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Steel Plate Stocking Chart

Grades ASTM	Description	Thickness (inches)	Chemistry C	Mn	P	S	Si	Cr	Ni	Mo	Other	Mechanical Properties Tensile KSI	Yield KSI
A36	Structural steel produced to meet specific physical properties. Excellent welding and forming capabilities.	.25 – .75	.25		.04	.05	.40					58 – 80	36 Y.P. min.
		.875 – 1.5	.25	.80/1.20	.04	.05	.40					58 – 80	36 Y.P. min.
		1.625 – 2.5	.26	.80/1.20	.04	.05	.15/.40					58 – 80	36 Y.P. min.
		2.75 – 4	.27	.85/1.20	.04	.05	.15/.40					58 – 80	36 Y.P. min.
		4.25 – 8	.29	.85/1.20	.04	.05	.15/.40					58 – 80	36 Y.P. min.
		8.25 – 20	.29	.85/1.20	.04	.05	.15/.40					58 – 80	32 Y.P. min.
A572	High-strength, low-alloy structural steel.												
Grade 50		.25 – 4	.23	1.35	.04	.05	**.15/.40				V .01/.15	65 min.	50 Y.P. min.
Grade 42		4.25 – 8	.21	1.35	.04	.05	.15/.40				V .01/.15	60 min.	42 Y.P. min.
Grade 65		.5 – 1.25	.23	*1.35/1.65	.04	.05	.40				V .01/.15	80 min.	65 Y.P. min.
A588	High-strength, low-alloy structural steel with four times greater corrosion resistance.	.25 – 4	.19	.80/1.25	.04	.05	.30/.65	.40/.65	.40		V .02/.10; Cu .25/.40	70 min.	50 Y.P. min.
		4.25 – 5	.19	.80/1.25	.04	.05	.30/.65	.40/.65	.40		V .02/.10; Cu .25/.40	67 min.	46 Y.P. min.
		5.25 – 8	.19	.80/1.25	.04	.05	.30/.65	.40/.65	.40		V .02/.10; Cu .25/.40	63 min.	42 Y.P. min.
A514	High-strength, alloy structural steel, quenched and tempered to achieve high minimum yields.												
Grade B		.375 – 1.25	.12/.21	.70/1.00	.035	.035	.20/.35	.40/.65		.15/.25	V .03/.08; Ti .01/.03; B .0005/.005	110/130	100 min.
Grade H		1.375 – 2	.12/.21	.95/1.30	.035	.035	.20/.35	.40/.65	.30/.70	.20/.30	V .03 /.08; B .0005/.005	110/130	100 min.
Grade F		2.25 – 2.5	.10/.20	.60/1.00	.035	.035	.15/.35	.40/.65	.70/1.00	.40/.60	V .03 /.08; B .0005/.006	110/130	100 min.
Grade Q		2.75 – 7	.14/.21	.95/1.30	.035	.035	.15/.35	1.00/1.50	1.20/1.50	.40/.60	V .03/.08	110/130	90 min.
Grade S		2.25 – 2.5	.11/.21	1.10/1.50	.035	.020	.15/.45			.10/.60	V .06; Ti .06; B .001/.005; Cb .06	110/130	100 min.
Grade E		2.5 – 4	.12/.20	.40/.70	.035	.035	.20/.40	1.40/2.00		.40/.60	Ti .01/.10; B .001/.005	110/130	90 min.
A516	Pressure-vessel quality.												
Grade 70		.1875 – 5	.27	.85/1.20	.025	.025	.15/.40					70/90	38 min.
		.625 – 1.5	.28	.85/1.20	.025	.025	.15/.40					70/90	38 min.
		1.625 – 2	.28	.85/1.20	.025	.025	.15/.40				Normalized	70/90	38 min.
		2.25 – 4	.30	.85/1.20	.025	.025	.15/.40				Normalized	70/90	38 min.
		4.25 – 6.5	.31	.85/1.20	.025	.025	.15/.40				Normalized	70/90	38 min.

AISI

Note: Single values are maximums unless otherwise noted.

1020	General-purpose steel produced to a controlled chemistry. Fits a wide range of applications.	.75 – 18	.18/.23	.30/.60	.035	.04							
1045	Mid-carbon steel with good response to heat treatment.	.375 – 16	.43/.50	.60/.90	.035	.04	.15/.40						
4140	Alloy steel with consistent response to heat treatment.	.375 – 8	.36/.44	.75/1.00	.035	.04	.15/.35	.80/1.10		.15/.25			
4130 AQ	Alloy steel produced to strict aircraft specifications.	.375 – 1.25	.28/.33	.40/.60	.035	.04	.15/.35	.80/1.10		.15/.25			

* 1.35 up to .5”
* 1.65 over .5”

** .40 up to 1.5”

Abrasion- Resistant													
AR400	Abrasion-resistant steel with surface hardness of 360/444 Brinell.	.25 – 3.5	.19	1.55	.025	.005	.55	.55	1.00	.55	B .0005/.005		

Services

- High-definition plasma cutting, up to 2” thick. Capacity, 10’ wide by 40’ long
- Oxy-fuel burning, up to 20” thick. Capacity, 14’ wide to 60’ long
- Beveling
- Heat-treating
- Forming
- Shot-blasting
- Grinding
- Milling

Our sales/engineering team is technically proficient, able to interpret customer CAD files (dwg & dxf) and drawings to produce accurate parts.

State-of-the-art nesting programs enable us to better utilize material, resulting in lower product costs.

Throughout the entire production process, machine operators and Quality Assurance are checking tolerances for accuracy and correctness.

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