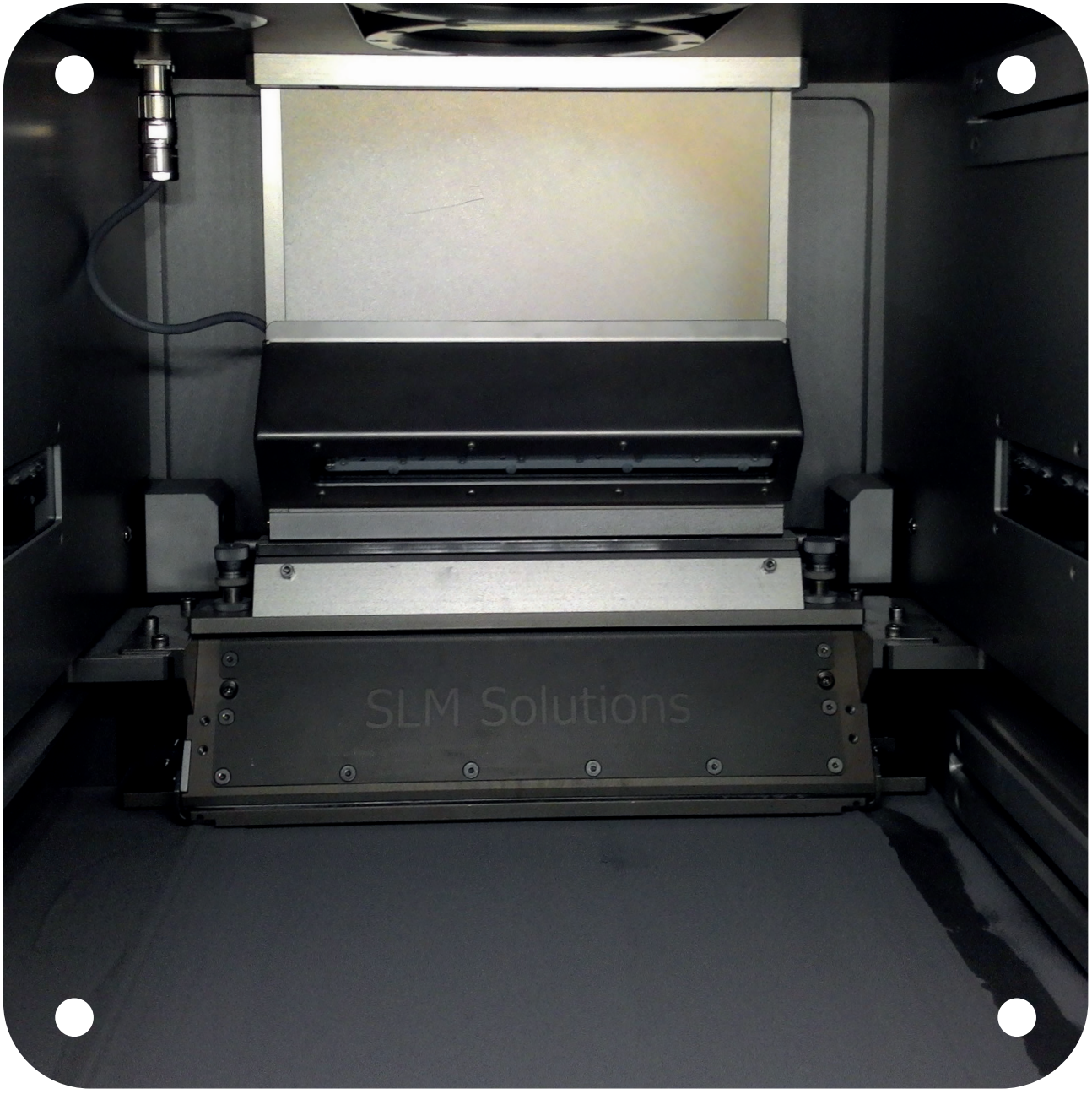
SLM SOLUTIONS

SLM®280HL

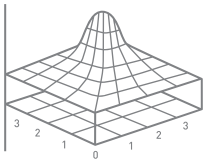
Selective Laser Melting System



The optimal approach for reliable metal part production and prototypes

Flexible, safe and efficient. Up to 80% higher build-up rate

SLM SOLUTIONS



The Selective Laser Melting System SLM®280^{HL} provides a 280 x 280 x 365 mm^3 build envelope and a patented multi-beam technology. The SLM®280^{HL} is equipped with one or two fiber lasers with 3D scanning optics. The system is available in three models, providing single optics (1x 400 W), dual optics (1x 400 W and 1x 1000 W) and twin optics (2x 400 W). Depending on how the components are arranged, a 80% higher build rate per time unit can be achieved.

SLM® 280 HL


SLM® 280 HL
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SLM® 280 HL

The Selective Laser Melting System SLM®280HL provides a 280 x 280 x 365 mm³ build envelope and a patented multi-beam technology. The (laser) beam profile has been further improved. The constructive solution of the recoater lip (available in polymer materials, as well as a ceramic blade) allows fine structures and achieves a significantly higher component quality. The field-proven, latest software supports a production-oriented data preparation for specific applications and highly optimized building processes.

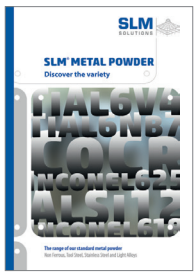
The whole process is carried out under an inert gas atmosphere. The reliable process gas filtration, and its double valve system, enable the highest degree of security. The efficient inert gas circulation during the safe and efficient operation leads to less gas consumption. The SLM® 280HL has a winning patented bi-directional powder coating in permanent production with optimal processing conditions for the highest and most constant construction qualities.

The open system provides a lot of opportunities to operate the machine in-house with specific parameters depending on current needs. Furthermore, individual developments on the SLM® 280HL can be transferred to other machines in the SLM® 280HL and SLM® 500HL series, for instance for production.

Technical Specifications

Build Envelope (L x W x H)	280 x 280 x 365 mm³ reduced by substrate plate thickness
3D Optics Configuration Dual Configuration: with switching unit	Single (1x 400 W), Twin (2x 400 W), Dual (1x 400 W und 1x 1000 W); Single (1x 700 W), Twin (2x 700 W), Dual (1x 700 W und 1x 1000 W) IPG fiber laser
Build Rate	up to 55 cm³/h
Variable Layer Thickness	20 µm - 75 µm
Min. Feature Size	150 µm
Beam Focus Diameter	80 - 115 µm
Max. Scan Speed	10 m/s
Average Inert Gas Consumption in Process	2,5 l/min (argon)
Average Inert Gas Consumption Purging	70 l /min (argon)
E-Connection / Power Input	400 Volt 3NPE, 32 A, 50/60 Hz, 3,5 - 5,5 kW
Compressed Air Requirement / Consumption	ISO 8573-1:2010 [1:4:1], 50 l/min @ 6 bar
Dimensions (L x W x H)	3050 mm x 1050 mm x 2850 mm (incl. PSH100)
Weight (incl. / without powder)	approx. 1500 kg / ca. 1300 kg

System configuration for all types of metal powders / Technical changes reserved



Metal powder
Please ask for our metal powder brochure

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