

CONCEPTLASER

a GE Additive company

X LINE 2000R Metal laser melting system

DMLM machine with XXL build envelope!

High-performance production machine with 2 x 1,000 watt lasers for safe processing of reactive materials.

Maximum productivity due to two build modules and rotating mechanism for reciprocal use.



Handling side of the X LINE 2000R

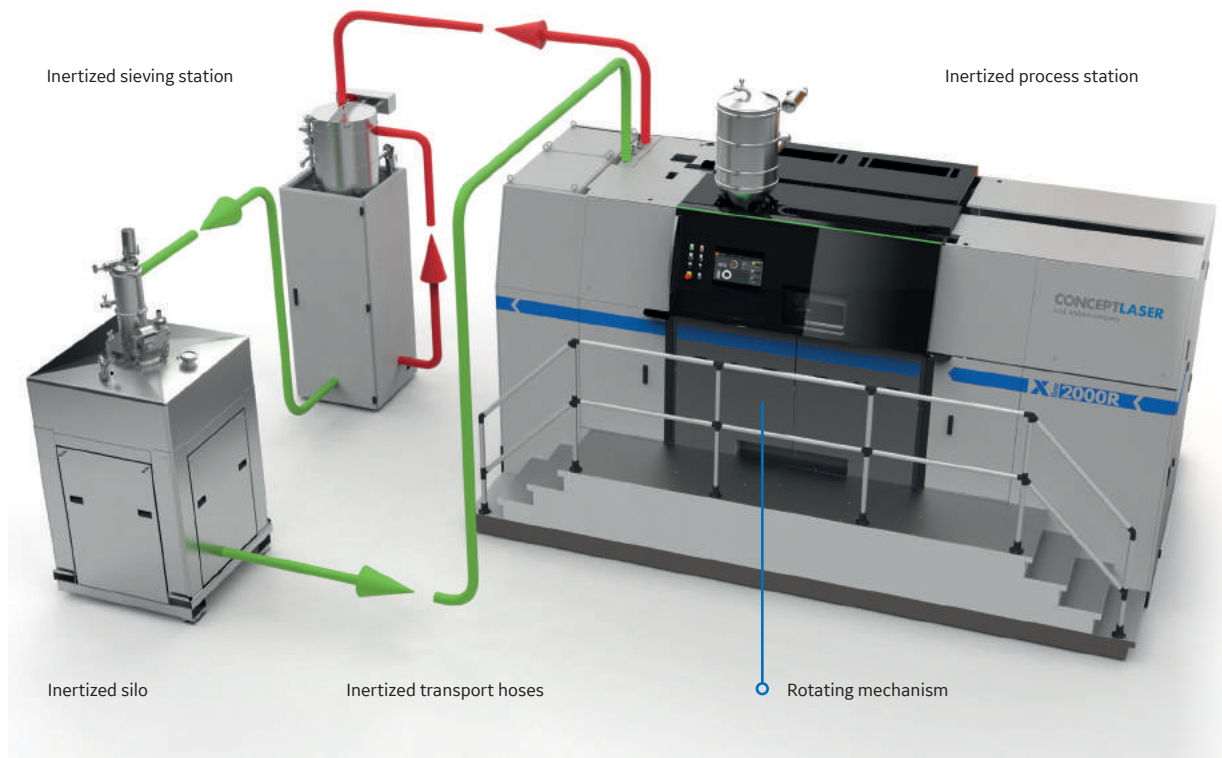


X LINE 2000R 3D METAL PRINTING ON XXL SCALE WITH DMLM

With a build volume of 160 liters, the X LINE 2000R is **the world's largest metal laser melting machine** for the toolless manufacture of large functional parts and technical prototypes with repeatable material properties. The X LINE 2000R is used for producing large-scale components in the aerospace and automotive industries.

The special thing about the machine is **the separation of the process and handling station**, which ensures both **safe operation** of the machine and easier handling.

In addition, the X LINE 2000R also has a **rotating mechanism** which allows **two build modules** to be used reciprocally, thus guaranteeing constant production with minimal downtimes.



