



Steel Specifications

Steel Castings & Forgings

11/2014

Alloy/Grade	Description	Typical Range of Mechanical Properties		
		Tensile/Ksi	Yield/Ksi	Elongation/%
A27/A27M-13	Standard Specification for Steel Castings, Carbon, for General Application	60 to 70	30 to 40	22 to 24
ASTM A148/A148M	Standard Specification for Steel Castings, High Strength, for Structural Purposes	80 to 260	40 to 210	22 to 3
ASTM A216/A216M	Standard Specification for Steel Castings, Fusion Welding, High Temp. Service	60 to 95	30 to 40	24 to 22
ASTM A218/A218M	Standard Specification for Steel Castings, Austenitic Manganese	NA	NA	NA
Grade 1020 to 1050	Basic Non-Resulfurized Steel	60 to 100	35 to 80	25 to 10
AAR M201 Gr. A to E	AAR Standards for Steel castings-- Max. 0.32% C , 1.50% Si . P 0.04% and S 0.04%	60 to 120	30 to 100	24 to 14
11 XX Series	Resulfurized Steel	50 to 120	45 to 100	30 to 10
12 XX Series	Rephosphorized and Resulfurized Steel	55 to 95	35 to 60	25 to 10
15 XX Series	Carbon-High Manganese, Alloy Steel	50 to 115	32 to 100	25 to 10
51 XX Series	Chromium Alloy Steel	85 to 155	55 to 105	21 to 10
41 XX Series	Chromium-Molybdenum Alloy Steel	75 to 175	55 to 115	30 to 10
43 XX Series	Nickel-Chromium-Molybdenum Alloy Steel	115 to 210	75 to 150	16 to 7
86 XX Series	Nickel-Chromium-Molybdenum Alloy Steel	70 to 180	70 to 165	16 to 8

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		Tensile/Ksi	Yield/Ksi	Elongation/%
304/304L	Cast Austenitic Stainless	TBD	TBD	TBD
310	Cast Austenitic Stainless	TBD	TBD	TBD
316	Cast Austenitic Stainless	70 to 100	42	30
CF3/CF3M	Cast Austenitic Stainless, Unclassified	70	30	33
CF8/CF8M	Cast Austenitic Stainless, Unclassified	70	30	35

Note: WE Lott has the capacity to supply most steel cast and forged alloys. In regard to other organizations standard specifications, we have the ability to cross reference the standard and produce parts to that material specification.