Rapid Prototyping Parts & Low Volume Products

METAL MATERIAL DATA

METAL 3D PRINTING MATERIAL

DMLM/DMLS - 3D Printing – Additive Manufacturing

DMLM/DMLS 3D Printing: Aluminum (ALSi10Mg) provides good casting properties and is typically used for cast parts with thin walls and complex geometry. Good strength, hardness and dynamic properties for parts subject to high loads.

Technology:	DMLM/DMLS
Material type:	Powder Bed Fusion-Laser Welding – Aluminum ALSi10Mg
(Rp 0.2 %) Yield Strength (AS BUILT):	260 ± 20 MPa
Heat Treated:	(230 ± 15 MPa)
Elongation at Break (AS BUILT):	6 ± 2%
Heat Treated:	(6 ± 2%)
Young's Modulus (AS BUILT):	75 ± 10 GPa
Heat Treated:	(75 ± 10 GPa)
Hardness (AS BUILT):	120-5 HBW
Heat Treated:	(120-5 HBW)
Tensile Strength (AS BUILT):	460 ± 20 MPa
Heat Treated:	(350 ± 10 MPa)
Applications:	Parts requirements for good thermal properties and low weight.

Disclaimer: The data above is general information and may vary from machine to machine or supplier to supplier. All tolerance specifications reflect the approximate range of a process's capabilities and should be viewed only as a guide. These dimensional tolerances, buyer assumes sole responsibility for the design, and must test and verify the material of the product for each specific application applies to their internal requirements.