

You must to know

Recommendable Material for your working condition.

Service Conditions	Working Condition Temperature		Application, General	Recommendable Materials		Tensile Strength, min.	
	°F	°C		Bolts (ASTM)	Nuts (ASTM)	ksi.	MPa
High-Temperature and High-Pressure Services	32 ~ 1,148	0 ~ 620	Synthetic Ammonium, Oil Refining Industries, and other similar uses.	A193 Grade B5	A194 Grade 3	100	690
	32 ~ 896	0 ~ 480		A193 Grade B6	A194 Grade 6	110	760
	-58 ~ 842	-50 ~ 450		A193 Grade B7	A194 Grade 2H	125	860
	-58 ~ 1,022	-50 ~ 550		A193 Grade B16	A194 Grade 4 or 7	125	860
	~ 1,292	~ 700	High Strength Stainless Steel for use at High-Temperature.	A453 Grade 660	A194 Grade 3	130	895
	~ 1,292	~ 700		A453 Grade 660	A194 Grade 3	100	690
High-Temperature and High-Corrosive Services	1,104 ~ 1,472	540 ~ 800	Chemical Industries, General.	A193 Grade B8	A194 Grade 8	125	860
	1,104 ~ 1,472	540 ~ 800	Atomic Power equipment, where needed grain boundary anticorrosiveness and heat resistivity.	A193 Grade B8C	A194 Grade 8C	125	860
	1,104 ~ 1,472	540 ~ 800	Where needed anticorrosiveness and heat resistivity.	A193 Grade B8M	A194 Grade 8M	110	760
	1,104 ~ 1,472	540 ~ 800	Where needed grain boundary anticorrosiveness.	A193 Grade B8T	A194 Grade 8T	125	860
Low-Temperature and High-Pressure Services	-148 ~ -58	-100 ~ -50	LGP Industry, and other similar uses.	A320 Grade L7	A194 Grade 4 or 7	125	860
	-148 ~ -58	-100 ~ -50		A320 Grade L7A	A194 Grade 4	125	860
	-148 ~ -58	-100 ~ -50		A320 Grade L7B	A194 Grade 4 or 7	125	860
	-148 ~ -58	-100 ~ -50		A320 Grade L7C	A194 Grade 4 or 7	125	860
	-148 ~ -58	-100 ~ -50		A320 Grade L43	A194 Grade 7	125	860
High-Temperature and High-Corrosive Services	-418 ~ -148	-250 ~ -100	Helium Extrusion, NG Lique-faction industries, and similar uses.	A320 Grade B8	A194 Grade 8	125	860
	-418 ~ -148	-250 ~ -100		A320 Grade B8C	A194 Grade 8C	125	860
	-328 ~ -148	-200 ~ -100		A320 Grade B8M	A194 Grade 8M	110	760
	-328 ~ -148	-200 ~ -100		A320 Grade B8T	A194 Grade 8T	125	860