

	composition	E [GPa]	ρ [kg/m ³]	μ [1]	σ_k [MPa]	σ_m [MPa]	ϵ_f [%]	α [1/K]	price [\$/kg]	applications
Structural steel AISI 1020 (konstrukční ocel)	0.2%C, 0.5%Mn, <0.05%P, <0.05%S	210	7800	0.3	295	395	36.5	14*10 ⁻⁶	0.5	undemanding engineering parts and components, bolts, light duty gears and machinery parts
High-strength steel AISI 4340 (vysokopevnostní ocel)	0.4%C, 0.25%S, 0.7%Mn, 1.85%Ni, 0.8%Cr, 0.25%Mo	210	7800	0.3	880	1000	17	14*10 ⁻⁶	2	heavy-duty applications: power transmission gears, aircraft landing gears
2800 Maraging steel (niklová superslitina)	18%Ni, 15%Co, 7%Mo, 1.1%Ti, <0.03%C	210	8000	0.3	2617	2693	6	11*10 ⁻⁶	200	rocket and missile skin, weapon firing pins, fencing blades, golf club heads, gas centrifuges for uranium enrichment
Austenitic stainless steel AISI 201 (austenitická nerezová ocel)	0.0%C, 17%Cr, 7%Mn, 4%Ni	200	7800	0.3	310	655	40	17*10 ⁻⁶	3.5	furniture, cookware
7075-T6 Aluminium alloy (dural)	90%Al, 6%Zn, 0.2%Cr, 2%Cu, 3%Mg	70	2100	0.33	500	570	11	33*10 ⁻⁶	4	aviation, marine, automotive, rock-climbing equipment, bicycle components
T-9047 Titanium alloy (titanová slitina)	92%Ti, 5%Al, 3%Sn	100	4500	0.36	792	826	10	9*10 ⁻⁶	40	corrosion resistive, high-temperature high-strength applications: aircraft, spacecraft, military, exclusive sport equipment (Porsche & Ferrari engine components)
brass (mosaz)	70%Cu, 30%Zn	130	8400	0.33	75	325	70	20*10 ⁻⁶	5	
concrete (beton)		48	2500	0.2	-	35 (compr.) 3 (tens.)	0.0	11*10 ⁻⁶	0.05	
glass (sklo)		65	2500	0.23	-	35	0.0	8.8*10 ⁻⁶		
compact bone (kost kompaktní)		14	2000	0.43	100	100	9	20*10 ⁻⁶		
para-aramid (kevlar)			1400			3620		9*10 ⁻⁶		body / vehicle armor, cables, brake linings, sport equipment (paraglider suspension lines, tennis racquets), composites - wind turbines