2onelab

Build & Create

Your complete 3D Metal Printing Ecosystem for the Dental Industry

- Versatile Combinations
- Easy Operation
- Time and Resource Efficiency

Our mission is to empower our customers to unlock the full potential of Additive Manufacturing — helping them streamline processes, save valuable time, reduce costs, and optimize resources.

2onelab

Innovation from Germany

We are the Experts for 3D Metal Printing and Additive Manufacturing
At 2onelab, we are experts in digital dental manufacturing. With passion, we develop customized solutions for dental laboratories to make additive manufacturing simpler, more efficient, and cost-effective. Our goal is to reduce the complexity of 3D printing and make cutting-edge technologies accessible to all laboratories.

Markus Wolf
Founder & CTO

Ran Reznik
Founder & CEO

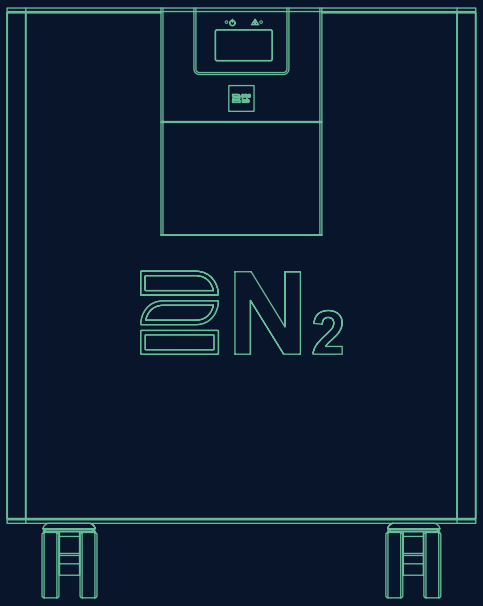
Our Partners

Worldwide Quality Network

Our vision is to advance additive manufacturing in the dental industry and set new standards for efficiency, precision, and quality in dental laboratories.

With our systems, we aim to reach every laboratory so that everyone can benefit from a seamless digital process chain.

Your Dental Ecosystem for 3D Metal Printing



2Create & 2Create Plus

3D Printer

Discover endless possibilities with the 2Create and 2Create Plus metal 3D printer. The user-friendly interface and flexible material selection provide an innovative solution for your projects.

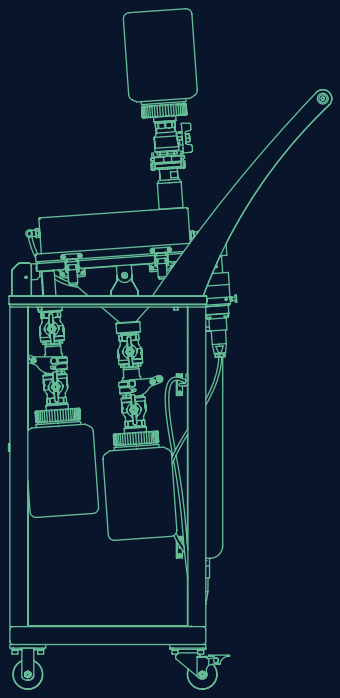
2N2

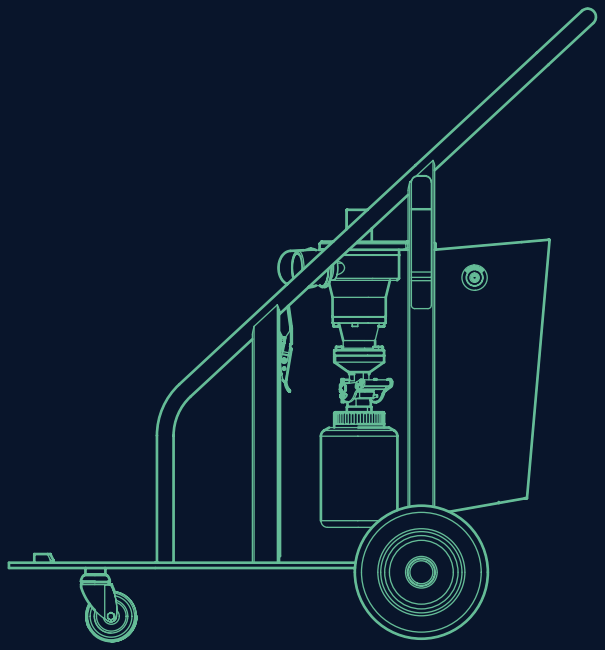
Self-Sufficient Nitrogen Supply

The Nitrogen Generator is used to supply the 2Create and 2Create Plus with nitrogen gas at the push of a button, to reduce the oxygen amount in the building chamber to prevent material from oxidation.

