

Cast Steel Grades

ASTM	Chemical Requirements					Tensile Requirements			
STEEL GRADE	Carbon	Manganese	Silicon	Sulfur	Phosphorus	Tensile Strength	Yield Point	Elongation in 2 in.	Reduction of Area
	Max % / Range					Min. ksi [Mpa] / Range		Min. %	
ASTM A27 / A27M									
ASTM A27, Grade N-1	0.25	0.75	0.80	0.06	0.05	N/A	N/A	N/A	N/A
ASTM A27, Grade N-2	0.35	0.60	0.80	0.06	0.05	N/A	N/A	N/A	N/A
ASTM A27, Grade U60-30	0.25	0.75	0.80	0.06	0.05	60 [415]	30 [205]	22	30
ASTM A27, Grade 60-30	0.30	0.60	0.80	0.06	0.05	60 [415]	30 [205]	24	35
ASTM A27, Grade 65-35	0.30	0.70	0.80	0.06	0.05	65 [450]	35 [240]	24	35
ASTM A27, Grade 70-36	0.35	0.70	0.80	0.06	0.05	70 [485]	36 [250]	22	30
ASTM A27, Grade 70-40	0.25	1.20	0.80	0.06	0.05	70 [485]	40 [275]	22	30
ASTM A148 / A148M									
ASTM A148, Grade 80-40	N/A	N/A	N/A	0.06	0.05	80 [550]	40 [275]	18	30
ASTM A148, Grade 80-50	N/A	N/A	N/A	0.06	0.05	80 [550]	50 [345]	22	35
ASTM A148, Grade 90-60	N/A	N/A	N/A	0.06	0.05	90 [620]	60 [415]	20	40
ASTM A216 / A216M									
ASTM A216, Grade WCA	0.25	0.70	0.60	0.045	0.04	60-85 [415-585]	30 [205]	24	35
ASTM A216, Grade WCB	0.30	1.00	0.60	0.045	0.04	70-95 [485-655]	36 [250]	22	35
ASTM A216, Grade WCC	0.25	1.20	0.60	0.045	0.04	70-95 [485-655]	40 [275]	22	35

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STEEL GRADE	Carbon	Manganese	Silicon	Sulfur	Phosphorus	Tensile Strength	Yield Point	Elongation in 2 in.	Reduction of Area
	Max % / Range					Min. ksi [Mpa] / Range		Min. %	
	ASTM A352 / A352M								
ASTM A352, Grade LCA	0.25	0.70	0.60	0.045	0.04	60-85 [415-585]	30 [205]	24	35
ASTM A352, Grade LCB	0.30	1.00	0.60	0.045	0.04	65-90 [450-620]	35 [240]	24	35
ASTM A352, Grade LCC	0.25	1.20	0.60	0.045	0.04	70-95 [485-655]	40 [275]	22	35
	ASTM A915 / A915M								
ASTM A915, Grade SC 1020	0.18-0.23	0.40-0.80	0.30-0.60	0.04	0.04	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 1025	0.22-0.28	0.40-0.80	0.30-0.60	0.04	0.04	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 1030	0.28-0.34	0.50-0.90	0.30-0.60	0.04	0.04	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 1040	0.37-0.44	0.50-0.90	0.30-0.60	0.04	0.04	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 1045	0.43-0.50	0.50-0.90	0.30-0.60	0.04	0.04	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 4130	0.28-0.33	0.40-0.80	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 4140	0.38-0.43	0.70-1.10	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 4330	0.28-0.33	0.60-0.90	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 4340	0.38-0.43	0.60-0.90	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 8620	0.18-0.23	0.60-1.00	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 8625	0.23-0.28	0.60-1.00	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A
ASTM A915, Grade SC 8630	0.28-0.33	0.60-1.00	0.30-0.60	0.04	0.035	N/A	N/A	N/A	N/A