

Standard materials for AM

Material	Condition	Equivalent material designation	Density g/cm ³	Yield point Rp 0,2 MPa	Tensile strength Rm MPa	Breaking strain A %	Hardness	Notes
Stainless steels								
316L	sintered	DIN 1.4404	≥7.75	≥150	≥450	≥40	≥100 HV10	austenitic, non-magnetic, can be polished
17-4-PH	sintered	DIN 1.4542	≥7.60	≥660	≥800	≥3	≥290 HV10	martensitic, precipitation hardening, ferromagnetic, can be polished
	heat treated			≥1000	≥1190	≥3	≥37 HRC	
15-5PH	sintered	DIN 1.4545	≥7.60	≥750	≥1150	≥6	≥300 HV10	martensitic, precipitation hardening, ferromagnetic, can be polished
	heat treated			≥1100	≥1300	≥6	≥40HRC	
In development								
Titanium								
Ti6Al4V	sintered	DIN 3.7135	≥4.30	≥600	≥800	≥3	tbd	non-magnetic, corrosion-resistant, light-weight
Tool steels								
M2	sintered	DIN 1.3342	tdb	tbd	tbd	tbd	tbd	hardenable and temperable, wear-resistant
	heat treated			tbd	tbd	tbd	tbd	
D2	sintered	DIN 1.2379	tdb	tbd	tbd	tbd	tbd	hardenable and temperable, wear-resistant, stainless
	heat treated			tbd	tbd	tbd	tbd	
H13	sintered	DIN 1.2344	≥7.40	≥850	≥1800	≥3	≥46 HRC	hardenable and temperable, wear-resistant
	heat treated			≥1300	≥1580	≥3	≥46 HRC	
Low Alloy steels								
4330	sintered	DIN 1.6511	≥7.45	≥500	≥700	≥4	≥24 HRC	hardenable and temperable, wear-resistant
	heat treated			≥1200	≥1600	≥2	≥48 HRC	
Other alloys								
Inconel 718	Sintered	DIN 2.4851	≥7,6	≥210	≥620	≥30	135-160 HV10	nickel based alloy

The material table is subject to alterations.



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