2onelab — Our Hardware

Build & Create





2Sieve

Ultrasonic Sieving System

Whether it is titanium, cobalt-chrome, aluminum or any alloy, the sieving system 2Sieve helps you to optimize the powder quality to achieve optimal printing results.

2Clean

Precision in Powder Recovery

Effortless cleaning with the 2Clean Cleaning System. The 2Clean comprises an explosion-proof vacuum powered by compressed air, meeting the stringent standards of ATEX directive.

The only 3D Metal Printer you will need!

Printing of mixed plates
Crowns, bridges, partials on one platform

Optimal parameters for perfect fitting
Less post-processing

Fast printing
One full platform in only 3 hours

Up to 60% more efficiency
Reuse the platform and powder

Low running costs
Low energy consumption, long life filters, low maintenance

No specialists needed
Learn the software and the workflow in only two days!

CAM software
2Build, optional: Oqcam (Oqton)

2onelab – Our Hardware 2Create & 2Create Plus

2Create

Technical Data

Process:	Powder Bed Fusion
Build Volume:	100 x 100 mm
Powder Reservoir:	100 x 200 mm
Coater:	Rotation Precision Coater
Inert Gas:	Nitrogen/Argon
Layer Thickness:	30 - 60µm
Weight:	450 kg
Dimensions (W x D x H):	720 x 860 x 1790 mm

Basic Build Volume and Envelope Size

2Create Plus

Technical Data

Process:	Powder Bed Fusion
Build Volume:	150 x 150 x 100 mm
Powder Reservoir:	150 x 150 x 200 mm
Coater:	Linear Coater
Inert Gas:	Nitrogen/Argon
Layer Thickness:	20 - 60µm
Weight:	450 kg
Dimensions (W x D x H):	720 x 860 x 1790 mm

Advanced Build Volume and Envelope Size

2onelab — Our Hardware 2Create & 2Create Plus

Your complete Dental Ecosystem for 3D Metal Printing

Discover endless possibilities with the 2Create and 2Create Plus metal 3D printer. The user-friendly interface and flexible material selection provide an innovative solution for your projects.

Fast material change
Change your powder within 20 minutes

Plug & Play
Ready to start printing titanium & other alloys

Instant Printing
Ready to print in below 5 minutes

2onelab – Our Hardware 2Create & 2Create Plus

Optimized for
Dental Applications

Crowns, Bridges and Partials / CoCr / **built in 3,5h**

Our solutions provide the flexibility and speed you need for efficient production of crowns, bridges, partials, and ortho bands.

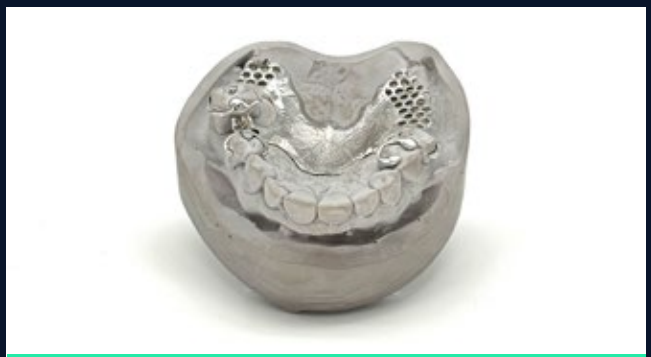
We understand the specific requirements of your dental lab and offer solutions that enable quicker response, enhance your product quality, and reduce your operational costs.

