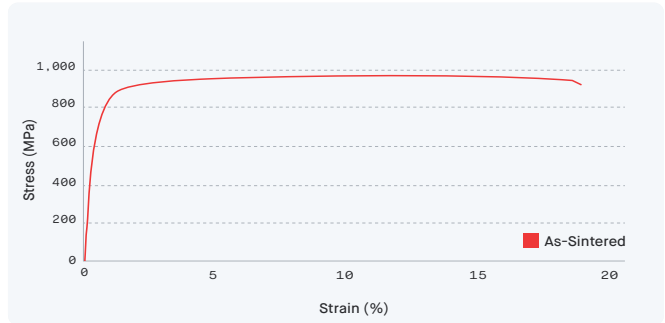


[Material Data Sheet]

Ti64

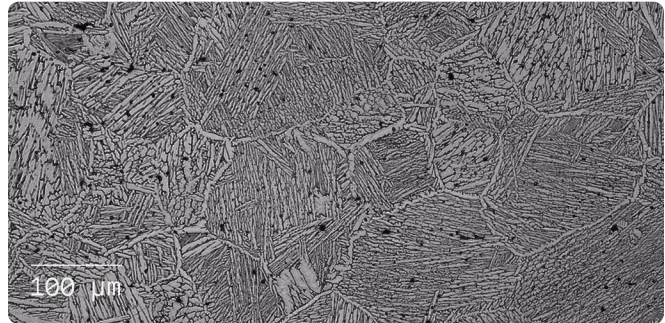
Titanium Alloy

PureSinter Furnace



COMPOSITION %

Ti	balance
Al	5.5 - 6.75
V	3.5 - 4.5



MECHANICAL PROPERTIES IN DESKTOP METAL PURESINTER FURNACE

	Standard	Studio System™ As-Sintered	ASTM F2885 Type 1 ¹ Densified Post Sintering	ASTM F2885 Type 2 ¹ As-Sintered
Ultimate tensile strength (MPa)	ASTM E8/E8M	935 ± 4	900	780
Yield strength (MPa)	ASTM E8M	815 ± 22	830	680
Elongation at break (%)	ASTM E8M	12.1 ± 2.4	10	10
Reduction in area	ASTM E8/E8M	20.2 ± 4	15	15
Hardness (HRC)	ASTM E18	32 ± 0.8		
Density (g/cm³)		4.36 ± 0.003		
Density (%)		98.1 ± 0.07		

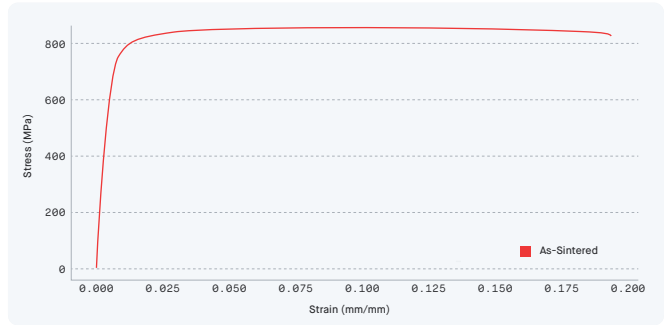
OTHER STANDARD DESIGNATIONS

AMS 4905	AMS 4954	GE C50TF12
AMS 4906	AMS 4965	MIL F-83412
AMS 4911	AMS 4967	MIL T-81556
AMS 4920	ASTM B265	MIL T-81915
AMS 4928	ASTM B348	MIL T-9046
AMS 4930	ASTM B381	MIL T-9047
AMS 4934	DIN 3.7164	SPS M618
AMS 4935	DMS 1570	

1. Per ASTM F2885 - 17 Standard Specification for Metal Injection Molded Titanium-6Aluminum-4Vanadium Components for Surgical Implant Applications. End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc. Tensile properties and density data reported are mean values minus 1 sigma. Samples are oriented in Xy and printed with a maximum wall thickness.

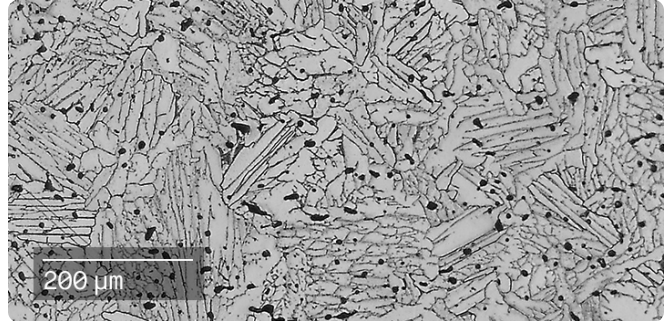
[Material Data Sheet]

Ti64 Titanium Alloy



COMPOSITION %

Ti	balance
Al	5.5 - 6.75
V	3.5 - 4.5



MECHANICAL PROPERTIES

	Standard	Studio System™ As-Sintered	MIM - ASTM F2885 Min ¹ As-Sintered	MIM - ASTM F2885 Min ¹ Densified Post Sintering
Ultimate tensile strength (MPa)	ASTM E8M	845	780	900
Yield strength (MPa)	ASTM E8M	730	680	830
Elongation (%)	ASTM E8M	17	10	10
Density (relative)	ASTM B311	97.5 %	96 %	98%

OTHER STANDARD DESIGNATIONS¹

UNS R56400

1. Per ASTM F2885 - 17 Standard Specification for Metal Injection Molded Titanium-6Aluminum-4Vanadium Components for Surgical Implant Applications. End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc. Tensile properties and density data reported are mean values minus 1 sigma. Samples are oriented in Xy and printed with a maximum wall thickness.