

	Material	Diameter	Bar length	Cross sectional area	pitch	Ultimate tensile load	Ultimate tensile strength	Elongation	Yield point load	Yield point Strength	Young Modul	Ultimate shear load	Ultimate shear strength	Mass
		[mm]	[mm]	[mm <sup>2</sup> ]	[mm]	[KN]	[Mpa]	[%]	[KN]	[Mpa]	[Gpa]	[KN]	[Mpa]	[Kg/m]
<b>STATICAL</b>	Austenitic stainless steel													
<b>STATIbar 6mm</b>	Grade 316	6	10000	8,9	25	8,7	977,53	4,1	8,17	917,97	125	7,5	842,69	0,072
<b>STATIbar 6mm</b>	Grade 304	6	10000	8,9	25	8,85	994,38	4,1	8,45	919,30	122	7,5	842,69	0,0714
<b>STATItie 6mm</b>	Grade 304 Austenitic stainless steel	6	50	8,9	25	8,7	977,53	4,1	8,17	917,97	125	7,5	842,69	0,072
<b>Austenitic stainless steel</b>			to											
			1500											
<b>STATItie 8mm</b>	Grade 304 Austenitic stainless steel	8	50	10,4	29	12,1	1163,46	4,8	10,7	1028,84	125	8,7	836,53	0,0828
<b>Austenitic stainless steel</b>			to											
			1500											
<b>STATItie 10mm</b>	Grade 304 Austenitic stainless steel	10	50	12,9	50	14,5	1124,03	5,7	12,2	945,74	125	11,7	906,97	0,0944
<b>Austenitic stainless steel</b>			to											
			1500											

Melting point for 316 1400 oC  
Melting point for 304 1450 oC

Thermal Conductivity 316 16,3 W/m.K  
Thermal Conductivity 304 16,2 W/m.K

Thermal Expansion 316  $15,9 \times 10^{-6} / K$   
Thermal Expansion 304  $17,2 \times 10^{-6} / K$

Chrom Nickel Austenitic ČSN 10088-1 1.4301 ( X5CrNi 18-10 ) AISI 304

Chrom Nickel austenitic Molybden Low Carbon content ČSN 10088-1 1.4404 ( X2CrNiMo 17-12-2 ) AISI 316L