DENTAL METAL 3D PRINTING

MAKE METAL. IN-HOUSE.

Compact systems. Open workflows.

VDESK1 / VDESK2 / V160x2

DENTAL & MEDICAL METAL PRODUCTION

Dental applications

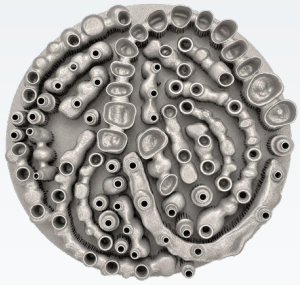
From routine laboratory production to complex implant and titanium cases.

Complete Lab Workflow

A broad range of dental metal parts within one laboratory workflow.

Crowns & Bridges

Crowns, bridges, telescopic crowns, inlays, onlays and Maryland bridges.



Implant Cases

Implant-supported restorations, implant bars and All-on-X restorations.

RPDs & Dentures

Removable partial dentures and full denture frameworks.

Titanium & Medical

Custom subperiosteal implants, zygomatic implant guides and mesh structures.

START COMPACT. GROW FASTER. SCALE PRODUCTION.

Find the right system for your lab

From your first in-house metal production system to high-volume dual-laser manufacturing.

VDesk1

COMPACT DESKTOP

Start compact

Compact laboratories starting in-house metal production.

VDesk2

SINGLE- OR DUAL-LASER DESKTOP

Grow faster

Growing laboratories needing speed and a compact footprint.

V160x2

INDUSTRIAL DUAL-LASER

Scale production

Production centers with high-volume demand.

Talk to our team >

System comparison

SYSTEM	LASERS	PRODUCTION SIZE	MACHINE SIZE*
VDesk1	Single	Ø100 × 65 mm	45 × 55 × 60 cm
VDesk2	Single or Dual	Ø150 × 80 mm	55 × 50 × 75 cm
V160x2	Dual	160 × 180 mm	80 × 100 × 185 cm

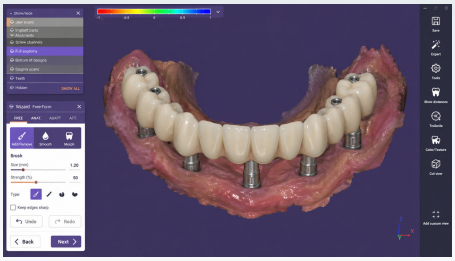
Production size: VDesk diameter × height; V160x2 width × depth.
*Machine size: W × D × H. VDesk dimensions exclude the base cabinets shown.

FROM DIGITAL DESIGN TO FINISHED METAL PARTS

Digital Dental Production Workflow

Six connected steps from dental CAD design to finished metal parts.

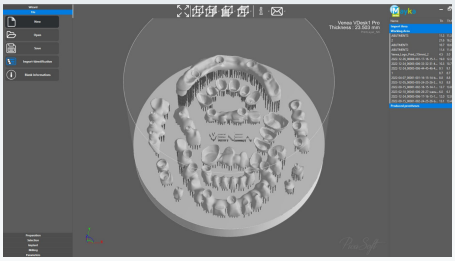
01



Design

Prepare dental CAD designs.

02



Nest

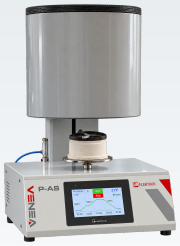
Arrange parts and generate supports.

03

Print

Build metal parts with PBF-LB/M.

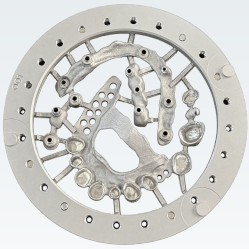
04



Heat Treatment

Apply the material-specific heat cycle.

05



Milling

OPTIONAL

Machine selected critical surfaces.

