



## 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.

<b>Technology:</b>	DMLM/DMLS
<b>Material type:</b>	Powder Bed Fusion-Laser Welding – Aluminum ALSi10Mg
<b>(Rp 0.2 %) Yield Strength (AS BUILT): Heat Treated:</b>	260 ± 20 MPa (230 ± 15 MPa)
<b>Elongation at Break (AS BUILT): Heat Treated:</b>	6 ± 2% (6 ± 2%)
<b>Young’s Modulus (AS BUILT): Heat Treated:</b>	75 ± 10 GPa (75 ± 10 GPa)
<b>Hardness (AS BUILT): Heat Treated:</b>	120-5 HBW (120-5 HBW)
<b>Tensile Strength (AS BUILT): Heat Treated:</b>	460 ± 20 MPa (350 ± 10 MPa)
<b>Applications:</b>	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.