Various Dental Applications / CoCr / **8,5h**

RPEs / Stainless Steel / **2,5h**

2Create Plus Plate with Partials / **8,5h**

RPDs / Crowns and Bridges / CoCr / **4h**



Polished Partial on a Model

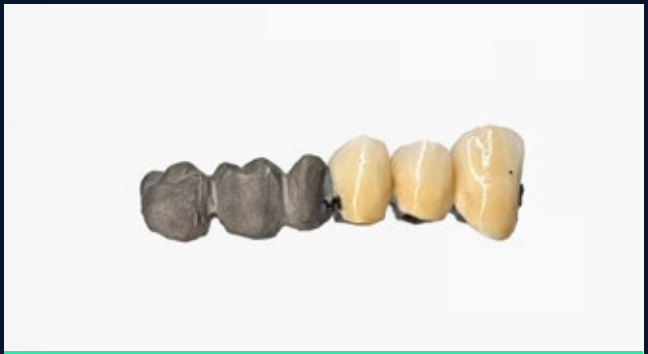
2onelab — Optimized for Dental Applications

Circular Bridge with Ceramic Finishing

Circular Bridge

RPE Stainess Steel with Welded Expander 1

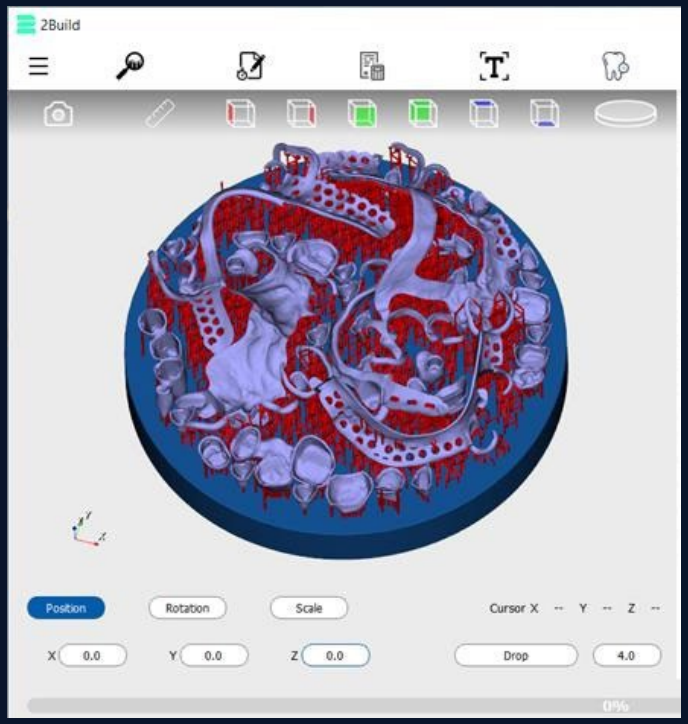
RPE Stainess Steel with Welded Expander 2



Partially Ceramic-Coated Bridge

2Build

An innovative CAM software developed for smart automation – Print what you want, exactly the way you want



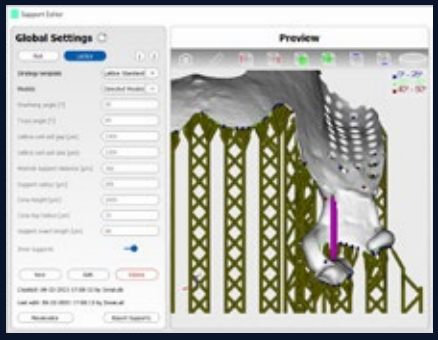
Nesting
High-speed nesting saves valuable post-processing time

Support Generation
Sophisticated, fully automated support generation

Strategy Editor
Select parameters for various powder types

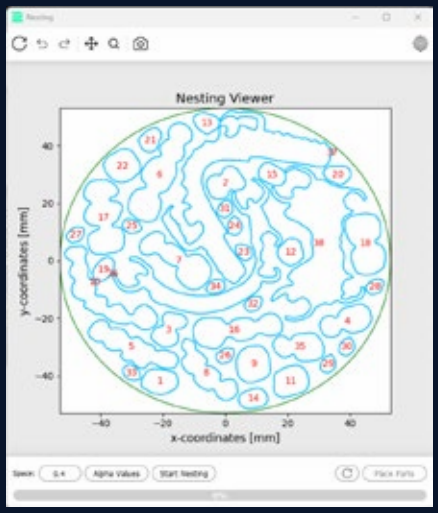
Slicing
Fast slicing calculation of the job file, ready for printing