06

Polishing

OPTIONAL

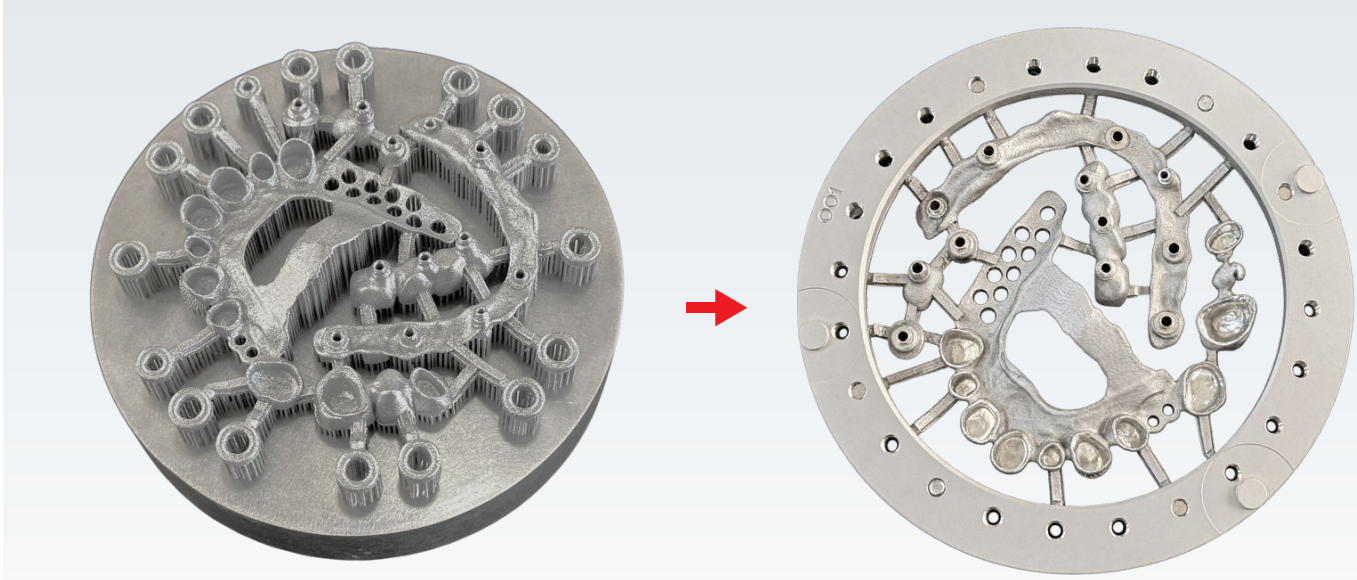
Finish and inspect the final parts.

ADDITIVE PRODUCTION + SELECTIVE MILLING

The Hybrid Workflow

Print Freedom. Mill Precision.

Print complex frameworks. Mill only the interfaces that require precision finishing.

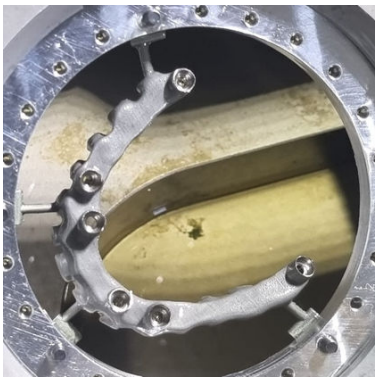


01 / Additive production

Build the framework with the geometry and allowance required for milling.

02 / Hybrid finishing

Machine selected functional surfaces and restoration interfaces.



Precision where it matters.

Selective milling completes the printed part through an open, compatible CAM workflow.

Discuss your hybrid workflow with our team >

YOUR LAB. YOUR PRODUCTION.

More than a printer.

A complete, open production solution for dental laboratories.

Real customers. Real production.

27+
YEARS OF PERSONAL SLM EXPERIENCE

29
COUNTRIES & GROWING

CE
TECHNOLOGY

Built for dental laboratories

Dental-Focused Design

Engineered for dental applications and daily laboratory production.

Open Workflow

Connect compatible CAD/CAM tools to your production process.

Compact Industrial Performance

Industrial metal printing in a laboratory-focused footprint.

Fast Installation & Training

Structured onboarding and practical expert training.

Remote Support

Direct technical assistance and remote diagnostics.

Lower Outsourcing Dependency

Keep more production in-house and control your lead times.

See more real production on Instagram >

BUILT LAYER BY LAYER.

PBF-LB/M Technology

Laser-based powder bed fusion of metals.

A laser selectively melts metal powder, building complex parts layer by layer.

Materials

All listed materials are supported across the full system range.

Dental Alloys

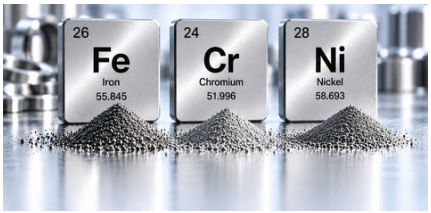
CoCr

CE-certified dental alloy powders

Titanium

Ti-6Al-4V (Grade 5)

Titanium (Grade 1)



Stainless Steels

316L / 17-4 PH

Tool Steels

Maraging Steel

Inconel

Inconel 718 / Inconel 625

YOUR NEXT PRODUCTION STEP

SEE THE QUALITY. HOLD THE RESULT.

Request a sample part >

Tell us your application and material.

venea3d.com/contact

info@venea3d.com

SCAN TO CONTACT

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