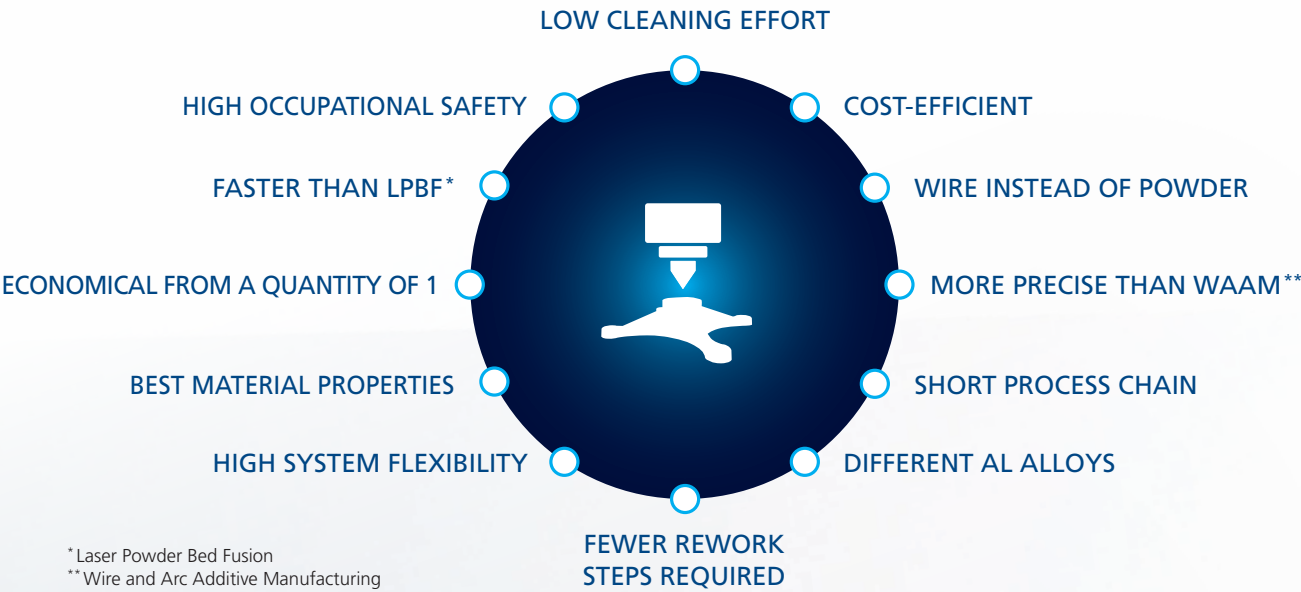


At a Glance
YOUR BENEFITS



REAL-LIFE EXAMPLES

	1 HOUSING COVER	2 TOOL INSERT	3 WELDING DEVICE
Frequency/drop diameter [Hz/µm]	150/700	150/680	150/700
Printing time [min]	460	145	460



Interested? Have your sample part printed without obligation and see for yourself!

Contact now your GROB contact person in the fields of additive manufacturing:
Mr. Christoph de Pay • Phone: +49 8261 996-4225 • E-mail: Christoph.dePay@grob.de



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Pioneers in designing and building highly innovative production and automation systems for almost 100 years.

#MachiningTechnology #UniversalMachiningCenters #AssemblyPlants #Electromobility
#Automation #AdditiveManufacturing #Digitalization
#NewAndQualityCheckedUsedMachines #Service

