

## ASTMA515/A515M

ASTM A515/A515M Standard Specification For Pressure Vessel Plates, Carbon Steel, For Intermediate-And Higher-Temperature Service



ASTM A515/A515M specification covers carbon-silicon steel plates primarily for intermediate - and higher-temperature service in welded boilers and other pressure vessels. Plates are available in three grades having different strength levels: Grade 60; Grade 65; and Grade 70. The steel shall be killed and made to a coarse austenitic grain size practice. The steel shall conform to the chemical requirements ASTM A515/A515M specified. Tension test shall be made to conform to the requirements specified. ASTM A515/A515M standard main steel grade: ASTM A515 Grade 60, 65, 70 (A515GR60, 65, 70)

### Specification of ASTM A515/A515M

Standard: ASTM A515/A515M
Grade: ASTM A515 GR 60, 65, 70
Thickness: 8mm -260mm
Width: 1000mm-4000mm
Length: 1000mm-20000mm
MOQ: 1 PC
Product type: Steel plate
Delivery time: Promptly ( Stock) or 10-40 days (Production)
Stock: Available
MTC: Available
Delivery condition: As Rolled or Normalized

**TABLE 1 Chemical Requirements**

Elements	Composition, %		
	Grade 60 [Grade 415]	Grade 65 [Grade 450]	Grade 70 [Grade 485]
Carbon, max: <sup>a, b</sup>			
1 in. [25 mm] and under	0.24	0.28	0.31
Over 1 to 2 in. [25 to 50 mm], incl	0.27	0.31	0.33
Over 2 to 4 in. [50 to 100 mm], incl	0.29	0.33	0.35
Over 4 to 8 in. [100 to 200 mm], incl	0.31	0.33	0.35
Over 8 in. [200 mm]	0.31	0.33	0.35
Manganese <sup>b</sup> , max:			
Heat analysis	0.90	0.90	1.20
Product analysis	0.98	0.98	1.30
Phosphorus, max <sup>a</sup>	0.025	0.025	0.025
Sulfur, max <sup>a</sup>	0.025	0.025	0.025
Silicon:			
Heat analysis	0.15-0.40	0.15-0.40	0.15-0.40
Product analysis	0.13-0.45	0.13-0.45	0.13-0.45

<sup>a</sup> Applies to both heat and product analyses.

<sup>b</sup>For each reduction of 0.01 percentage point below the specified maximum for carbon, an increase of 0.06 percentage point above the specified maximum for manganese is permitted, up to a maximum of 1.50 % by heat analysis and 1.60 % by product analysis.

**TABLE 2 Tensile Requirements**

	Grade		
	60 [415]	65 [450]	70 [485]
Tensile strength, ksi [MPa]	60-80 [415-550]	65-85 [450-585]	70-90 [485-620]
Yield strength, min, ksi [MPa]	32 [220]	35 [240]	38 [260]
Elongation in 8 in. [200 mm], min, % <sup>a</sup>	21	19	17
Elongation in 2 in. [50 mm], min, % <sup>a</sup>	25	23	21

<sup>a</sup> See Specification A20/A20M for elongation adjustment.

We are a professional ASME SA515 and ASTM A515 steel stockist and supplier. We can supply different product type and grades of ASME SA515. If you have any need of ASME SA515 steel please do not hesitate to contact us .

ASME SA515

ASME SA515 Grade 60 , ASME SA515 Grade 65 , ASME SA515 Grade 70

ASTM A515 Grade 60 , ASTM A515 Grade 65 , ASTM A515 Grade 70

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