

Carbon & Low Alloy Steels	ALLOY TYPE	SIMILAR DESIGNATION	CONDITION	ULTIMATE TENSILE STRENGTH PSI	YEILD STRENGHT PSI	ELONGATION % IN 1 INCH	REMARKS
	4130	QQ-S-681d MIL-S-22141 IC4130	ANNEALED	80,000	60,000	18	STRUCTURAL PARTS REQUIRING WELDING, HIGH FATIGUE RESISTANCE , STRENGTH
			QUENCH & TEMPERED @ 350°F	200,000	170,000	6	
			QUENCH & TEMPERED @ 1250°F	105,000	85,000	18	
	4140	QQ-S-681d MIL-S-22141 IC4140	ANNEALD	90,000	60,000	17	STRUCTURAL PARTS GOOD COMBINATION OF FATIGUE, WEAR RESISTANCE AND HARDNESS
			QUENCH & TEMPERED @ 350°F	220,000	200,000	4	
			QUENCH & TEMPERED @ 900°F	180,000	155,000	9	
			QUENCH & TEMPERED @ 1000°F	155,000	135,000	10	
			QUENCH & TEMPERED @ 1200°F	120,000	100,000	14	
			QUENCH & TEMPERED @ 1250°F	110,000	90,000	17	
4340	QQ-S-681d MIL-S-22141 IC4340	ANNEALED	90,000	70,000	15	STRUCTURAL PARTS GOOD COMBINATION OF FATIGUE, WEAR RESISTANCE AND HARDNESS BETTER HARDENBILITY THAN 4140	
		QUENCH & TEMPERED @ 350°F	220,000	205,000	4		
		QUENCH & TEMPERED @ 900°F	180,000	160,000	6		
		QUENCH & TEMPERED @ 1250°F	110,000	90,000	16		
6150	MIL-S-22141 IC6150	ANNEALED	100,000	60,000	12	HIGH STRENGTH AND HARDNESS	
		QUENCH & TEMPERED @ 350°F	230,000	210,000	2		
		QUENCH & TEMPERED @ 1250°F	110,000	90,000	10		
8620	QQ-S61d MIL-S-22141 IC8620	ANNEALED	70,000	50,000	22	CARBURIZING ALLOY STEEL FOR STRESSED PARTS	
		QUENCH & TEMPERED @ 1200°F	100,000	80,000	16		
8630 & 8730	QQ-2-681d MIL-S-22141 IC8630 MIL-S-22141	ANNEALED	80,000	60,000	18	STRUCTURAL PARTS GOOD COMBINATION OF FATIGUE AND HARDNESS	
		QUENCH & TEMPERED @ 350°F	200,000	170,000	6		
		QUENCH & TEMPERED @ 1250°F	105,000	85,000	18		

*Because of low impact, meaningful tensile and yield values are not attainable. The values shown are the specification minimums for separately cast bars, unless otherwise noted.