

### Description

ASTM A516 is the standard specification for carbon steel plates used in pressure vessels for low to moderate temperature service. A516 Grade 70 is an excellent choice for service in lower than ambient temperature applications with excellent notch toughness and good weldability. This steel grade is used in both pressure vessel and industrial boilers and can withstand high pressure at different temperatures.

Plates up to and including 40mm thick may be supplied as-rolled but may be ordered normalised. Plates thicker than 40mm as well as plates on which notch toughness test is required, must be normalised.

### Applications

Used throughout the oil, petrochemical and gas industry. The steel is also found in sour services and wet H<sub>2</sub>S applications (where steel is HIC tested).

### Chemical composition

C	Si	Mn	P	S
0.27	0.15 - 0.40	0.85 - 1.20	0.025	0.025

### Mechanical properties

Nominal Thickness (mm)	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)
6 - 50	260 min	480 - 620	17 min

### Note

- Chemical composition: Ladle/ product analysis in %max
- Mechanical properties: At ambient temperature
- Delivery condition: Normalised (+N)
- Minimum impact energy: 20J minimum  $t \leq 25$  @ -46°C;  $25 < t \leq 50$  @ -40°C;  $50 < t \leq 63$  @ -35°C
- HIC test is a supplementary requirement
- Supplementary requirements shall not apply unless specified in the purchase order as per ASTM A20 / A20M.

### Approximate equivalents

EN 10028-2 Grade P295GH, BS 1501-224-490 A/ B, GB 713 Q345R.

### Standard stock list

13000 x 3000 x 6 / 8 / 10 / 12 / 16 / 20 / 25 / 30 / 35 / 40 / 50 mm