

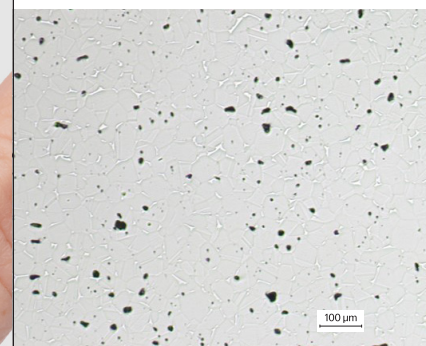
HP Metal Jet SS 316L

HP Metal Jet Certified material

The HP Metal Jet 316L Stainless Steel is a non-magnetic austenite material used in applications requiring extremely high corrosion resistance, excellent elongation, ductility, and strength at elevated temperatures. The high alloy and low carbon content makes it a great fit for automotive, aerospace, medical, jewelry, and oil/chemical industries.



Sintered



Material Properties^{1,2} (Nominal values)

		Test method	HP Metal Jet (as sintered)	Benchmark MIPF 35
Ultimate Tensile Strength (MPa)	XYZ	ASTM E8	$\mu=561, \sigma=5.5$	≥ 450
Yield Strength (MPa)	XYZ		$\mu=219, \sigma=1.9$	≥ 140
Elongation (%)	XYZ		$\mu=50\%, \sigma=5.5$	$\geq 40\%$
Surface Roughness (Ra)	XYZ		$6.3 \mu\text{m}, \sigma=1.5$	
Hardness (HRB)		ASTM E18	$\mu=69, \sigma=0.24$	67 (typical)
Density	g/cc	ASTM B311	$\mu=7.84, \sigma=0.01$	7.6 (typical)
	%		$\geq 98\%$	

Chemical Composition [wt.-%]

	Fe	Ni	Cr	C	Cu	Nb + Ta	Mn	Si	P	S	Total Other
Min.	Bal	10.0%	16.0%	-	2.0%	-	-	-	-	-	-
Max.		14.0%	18.0%	0.03%	3.0%	2.0%	1.0%	0.030%	0.10%	0.20%	1.0%

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1. All reported values are typical properties at nominal composition and density.
 2. All reported values are based on a finite sample size and for reference purposes only. Information contained herein is subject to change without notice and based on specific application designs. No warranty or guarantee is made against these values.
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