote control by TeamViewer®

Optional Force Feedback

Simple operation

Clean & environmentally friendly disposal

Open system

Economic 3D printing solutions for high quality, flexible and fast delivery labs

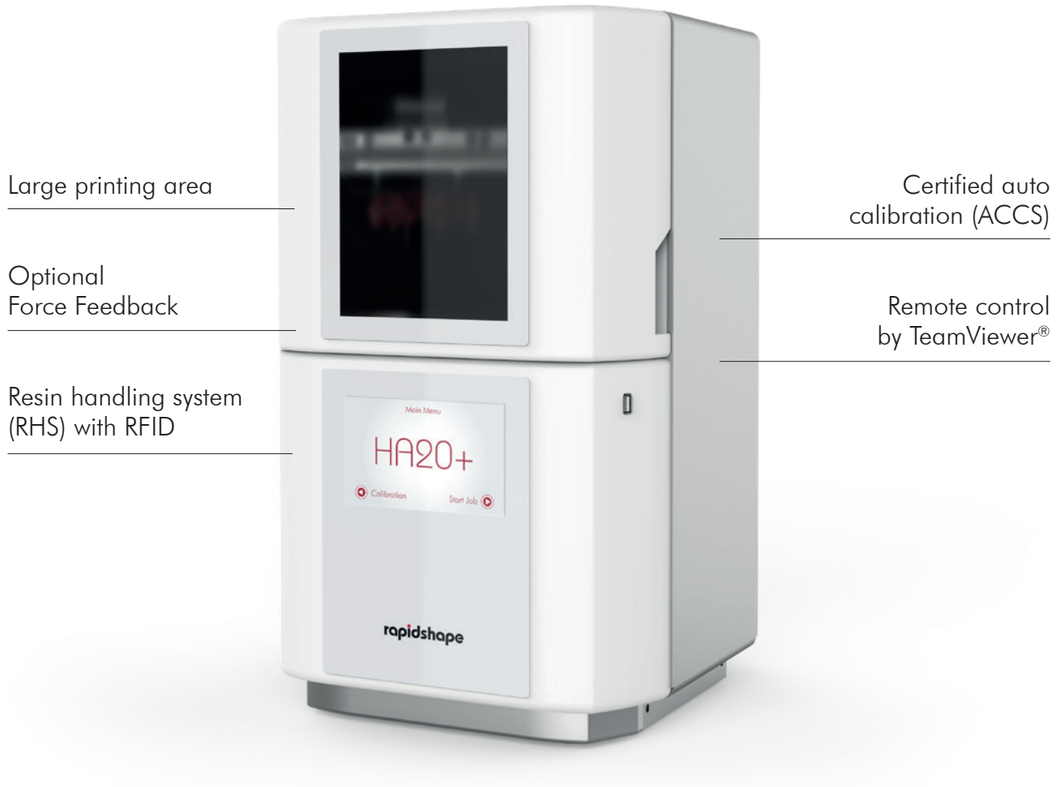
HA20+

The most economic professional 3D printing solution for hearing aid labs and medium-sized producers.

The HA20+ features a large build area for approx. 30 pieces and combines the fastest speed (patented force feedback technology) needed for immediate patient care with high accuracy and full material choice.

The high quality DLP printer has a long lifespan with consistent quality over time at an attractive price level.

Performance parameters	HA20+
Building area	133 × 75 mm
Native pixel	+/– 34,5 µm
Max. part height	90 mm
Light source	385 nm UV LED
Resolution	HD 1920 × 1080 px
Dimension (W × H × D)	335 × 541 × 349 mm
Connections	WLAN, TCP/IP, USB
Control	7" LCD-Display, touch control
New features compared to HA II series	Faster print speed Larger LCD screen Touch control Full cloud connectivity



