ASTM A516 Grade 70 Pressure Vessel Steel PLATE

1.Pressure Vessel Steel Home Page

ASTM A516

ASTM A516 Grade 60 | ASTM A516 Grade 65 | ASTM A516 Grade 70

2.ASTM A516 Grade 70 is a pressure steel grade used in the production of weldable steel pressure vessels and boilers. Masteel supply high quality carbon steel plate for boiler and pressure vessel fabrication which is ideally suited to the high standards set by the oil, gas and petrochemical industry - this is why we stock an extensive range of carbon plates according to ASTM A516 Grade 70.

3.ASTM A516 Grade 70 is an excellent choice for service in lower than ambient temperature applications, has excellent notch toughness and is used in both pressure vessels and industrial boilers.

A516 Grade 70 offers greater tensile and yield strength when compared to ASTM A516 Grade 65 and can operate in even lower temperature service.

4.Our plates come with mill certification in accordance with EN10204 3.1 or EN10204 3.2. Our plates are fully traceable, usually with hard stamping and we welcome any third party or customer inspection if required which can be arranged with the client.

5.Table 1: Chemical Composition of ASTM A516 Grade 70

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Carbon (C) | % | Manganese (Mn) | % | Phosphorus (P) | % |
| 12.5mm or less 12.5 - 50mm 50 - 100mm 100 - 200mm > 200mm | 0.27 0.28 0.30 0.31 0.31 | 12.5mm or less       • Heat Analysis :       • Product Analysis : Over 12.5mm       • Heat Analysis :       • Product Analysis : | 0.85-1.20 0.79-1.30  0.85-1.20 0.79-1.30 | (max) | 0.035 |
| Sulphur (S) | % | Silicon (Si) | % |  | |
| (max) | 0.035 | • Heat Analysis :       • Product Analysis : | 0.15-0.40 0.13-0.45 |

(Maximum values unless stated otherwise)

Table 2: Mechanical Properties of ASTM A516 Grade 70

|  |  |
| --- | --- |
| Description | Grade 70 |
| Tensile strength (ksi) Tensile strength (MPa) Yield strength (ksi) Yield strength (MPa) Elongation in 200mm (min)(%) Elongation in 50mm (min) (%) Thickness (max)(mm) | 70-90 485-620 38 260 17 21 205 |

(Minimum values unless stated otherwise)

(Please note: the technical information above is for guidance only – for exact specifications please check with our Sales Team)

6.To find out more about ASTM A516 Grade 70 and to receive a competitive quotation for the supply of this material, please contact us.