

TABLE: COMMON MARTENSITIC STAINLESS STEEL GRADES AND THEIR APPLICATIONS

COMMON NAME	UNS NO	FORMS AVAILABLE*	TYPICAL COMPOSITIONS (%)					OTHER	TYPICAL APPLICATIONS
			C	Cr	Ni	Mo			
410	S41000	Bar	0.10	12.5	-	-	-	General purpose grade for use in mildly corrosive environments.	
416	S41600	Bar	0.10	12.5	-	-	0.20S	Free machining variation of 410.	
420	S42000	Bar	0.25	12.5	-	-	-	General engineering uses, such as pump and valve shafts.	
420C	-	Sheet, Coil, Plate, Bar	0.30	12.5	-	-	-	Developed for high hardness after heat treatment. Used for cutting tools, surgical knives, etc.	
431	S43100	Bar	0.18	16.0	2.0	-	-	Hardenable steel with corrosion resistance approaching 304. Used for pump shafts, etc. Should be double tempered after hardening.	
440C	S44004	Bar	1.10	17.0	-	0.40	-	Capable of being hardened to 60HRC. Highest hardness and abrasion resistance of all the stainless steels. Corrosion resistance similar to 410.	

* Compatible or equivalent grades also available in castings.