Low acquisition cost

Small space requirement

Open system

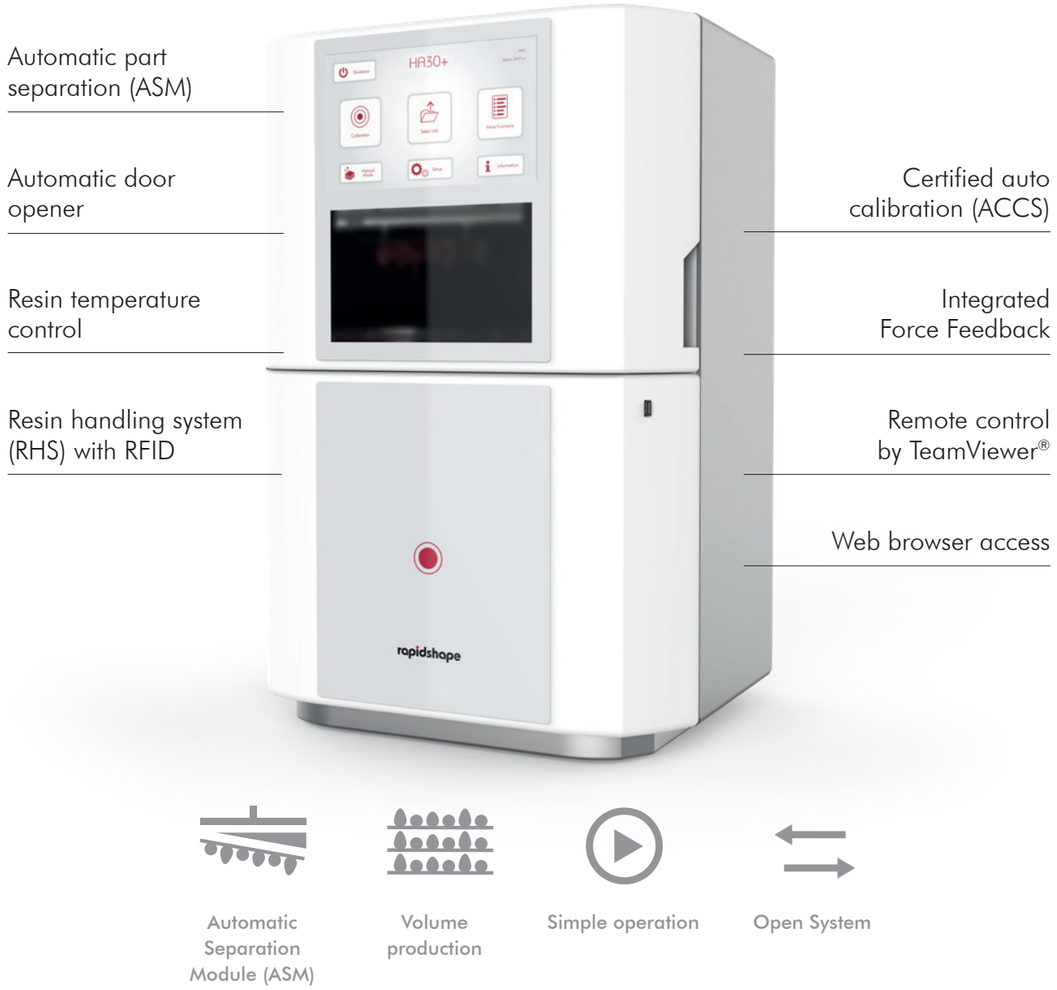
HA30+

Fast, flexible and semi-automated: The workhorse for professional producers.

The powerful HA30+ again sets new standards in terms of quality and productivity. The automatic part separation module enables cutting of parts without manual operation. The next print jobs starts immediately after separation (patents pending).

The simple operation and automation of process are convincing for professional and validated use. Furthermore, the temperature-controlled resin reservoir provides process stability and increases part quality even more.

Performance parameters	HA30+
Building area	151 × 85 mm
Native pixel	+/– 39 µm
Max. part height	110 mm (with ASM: 45 mm)
Light source	385 nm UV LED
Resolution	HD 1920 × 1080 px
Dimension (W × H × D)	480 × 690 × 410 mm
Connections	WLAN, TCP/IP, USB
Control	10" touch-screen
New features compared to HA II series	Faster print speed Automatic part separation module Full cloud connectivity



HA50+

Hands-free opening, enlarged build area and movable: The perfect start into mass production.

The innovative HA50+ is characterized by outstanding quality, productivity, speed and convenience. The free-standing model offers a particularly large printing area, which is ideal for starting large-scale production. The automated cutting module enables parts to be peeled off without manual operation. The next print jobs begin immediately after the separation – an immense time saver! In addition, the device has an automatic resin refill and can easily moved and flexibly positioned.