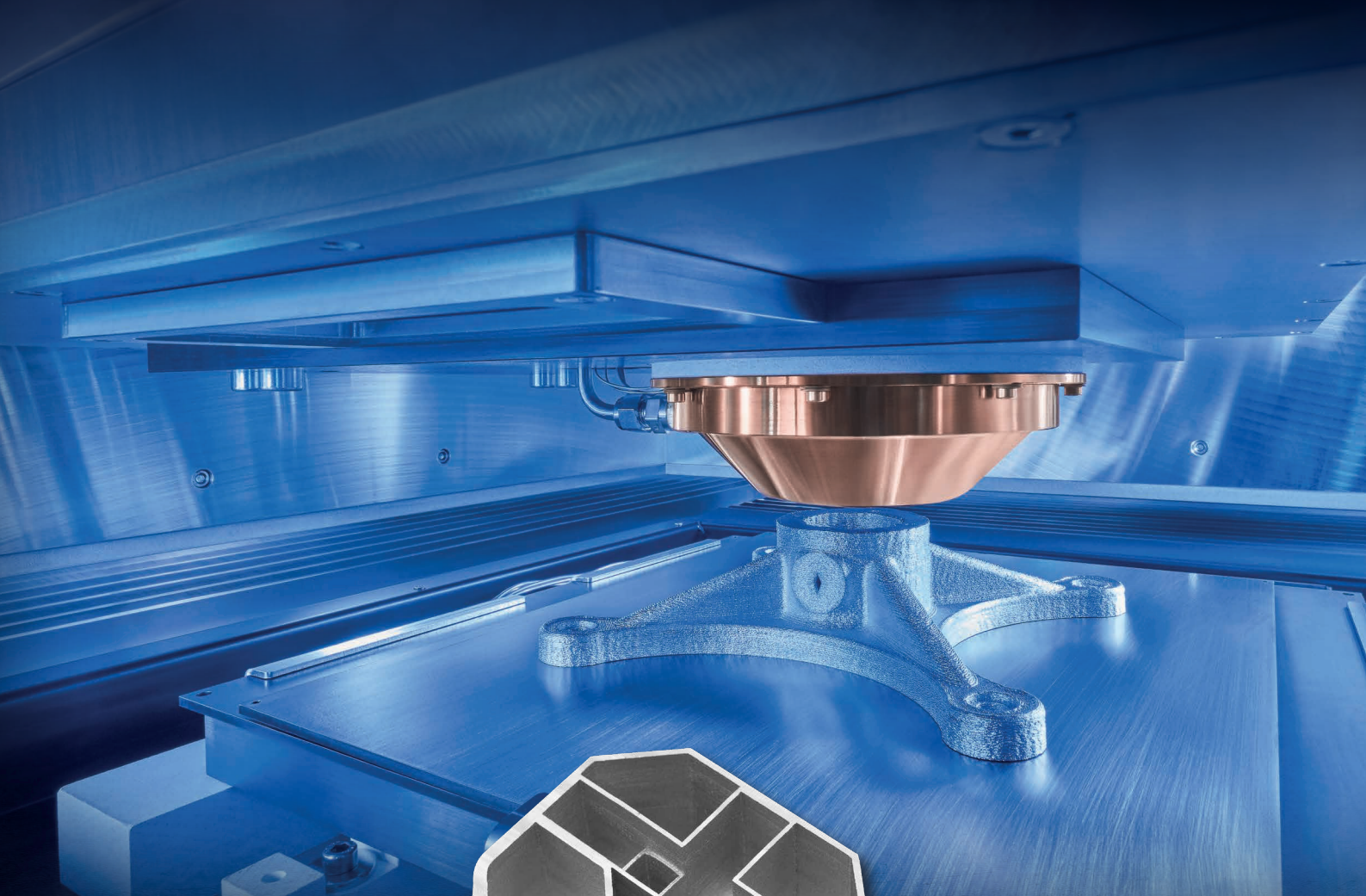


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Excellence in sustainable technology



GROB METAL PRINTING
GMP300



Innovative, economical & flexible

THE GROB GMP300!

GROB's GMP300 allows safe and at the same time rapid production of near-net-shape aluminum components due to its powder-free manufacturing process. With the GMP300, we offer our customers reliable, efficient and cost-conscious plant technology with maximum production flexibility. In cooperation with you, we develop additive-compatible components, fully realizing the full potential for your production.

TECHNICAL DATA ▶ GMP300	
Max. construction volume [mm³]	300x300x300
Positioning accuracy [mm]	0.015
Var. Min./max. drop diameter [mm]	0.3 to 0.85
Max. calculated build-up rate	199 cm³/h (250 Hz at 750 µm drop diameter)
Building panel heating max.	650 °C
Control system	Beckhoff TwinCat
Power input [kWh]	approx. 4
System size [mm]	2,300x2,700x2,700
System weight [kg]	5,800
Max. axis speed [m/min]	30

Subject to technical changes without prior notice

Wide range of applications:

- ⊕ Housing parts
- ⊕ Tools
- ⊕ Gripper and holder
- ⊕ Heat sink and fluid components
- ⊕ Electrically conductive components
- ⊕ Prototypes and spare parts
- ⊕ Fixtures and attachments



At a Glance

MATERIAL EXAMPLES

EXCERPT FROM THE MATERIAL DATA SHEETS									
AlSi10Mg (4046)				Guidance value (weld metal)			GMP300 lying flat		
Tensile strength [MPa]				140			> 200		
Elongation A5 [%]				4			> 20		
0.2 % yield strength [MPa]				70			100		
Chemical composition of the weld metal [%]									
Si	Fe	Cu	Mn	Mg	Zn	Be	Ti	Others individually	Others total
9.0 – 11.0	<0.55	<0.03	0.4	0.20 – 0.45	<0.1	<0.0003	<0.15	<0.05	<0.15

Porosity: < 0.3 %

AlSi12 (4047A)			Guidance value (weld metal)			GMP300 lying flat			
Tensile strength [MPa]			130			150 – 200*			
Elongation A5 [%]			5			8 – 20*			
0.2 % yield strength [MPa]			60			80 – 125*			
Chemical composition of the weld metal [%]									
Si	Fe	Cu	Mn	Mg	Zn	Be	Ti	Others individually	Others total
11.0 – 13.0	<0.6	<0.3	0.15	0.15	<0.2	<0.0003	<0.15	<0.05	<0.15

Porosity: < 0.1 %

* depending on parameters

AlMg4.5 (5183)			Guidance value (weld metal)			GMP300 lying flat			
Tensile strength [MPa]			275			300			
Elongation A5 [%]			18			25			
0.2 % yield strength [MPa]			130			125			
Chemical composition of the weld metal [%]									
Si	Fe	Cu	Mn	Mg	Zn	Be	Ti	Others individually	Others total
<0.4	<0.4	<0.1	0.5 – 1.0	4.3 – 5.2	<0.25	<0.0003	<0.15	<0.05	<0.15

Porosity: < 0.1 % possible

Many other materials can be processed, such as AlSi5 and Al99.5.

IF YOU HAVE ANY QUESTIONS ABOUT THE MATERIALS THAT CAN BE PROCESSED WE WILL BE HAPPY TO ADVISE YOU!