# METAL 3D PRINTING MATERIAL

### DMLM/DMLS - 3D Printing – Additive Manufacturing

**DMLM/DMLS 3D Printing:** 316 stainless steel provides corrosion resistant and have chemical composition corresponding to ASTM F138. This stainless steel have evidence that there are no leachable substances in cytotoxic concentrations. Parts are not ideal in temperature range of 427°C-816°C where precipitation of chromium carbides occurs.

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| **Technology:** | DMLM/DMLS |
| **Material type:** | Powder Bed Fusion-Laser Welding – SS 316 |
| **(Rp 0.2 %) Yield Strength (AS BUILT):**<br>**Heat Treated:** | 464 ± 26 MPa<br>(330 ± 8 MPa) |
| **Elongation at Break (AS BUILT): Heat Treated:** | 40 ± 5%<br>(63 ± 5%) |
| **Young's Modulus (AS BUILT): Heat Treated:** | 167 ± 26 GPa<br>(200 GPa) |
| **Hardness (AS BUILT):**<br>**Heat Treated:** | 20 HRC<br>(20 HRC) |
| **Tensile Strength (AS BUILT):**<br>**Heat Treated:** | 587 ± 26 MPa<br>(529 ± 8 MPa) |
| **Applications:** | Functional elements in electronic housing and accessories, automotive, industrial. |

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.