

SLM Material Properties Table

Materials	Resolution/ μm		Condition	Ultimate Tensile Strength/MPa	Yield Stress/M Pa	Elongati on/%	Hardness
SS17-4 PH	Normal	20	Solution & Aged (H900)	1372	1227	10	42HRC
	High	30	Solution & Aged (H900)	1365	1234	13	42HRC
SS316L	Normal	20	Stress Relieved	614	503	55	94HRB
	High	30	Stress Relieved	634	496	58	94HRB
Aluminum alloy(AISI1 0Mg)	Normal	20	Stress Relieved	268	180	15	46HRB
	High	40	Stress Relieved	296	228	10	50HRB
Inconel 718	Normal	20	Stress Relieved	986	676	36	33HRB
	High	60	Solution & Aged per AMS 5663	1386	1200	19	45HRB
Cobalt Chroma(C o28Cr6Mo)	Normal	20	As Build	1255	772	17	39HRC
	High	30	As Build	1213	820	14	38HRC
Copper(Cu Ni2SiCr)	Normal	20	Stress Relieved	496	434	23	87HRB
	High						
Titanium(Ti 6Al4V)	Normal	20	Stress Relieved	1055	951	15	35HRC
	High	30	Stress Relieved	993	855	18	33HRC

These figures are approximate and dependent on a number of factors, including but not limited to, machine and process parameters. The information provided is therefore not binding and not deemed to be certified. When performance is critical, also consider independent lab testing of additive materials or final parts.