Performance parameters	HA50+
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 control

Automatic part separation (ASM)

Automatic door opener

Resin temperature control

Resin handling system (RHS) with RFID

Certified auto calibration (ACCS)

Integrated Force Feedback

Remote control by TeamViewer®

Web browser access

Automatic Separation Module (ASM)

High volume production

Simple operation

Open System

RS wash

Perfect finish for 3D printed hearing aid products: automatic and environmentally-friendly cleaning.

The RS wash automated cleaning system boasts several new features to make cleaning particularly safe and easy (patents pending).

Fully automatic cleaning in just about 6-8 minutes and clean handling of sticky resins are made possible. The consumption of cleaning agents is reduced to a minimum, while ensuring optimal results. For easiest handling, the RS wash is intelligently connected to the printer.

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

Integrated 6″ touch-screen

Ergonomic design

Effective computer-controlled liquid use

Exchangeable liquid container (plug-in system)

Stackable with RS cure

No time consuming cleaning

Clean process, no handling of sticky resins

Reduced smell

Intelligent connectivity to printer and RS cure

RS cure

Safety and speed throughout the entire production process: 360° curing with certified programs.

The automated RS cure unit offers a validated material curing in just about 6-10 minutes. The illumination system cures homogeneously from all sides by powerful LEDs in combination with heating and a defined atmosphere (patents pending). The radiation covers the UVA and UVB spectrum.

Mechanical properties and biocompatibility of the final product is certified by various material suppliers. Equipped with a data link to the 3D printer, the right curing program is pre-selected and starts with the touch of a finger.

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

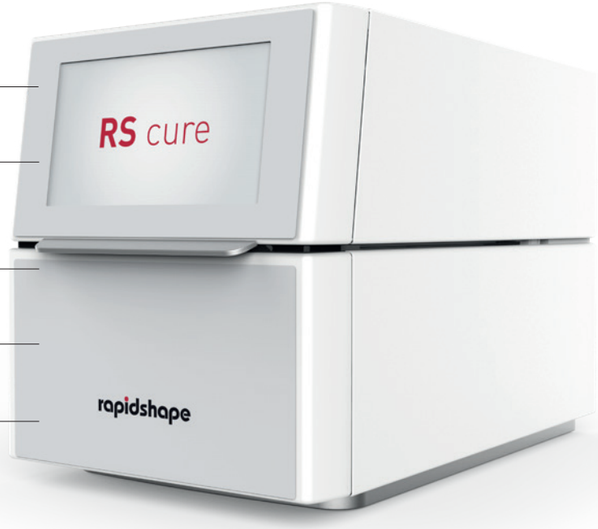
Integrated 6″ touch-screen

Ergonomic design

Certified auto calibration (ACCS)

360° illumination in one go

Stackable with RS wash



Validated process

Compatibel with various material suppliers

Works with vacuum

Intelligent connectivity to printer and RS wash

Industrial manufacturing solutions: Stand-alone or in sequence with full automation

HA70+

The stand-alone 3D printer model for centralized production.