2onelab – Our Software 2Build



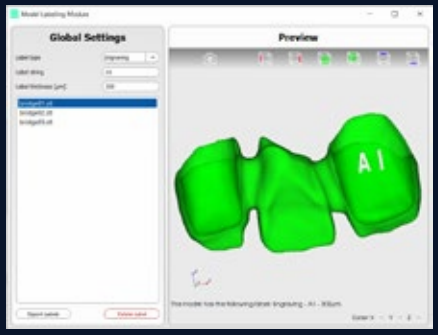
Support Editor

Supports are designed for distortion-free printing and the generation of lattice/rod supports.



Nesting

Automated placement of your parts, optimized for maximum part count and the highest density on the build plate.



Labeling

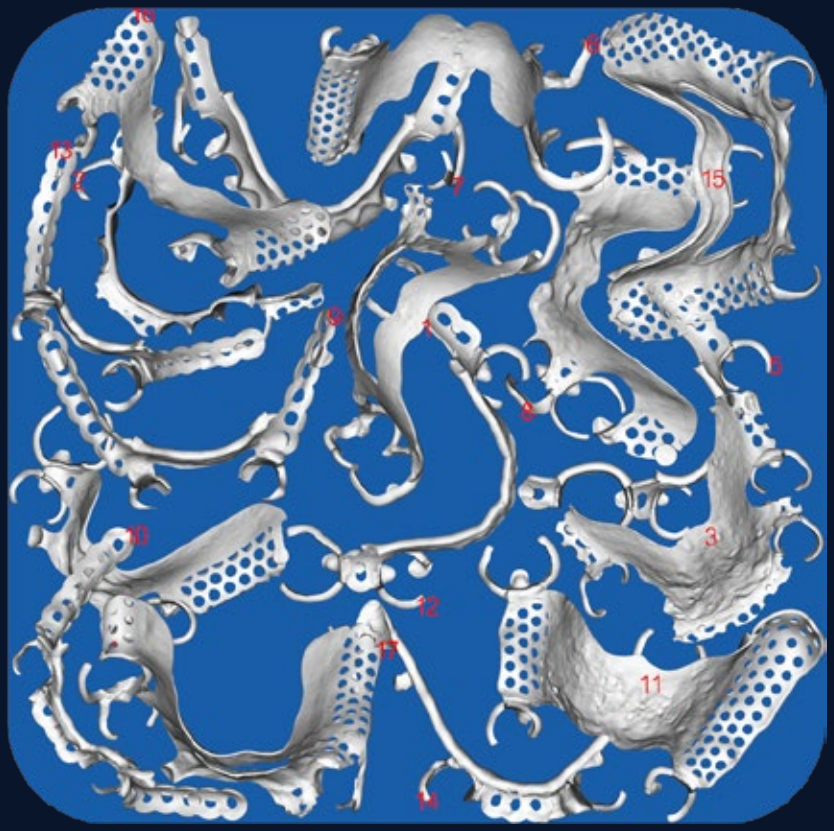
Enables part labeling with specific information, improving organization, traceability, and communication in the production process.

2Build Project Report:
2Create

Job name:	2Create Job 01 Partials.gcode
Job created:	05-22-2024 12:00:29
Printer:	2CREATE
Number of models:	5
Powder LOT number:	DNT 534627 A
Printing time:	03:32:04
Printing height:	32.13 mm
Volume of all models:	7412 mm^3
Material:	Cobalt-Based
Material usage:	62 g
Material costs:	8.6 EUR
Energy consumption:	3.11 kWh
Energy costs:	0.93 EUR
Gas consumption:	1048.0 l
Gas costs:	8.38 EUR
Total job costs:	27.91 EUR