MACHINE

- Build envelope 800 x 400 x 500 mm³
- Build volume 2 x 160 l
- Dual laser, 2 x 1,000 watt
- High build rate: up to 120 cm³/h
- Maximum safety due to separation of the process and handling station
- Two build modules for maximum productivity – simultaneous unpacking and setting up alongside ongoing build job
- Additive manufacturing of parts under inert conditions

POWDER HANDLING

- Automatic powder handling under inert conditions
- Protection of the powder from oxidation
- Machine, sieving station, silo and powder transport hoses are fully inertized
- Safe contactless powder handling (no need for operation)
- Maximum operator safety

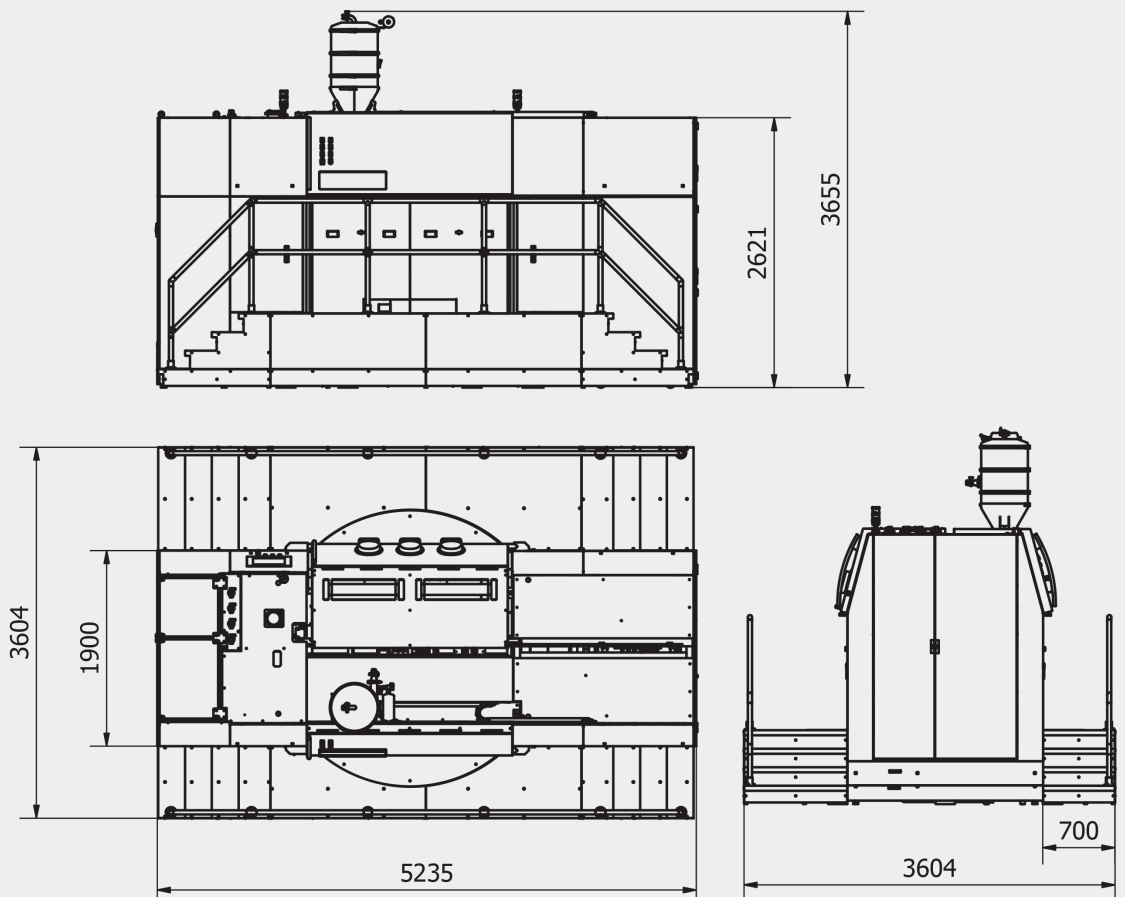
X LINE 2000R TECHNICAL DATA

Build envelope	800 x 400 x 500 mm ³ (x, y, z)
Layer thickness	30 – 150 µm
Production speed	up to 120 cm ³ /h (depending on material, parameter, geometry)
Laser system	2 fiber lasers, each 1,000 W (cw)
Max. scanning speed	7 m/s
Focus diameter	approx. 100 – 500 µm
Heating	9 kW, maximum temperature 200°C
Connected loads	Average power consumption 13 kW Power connection 3/N/PE AC 400 V, 50 A, 50 – 60 Hz
Inert gas supply	1 gas connection available
Inert gas consumption	approx. 17 – 34 l/min *
Dimensions	5235 x 3655 x 3604 mm ³ (B x H x T)
Weight	approx. 9500 kg (tare weight)
Operation conditions	15 – 25°C
Necessary peripheral equipment	Sieving station, power silo
Materials	CL 32AL Aluminium (AlSi10Mg) CL 41TI ELI Titanium alloy (TiAl6V4 ELI) CL 100NB Nickel-based alloy (Alloy 718)

*Inert gas consumption during the building process with N₂

X LINE 2000R 07/2018
Subject to technical changes.
Photos: uwe-muehlhaeuser.de
Machine layout & 3D graphics: newkon.info
Artwork: brandnew-design.de

X line 2000R



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MANUFACTURING AWARD





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