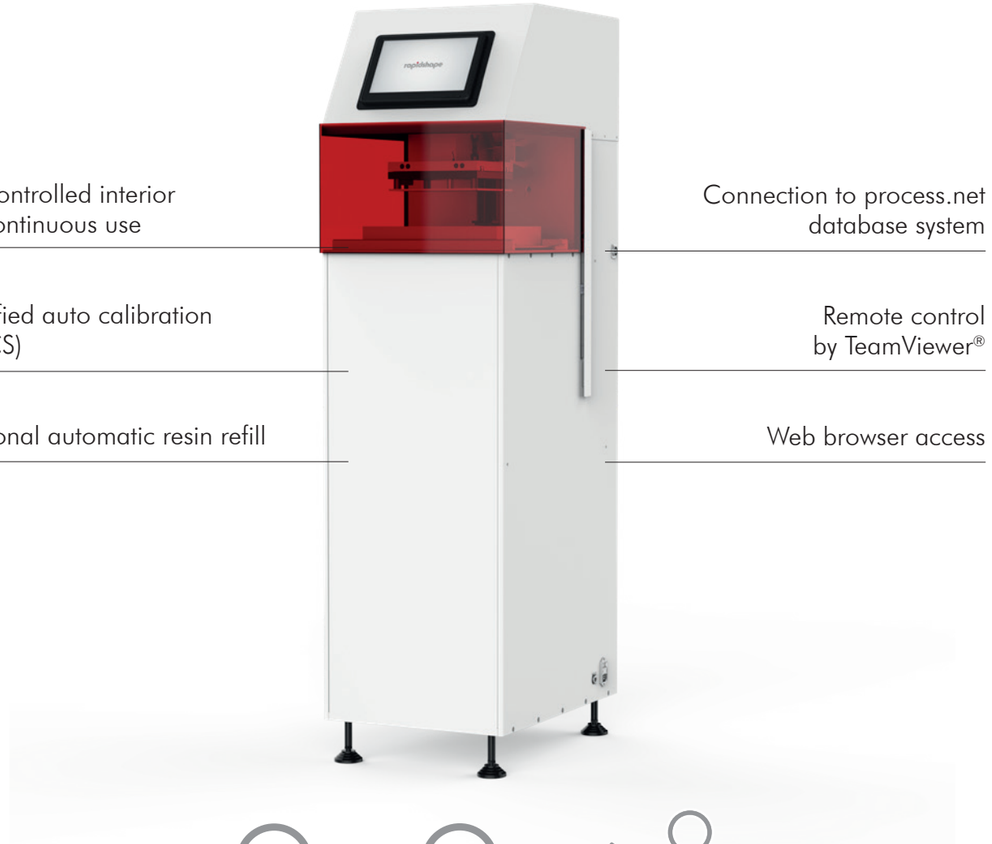
Rapid Shape HA70+ offers all features for the volume production of high-quality hearing aid products. A true industrial printer engineered for 24/7 production under 100 % load. Modular high-performance sub-systems including a dual-circuit cooling system with heat exchanger ensures optimal operation. The open system architecture allows a wide range of materials.

Performance parameters	HA70+
Building area	232 × 137 mm
Native pixel	+/– 22,5 µm
Max. part height	150 mm
Light source	385 nm, ultra high power UV LED
Resolution	4K 3640 × 2160 px XPR
Dimension (W × H × D)	443 × 1593 × 625 mm
Connections	TCP/IP, USB
Control	10" touch-screen

AC controlled interior for continuous use

Certified auto calibration (ACCS)

Optional automatic resin refill



Connection to process.net database system

Remote control by TeamViewer®

Web browser access

24/7

Industrial continuous manufacturing

€/pcs

Lowest cost per part

Joint development of applications

HA90+ with ASM

The automated, in-sequence 3D printer model for industrial production.

High reliability, high sturdiness, reproducible quality over time make this a 24/7 production unit with industrial projection system, internal cooling for system components. Robot-supported functions are enabled through the automated part separation module (ASM).

Performance parameters	HA90+
Building area	232 × 137 mm
Native pixel	+/– 22,5 µm
Max. part height	150 mm
Light source	385nm, ultra high power UV LED
Resolution	4K 3640 × 2160 px XPR
Dimension (W × H × D)	625 × 1593 × 443 mm
Connections	TCP/IP, USB
Control	10" touch-screen
New features compared to HA II series	Automation functions High resolution projector Larger print area

Part separation module (ASM)

Storing for large quantity of printed parts

Automatic resin refill

AC controlled interior for continuous use

Certified auto calibration (ACCS)

Remote control by TeamViewer®

Web browser access

Connection to process.net database system

Automatic Separation Module (ASM)