2Build Project Report:
2Create Plus

Job name:	2Create Plus Job 01 Partials.gcode
Job created:	05-22-2024 13:08:57
Printer:	2CREATE Plus
Number of models:	17
Powder LOT number:	DNT 534627 A
Printing time:	08:29:27
Printing height:	40.95 mm
Volume of all models:	26254 mm^3
Material:	Cobalt-Based
Material usage:	218 g
Material costs:	74.12 EUR
Energy consumption:	11.29 kWh
Energy costs:	3.39 EUR
Gas consumption:	3276.0 l
Gas costs:	26.21 EUR
Total job costs:	103.72 EUR



Hybrid Software

Create the perfect connection between 3D printing and milling technology with Make & Mill, the hybrid CAM system

Perfect Fitting
Milling creates highly precise contact surfaces, ensuring a perfect fit and smooth adaptation to adjacent structures. This enhances accuracy and improves overall functionality.

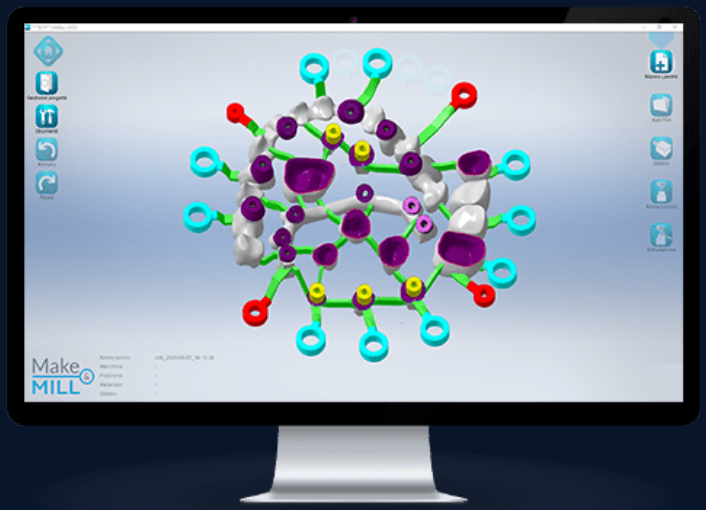
Saving Time & Material
Milling only the critical areas after SLM minimizes material waste, optimizes resource usage, and significantly reduces processing time.

Reduced Post-Processing
Targeted milling of critical areas minimizes manual finishing, enhances efficiency, and ensures consistent, high-quality results.

Seamless Integration
2onelab is perfectly integrated into Make & Mill, ensuring full compatibility with all common CAD systems and milling machines.

2onelab – Our Software Partner CIMSystems

Hybrid manufactured bridge with implant connection:



The Utmost Accuracy

The post-processing is carried out with the utmost accuracy to ensure the quality of the manufactured components.

2onelab — Our Software Partner CIMSystems

2Connect

The Future of Dental 3D Printing Technology.

2Connect is a central library for printing parameters and strategies. All printing parameters are developed, validated by us and can be downloaded for free. For almost all alloys and suppliers. This ensures you remain flexible andalways work with the perfect parameter set.

