

Tensile strengths

Approximate tensile strength comparison of steel grades and classes.

INCH Fasteners			METRIC Fasteners	
Pound per Inch ²	(psi)		(MPa)	Megapascals
	58015	=	400	Class 4.6
SAE Grade 2 (over 3/4")	60000	=	414	
	60916	=	420	Class 4.8
BSW Mild Steel (AS / NZS 2451)	62000	=	427	
SAE Grade 2 (up to 3/4")	74000	=	510	
	75420	=	520	Class 5.8
	89923	=	620	Stainless Duplex 2205
	101526	=	700	Stainless Steel Class 70
SAE Grade 5 (over 1")	105000	=	724	
	116030	=	800	Stainless Steel Class 80
	116030	=	800	Class 8.8 (up to and including 16mm)
SAE Grade 5 (up to 1")	120000	=	827	
	120381	=	830	Class 8.8 (over 16mm)
SAE Grade 8	150000	=	1034	
	150839	=	1040	Class 10.9
	176946	=	1220	Class 12.9
Grade 9 · ASTM A574 (L9 & Plow Bolts) · A574 socket head cap screws up to 1/2" (170 000 psi over 1/2")	180000	=	1240	