Optional with cabinet or conveyor belt

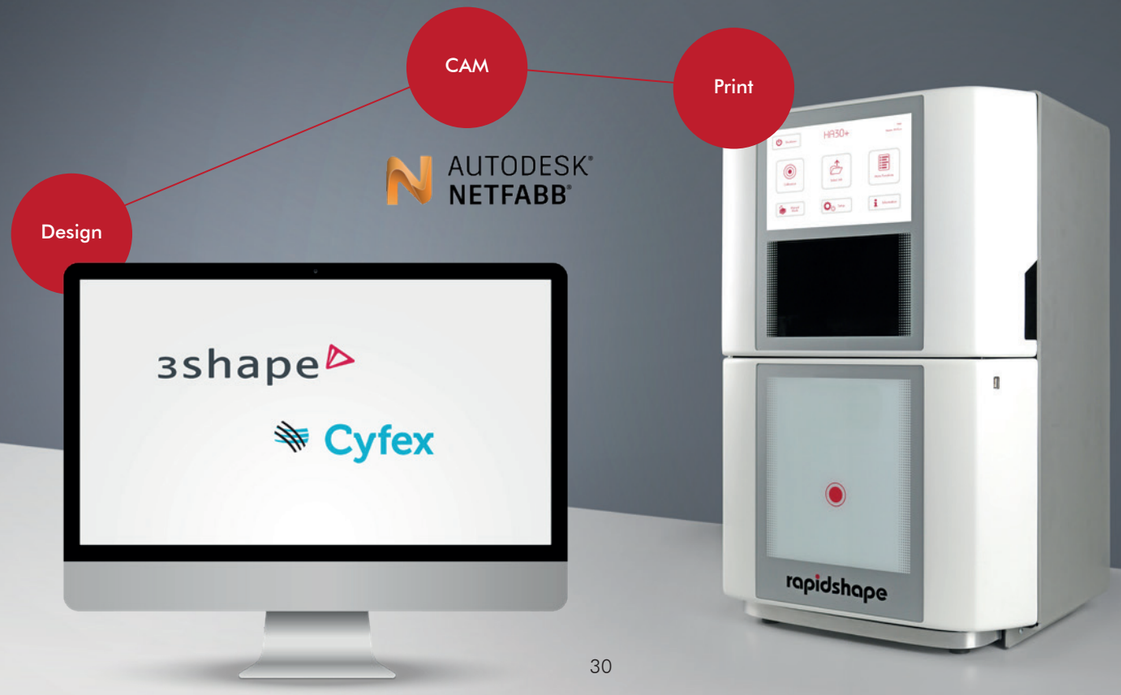
Industrial continuous manufacturing

The integrated workflow: interlinked, easy, adaptable

Rapid Shape supports the user from start to finish. With the integration of design parameters, data transmission and print preparation functions are preconfigured and automated. In addition through the cloud, Rapid Shape 3D printers can be connected to every laboratory.

Integrated workflows feature autonomous

- part orientation
- part positioning
- adding necessary supports
- build creation



With Rapid Shape you have the full choice

Rapid Shapes open system and collaboration with leading material manufacturers provides reliability as well as full flexibility and availability. Rapid Shape and its partners offer certified workflows for guaranteed biocompatibility.

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Users who have already placed their trust in us

audifon hearing systems
Comfoor
DGS
Dreve
elacin hearing protection – a sound experience
GAES Centros Auditivos
GEERS GUTES HÖREN
HÖRLUCHS® Gehörschutzsysteme MADE IN GERMANY
KIND DAS GANZE LEBEN HÖREN
ReSound GN
sivantos the hearing company
sonova HEAR THE WORLD

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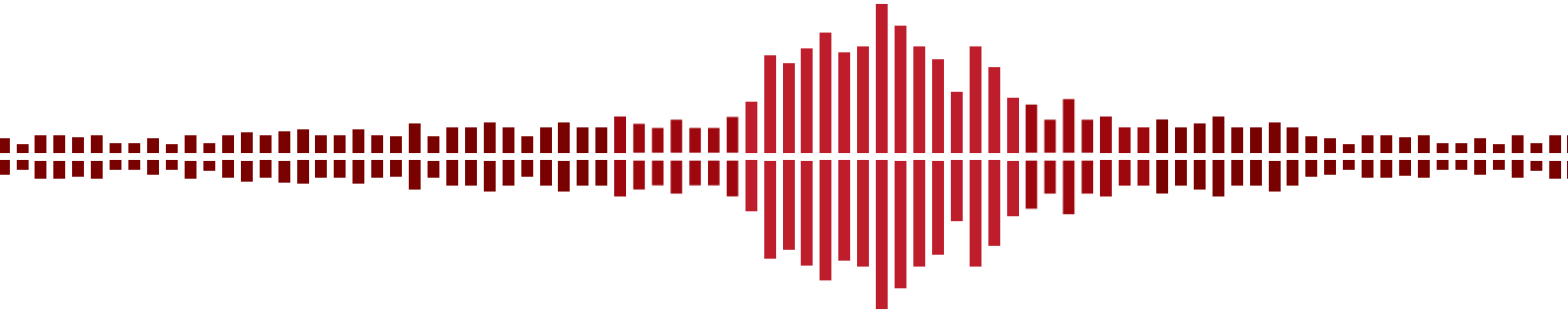
rapidshape

Rapid Shape GmbH
Römerstrasse 21
71296 Heimsheim
Germany

+49 7033 3098780
sales@rapidshape.de

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