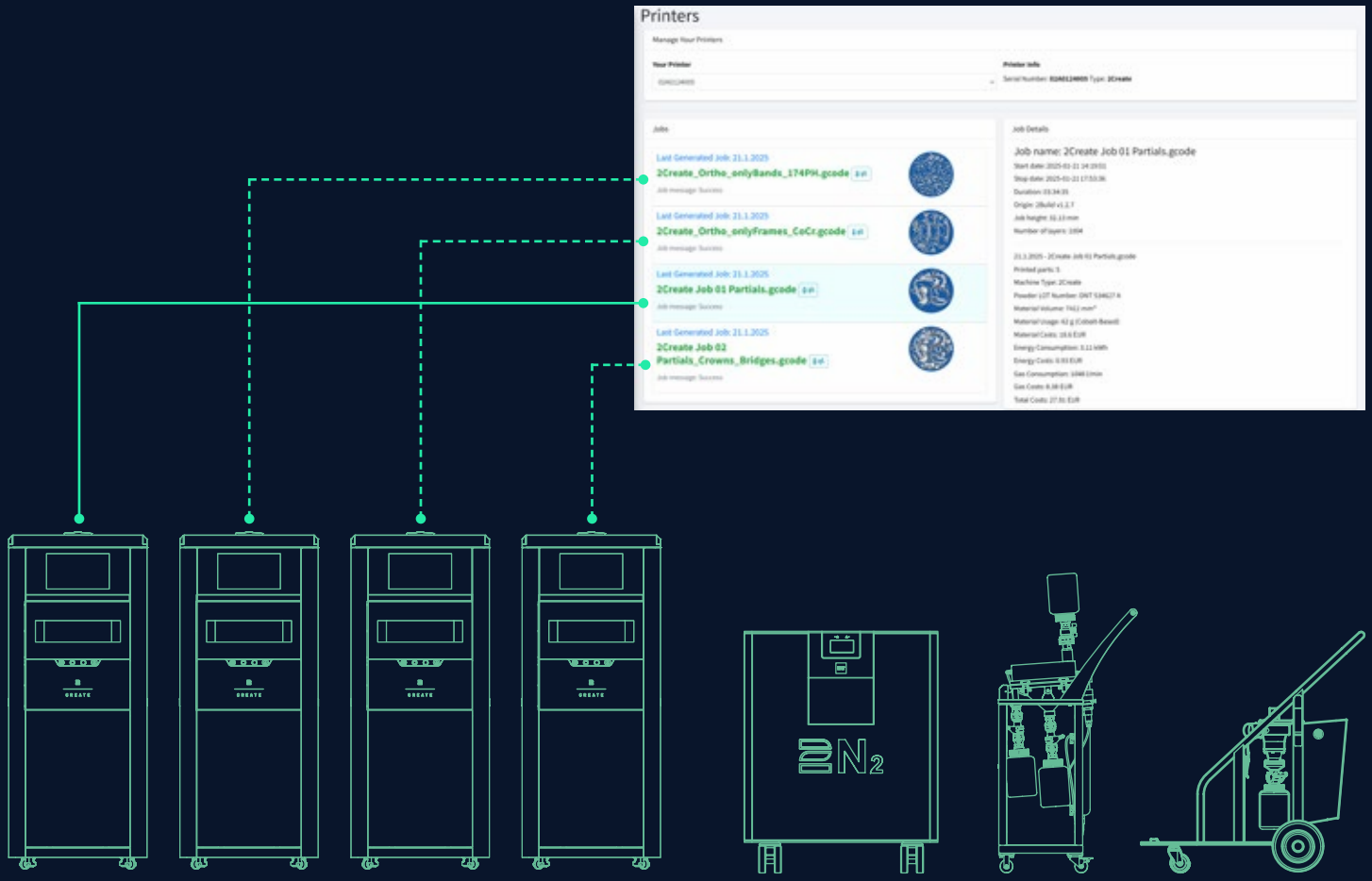
Marketplace for Printing Strategies
Central management of new printing strategies, easily integrable into CAM software.

Comprehensive Printing History Analysis
Tracks and analyzes the user's complete printing history, including consumables usage.

Optimized for Service Excellence
Designed to ensure optimal service delivery and high customer satisfaction.

Overview of your Production

In the fast-paced world of dental 3D printing, precise and efficient processes are crucial. 2Connect is a unique online platform that allows to monitor the status of all your printers in your process chain.



The primary advantages of 2onelab lie in the diverse array of hardware solutions that guide you seamlessly through every stage of your 3D printing workflow, from inception to completion.

2N2

Self-Sufficient Nitrogen Supply

The nitrogen generator is used to supply our printers with nitrogen gas at the push of a button.

Technical Data:

N2 Outlet:	Ø = 6mm
Flow Rate (Max.):	70 l /min
Outlet Pressure (Max.):	9 bar (130 psi)
Nitrogen Purity:	< 500 ppm@ 10 l/min < 0.5% @ 30 l/min
Power Supply Voltage:	220-240 Vac (±10%) 50/60 Hz
Rated Power (Max.):	2.2 KW
Net Weight:	175 kg
Noise Level:	< 50 dB
Dimensions (W x D x H):	590 x 920 x 730 mm

Main Advantages:

+ Easy Use & Quick Installation
+ Low Maintenance
+ Low Noise
+ No Belts, direct Drive
+ Generates Nitrogen on Demand
+ Exclusive Electronic Flow Control
+ Designed to run 24 Hours a Day

2Sieve

Ultrasonic Sieving System

Whether it's titanium, cobalt-chrome, aluminum, or any alloy, the 2Sieve sieving system helps you optimize the powder quality to achieve optimal printing results.

