

Grade	Thickness	Chemistry											Mechanical Properties				
		C	Mn	P	S	Si	Cr	Ni	Mo	V	B	Other	Tensile KSI	Yield KSI	% Elong. Min*		
															8"	2"	
A36	1/4" thru 3/4"	.25	-	.04	.05	.40	-	-	-	-	-	-	58 to 80	36 YP Min	18	21	
	> 3/4" thru 1-1/2"	.26	.80/1.20			.15/.40											
	>1-1/2" thru 2-1/2"	.27	.85/1.20			-											
	>2-1/2" thru 4"	.29															
	>4" thru 8"																
>8" thru 24"																	
C1020	3/4" thru 1-1/2"	.17/.23	.30/.60	.035	.04	-	-	-	-	-	-	-	-	-	-	-	
	>1-1/2" thru 6"					.15/.40											
C1045	1/4" thru 14"	.42/.50	.60/.90	.035	.04	.15/.40	-	-	-	-	-	-	-	-	-	-	
A572	3/8" thru 1-1/2"	.23	1.35	.04	.05	.40	-	-	-	.01/.15	-	-	65 Min	50 YP Min	16	19	
	>1-1/2" thru 4"					.15/.40											
	>4" thru 6"	.21															
A588	.75" thru 4"	.19	.80/1.25	.04	.05	.30/.65	.40/.65	.40	-	.02/.10	-	Cu .25/.40	70 Min	50 YP Min	16	19	
	>4" thru 5"												67 Min	46 YP Min			
	>5" thru 8"												63 Min	42 YP Min			
A516	3/16" thru 1/2"	.27	.85/1.20	.035	.035	.15/.40	-	-	-	-	-	-	70 to 90	38 Min	17	21	
	>1/2" thru 2"	.28															
	>2" thru 4"	.30															
	>4" thru 8"	.31															
Clean-Cut® 20	1/2" thru 10"	.14/.22	1.20/1.50	.04	.07/.15	.10/.40	-	-	-	-	-	-	-	-	-	-	
Clean-Cut® 45	3/4" thru 6"	.42/.50	1.20/1.50	.04	.06/.12	.10/.40	-	-	-	-	-	-	-	-	-	-	
4140	1/4" thru 14"	.36/.44	.70/1.00	.035	.04	.15/.40	.80/1.15	-	.15/.25	-	-	-	-	-	-	-	
4340	3/8" thru 8-1/8"	.36/.44	.55/.80	.035	.04	.15/.40	.60/.90	1.65/2.00	.20/.30	-	-	-	-	-	-	-	
8620	3/8" thru 6"	.17/.23	.60/.90	.035	.04	.15/.40	.35/.60	.40/.70	.15/.25	-	-	-	-	-	-	-	
A514	3/8" thru 1-1/4"	.12/.21	.70/1.00	.035	.04	.20/.35	.40/.65	.30/.70	.20/.30	.03/.08	.0005/.005	-	Ti .01/.03	110 to 130	100 Min	-	18
	>1-1/4" thru 2"	.12/.21	.95/1.30										-				
	>2" thru 2-1/2"	.10/.20	.60/1.00										Cu .15/.50				
	>2" thru 6"	.14/.21	.95/1.30										1.00/1.50				

Single values are maximums unless otherwise noted. Ranges depict Min./Max.
Clean-Cut is a registered trademark of Mittal Steel USA.

* Adjustments to elongation requirements may apply depending on plate thickness or plate width.
The values shown are for 96" wide plates as rolled.

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