

400 Series Martensitic Stainless Steel	ALLOY TYPE	SIMILAR DESIGNATION	CONDITION	HARDNESS MINIMUM C SCALE	ULTIMATE TENSILE STRENGTH PSI	YEILD STRENGTH PSI	ELONGATION % IN 1 INCH	REMARKS
	410	AMS-5350 ASTM-A-296 MIL-S-16993	AIR OR OIL QUENCH AND DRAW	R 42 C	200,00	150,000	6	GOOD COMBINATION OF HARDNESS AND CORROSION RESISTANCE
				R 40 C	180,000	140,000	8	
				R 36 C	160,000	120,000	12	
				RC <20	95,000	75,000	18	
			ANNEALED	RC <20	70,000	45,000	20	
	416	AMS-5349 QQ-S-763 MIL-S-862	AIR OR OIL QUENCH AND DRAW	R 38 C	160,000	130,000	5	FREE MACHINING GRADE OF 410 NOT AS TOUGH AS 410
				RC <20	95,000	75,000	12	
			ANNEALED	RC <20	70,000	40,000	15	
	420	ASTM-A-296	LOW CARBON QUENCH AND DRAW	R 46 C	200,00	150,000	3	SIMILAR TO 410, HIGHER HARDNESS BUT LESS TOUGH
HIGH CARBON QUENCH AND DRAW			R 48 C	200,00	150,000	3		
ANNEALED			R 28 MAX C	90,000	60,000	12	BETTER WEAR RESISTANCE	
430		ANNEALED	RC <20	60,000	45,000	15	BETTER CORROSION AND HEAT RESISTANCE	
431	AMS 5353 MIL-S-22216	QUENCH AND DRAW	R 38 C	170,000	130,000	5	BETTER CORROSION RESISTANCE OF SERIES	
		ANNEALED	R 28 MAX C	90,000	60,000	12		
440A	ASTM-A-314 QQ-S-763 MIL-S-22216	QUENCH AND DRAW	R 50 C	*	*	Nil	CUTLERY AND MOLDS HIGH HARDNESS	
		QUENCH DEEP FREEZE AND DRAW	R 52 C	*	*	Nil		
		ANNEALED	R 28 MAX C	90,000	60,000	6		
440C	AMS 5352 QQ-S-763 MIL-S-22216	QUENCH AND DRAW	R 58 C	*	*	Nil	HIGHEST HARDNESS BEST CUTLERY GRADE	
		ANNEALED	R 30 MAX C	90,000	60,000	2		
440F		QUENCH AND DRAW	R 55 C	*	*	Nil	FREE MACHINING GRADE OF 440C	

\*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.