

Laser Metal Deposition

From coating to repair through to additive manufacturing

DepositionLine technology package for LMD:

Configurable solution from beam source, powder feeder, optics, and

Compatible systems:

TruLaser Cell 3000, TruLaser Cell 7040 individual integration into your OEM

metal powders

company? Talk to our experts!



TruPrint 1000

Build volume (cylinder): Ø 100 × H 100 mm

Maximum laser power at the workpiece (TRUMPF fiber laser):

1 × 200 W

Multilaser option: 2 x 200 W Beam diameter: 55/80 um Unpacking: Internal

Overview of Additive Manufacturing systems for

Industrial production solutions for your metal application From prototyping to industrial series production. As a pioneer in additive technologies and laser specialist since 1979, we offer the right technology for every

application requirement: Laser Metal Fusion (or Laser Powder Bed Fusion) or Laser Metal Deposition. Benefit

from complete industrial solutions with intelligent monitoring and smart services from a leading high-tech

mechanical engineering company worldwide. You are looking for potentials of additive manufacturing in your

Further options: Preform, Multiplate Unpacking: Internal under shielding gas Inert Powder Cycle, Powder Bed Moni-Periphery:

toring, Calibration



TruPrint 2000

Build volume (cylinder): Ø 200 x H 200 mm

Maximum laser power at the workpiece (TRUMPF fiber laser):

1 x 300 W Fullfield multilaser option: 2 × 300 W

Ream diameter: 55 µm Preheating: Up to 200 °C

Powder preparation station

Further options: Powder Bed and Melt Pool Monitoring, Calibration



Build volume (cylinder):

Ø 300 x H 400 mm

Maximum laser power at the workpiece (TRUMPF fiber laser):

1 x 500 W. Fullfield multilaser option: 2 x 500 W or 2 x 700 W

Beam diameter: 80 um Preheating: Up to 200 °C

Unpacking: Internal under shielding gas or external with interchangeable cylinder in depowdering station (optional under shielding gas) or with unpacking station

Periphery: Industrial part and powder

Further options: Powder Bed and Melt Pool Monitoring, Calibration



Build volume (cylinder): Ø 300 x H 400 mm

Maximum laser power at the workpiece (TRUMPF fiber laser):

3 x 500 W fullfield multilaser Beam diameter: 80 um

Preheating: Up to 200 °C (basic machine), up to 500 °C (optional)

Automatic process start: Yes

Unpacking: External with interchangeable cylinder in depowdering station (optional under shielding gas) or with unpacking station

Periphery: Industrial part and powder

Further options: Preform, Powder Bed and Melt Pool Monitoring, Calibration



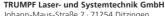
TruPrint 5000 Green Edition

Build volume (cylinder): Ø 300 × H 400 mm Maximum laser power at the workpiece (TruDisk Laser 1020):

Beam diameter: 210 um

800 W. 515 nm

Preheating: Up to 200 °C



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Industrial Additive Technologies

The right solution for every metal AM application

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The right solution for every metal AM application



Laser Metal Deposition

The allrounder among additive systems

- From coating to repair through to additive manufacturing
- The right beam source and powder feeder for every application
- High-speed laser metal deposition for rotationally symmetric components

TruPrint 1000

3D printing in premium quality: highly productive and compact

- Highest build rates and machine run time
- Superior part and surface quality
- Ergonomic contact-free powder handling
- Process flexibility and advanced monitoring
- Best fit for dental applications:
 Lower part cost due to preform, multiplate and hybrid digital chain

TruPrint 2000

Economical 3D printing in premium quality

- Premium part quality with 55 µm beam diameter
- Highly productive due to fullfield multilaser option
- Low part costs due to perfectly tailored machine concept
- Highest quality standards through Melt Pool Monitoring
- Inert, closed powder cycle

TruPrint 3000

Flexible solution for industrial 3D printing

- Maximum productivity through fullfield multilaser 2 x 500 W
- High process reliability due to newly developed gas flux
- Flexible production setup
- Ensuring high quality standards with Automatic Multilaser Alignment
- Inert, closed powder cycle

NEW: 3D printing of aluminum with 2 x 700 W

TruPrint 5000

Highly productive and semi-automated 3D printing system

■ Fullfield multilaser 3 × 500 W with Automatic Multilaser Alignment for high part quality

TruServices

<30 min response time for urgent service requests</p>

- Preheating up to 500 °C (optional)
- Inert, closed powder cycle
- External part and powder management compatible for TruPrint 3000 & TruPrint 5000

NEW: Preform option for hybrid manufacturing

TruPrint 5000 Green Edition

3D printing of copper and copper alloys

- Unique combination of green laser and additive manufacturing system
- Highest quality and productivity through green laser with wavelength of 515 nm
- Outstanding thermal properties and electrical conductivities