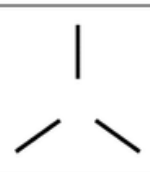





CARBON STEEL TECHNICAL INFORMATION

Grade	Nominal Size of Product in.	Material and Treatment	Proof Load Stress ksi	Yield Strength ksi Min	Tensile Strength ksi Min	Surface Max	Core Min	Core Max	Grade Identification Mark	
A307 Gr A	¼ to 4	Low or medium carbon steel			60		B69	B100	307A	
A307 Gr B	¼ to 4				60 min 100 max		B69	B95	307B	
SAE Gr 1	¼ to 1-1/2		33	36	60		B70	B100	None specified	
SAE Gr 2	¼ to ¾	Low or medium carbon steel, cold worked	55	57	74		B80	B100	None specified	
SAE Gr 5	¼ to 1 1-1/8 to 1-1/2	Medium carbon steel, product is quenched and tempered	85 74	92 81	120 105	30N54 30N50	C25 C19	C34 C30		
A449 Type 1	¼ to 1 1-1/8 to 1-1/2 1-3/4 to 3		85 74 55	92 81 68	120 105 90		C25 C19 B91	C34 C30 B100		
A325 Type 1	½ to 1 1-1/8 to 1-1/2		85 74	92 81	120 105		C24 C19	C35 C31		A325
SAE Gr 5.2	¼ to 1		Low carbon boron steel, product is quenched and tempered	85	92	120	30N56	C26	C39	
A449 Type 2	¼ to 1			92	120		C25	C34		
A325 Type 3	½ to 1 1-1/8 to 1-1/2	Atmospheric corrosion resistant steel, the product is quenched and tempered	85 74	92 81	120 105		C24 C19	C35 C31	A325	
SAE Gr 8	¼ to 1-1/2	Medium carbon alloy steel, product is quenched and tempered	120	130	150	30N58.6	C33	C39		
A354 Gr BD	¼ to 2-1/2 2-3/4 to 4		120 105	130 115	150 140		C33 C31	C39 C38		BD
A490 Type 1	½ to 1-1/2		120	130	150 min 170 max		C33	C38		A490
ASAE Gr. 8.2	¼ to 1	Low carbon boron steel, product is quenched and tempered	120	130	150		C33	C39		
A490 Type 3	½ to 1-1/2	Atmospheric corrosion resistant steel, product is quenched and tempered	120	130	150 min 170 max		C33	C38		A490