

NICKEL SUPERALLOY

Inconel 625

MECHANICAL PROPERTIES*

L-PBF		AS-BUILT	AMS 7000
Yield Strength [MPa]	XY Z	615 ± 10	>345
Ultimate Tensile Strength [MPa]	XY Z	896 ± 11	>827
Elongation [%]	XY Z	48 ± 3	>30
Hardness [HRB]		96	-

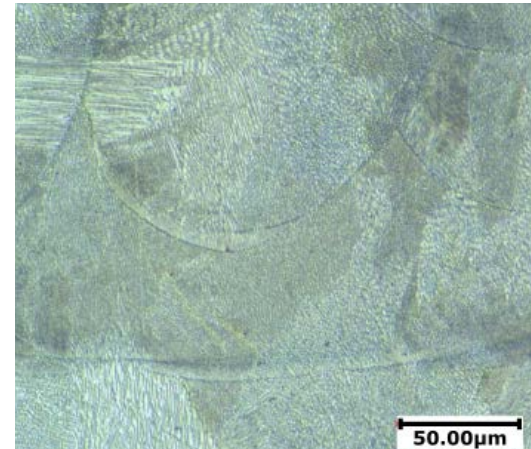
		HEAT TREATMENT A	ASTM F3056-14
Yield Strength [MPa]	XY Z	450 ± 8 444 ± 5	>275
Ultimate Tensile Strength [MPa]	XY Z	894 ± 7 877 ± 9	>485
Elongation [%]	XY Z	62 ± 2 64 ± 3	>30
Hardness [HRC]		97	-

PHYSICAL PROPERTIES

Relative Density [%]	>99.5
Surface Roughness [Ra μm]	up to 3 [‡]
Minimum Wall Thickness [mm]	0.3 - 0.5 [‡]

‡ Properties are dependant on geometry and orientation

* All data is collected using round machined ASTM E8M tensile coupons



Microstructure of Inconel 625 after HIP

PROCESSING CAPABILITIES

- Additive Manufacturing Solutions
- Printing Optimization
- Heat Treatment
- Deburring and Finishing
- CNC Machining
- Computed Tomography
- Mechanical and Metallurgical Testing
- Precision Metrology
- AS9100 / ISO 9001:2015