Technical Data:

Mesh:	63µm
Sieving Capacity:	approx. 1kg per 30min
Output Frequency:	33-37 kHz
Electrical Connection:	115 / 230 VAC; ~50/60 Hz
Dimensions (W x D x H):	360 x 420 x 930 mm

2onelab — Our Hardware 2Sieve

Main Advantages:

+ Compact Design
+ Integrated HEPA filter for maximum Safety
+ Safe Screening under Protective Gas
+ Fits directly into the 2Create & 2Create Plus
+ Safe, Simple, Efficient

2Clean

Precision in Powder Recovery

Effortless cleaning with the 2Clean Cleaning System. The 2Clean consists of an explosion-proof vacuum powered by compressed air, meeting the stringent standards of the ATEX directive.

Technical Data:

Drive:	Compressed Air Drive
Air Consumption:	30-45 m./h
Negative pressure (Max.):	-250 mbar
Weight:	63 kg
Dimensions (W x D x H):	950 x 950 x 600 mm

Main Advantages:

+ Efficient Powder Reuse
+ Comprehensive Cleaning
+ Easy Integration
+ Safe
+ Maintenance Readiness

Heating Oven

The **HTS-2/Metal Glow-120+** and **Glow Cube 200+** are powerful furnaces from the 2Create product family, specifically designed for thermal post-processing. These systems offer innovative solutions to enhance the quality and precision of your 3D printing results. The thermal post-processing is performed under argon or nitrogen gas to achieve optimal results without oxidation or contamination.

HTS-2/Metal Glow-120+

Technical Data:

Build Platform:	Suitable for small build platforms with a diameter of 110 mm
Max. Temperature:	1400°C (maximum heating rate is 40°C/min)
Power Connection:	200-240V /50-60Hz, 2kW
Weight:	56 kg
Dimensions (W x D x H):	390 x 500 x 790 mm

Glow Cube-200+

Technical Data:

Build Platform:	Suitable for big build platforms with a diameter of 240 x 250 x 270 mm
Max. Temperature:	1200°C (maximum heating rate is 30°C/min)
Power Connection:	200-240V /50-60Hz, 2kW
Weight:	200 kg
Dimensions (W x D x H):	630 x 720 x 970 mm (incl. trolley H=1670 mm)

2onelab – Our Hardware Partner Mihm Vogt

Polishing Machines

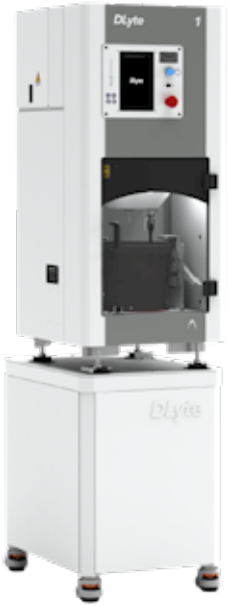
Perfect Shine

The optimal polishing solutions for the dental sector with the 3D Print polishing machines: **DLyte Desktop Pro** and **DLyte D1**. Ideal for dental applications with CoCr and Titanium. It handles grinding to mirror finishing for cast, sintered, or milled metals.

DLyte Desktop PRO

Technical Data:

Units per Process:	2 units
Full load current consumption :	8A
Voltage:	230 V ~ ± 10% (1P + N + PE)
Power Connection:	1.7 kW
Weight:	43 kg
Dimensions (W x D x H):	450 x 519 x 470 mm



DLyte D1

Technical Data:

Units per Process:	4 units
Air Pressure :	4-5 bar
	(air connector: 8mmØ or 1/4' BSP')
Voltage:	230 V~ ± 10% (1P+N+PE)*
Power Connection:	2 kW
Weight:	115 kg
Dimensions (W x D x H):	500 x 690 x 1,150 mm

Reach out to us and our dental experts to discover a suitable solution for your product visions!

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Scan the QR Code and connect with us on Linkedin

#BuildandCreate

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