EN 10028 – P235GH Pressure Vessel Steel plate

1.Pressure Vessel Steel Home Page

EN 10028

P235GH | P265GH | P295GH | P355GH | P275 NH/NL1/NL2 | P355 NH/NL1/NL2

P460 NH/NL1/NL2

2.P235GH is a pressure vessel quality steel which is available from Mantel, ex–stock.P235GH is a European specified steel for use in pressure vessels, boilers and heat exchangers.

3.The composition of this steel makes it ideal for applications where elevated working temperatures are the norm and the material is used by fabricators throughout the oil, gas and petrochemical industry.

4.P235GH is a normalized carbon alloy steel and is available ex-stock from our warehouse with mill certification and stamping. This EN10028 steel grade supersedes the older BS and DIN standards (Grades BS 1501-161-360A and DIN H 1, respectively).

5.Please refer to the data tables below.

Table 1: Chemical Composition of EN 10028 P235GH

|  |  |  |  |
| --- | --- | --- | --- |
| Element | % by mass | Element | % by mass |
| Carbon (C) | ≤0.16 | Silicon (Si) | ≤0.35 |
| Manganese (Mn) | 0.60 to 1.20 | Phosphorous (P) (max) | 0.025 |
| Sulphur (S) (max) | 0.015 | Aluminium (Al) | ≤0.020 |
| Nitrogen (N) | ≤0.012 | Chromium (Cr) | ≤0.30 |
| Copper (Cu) | ≤0.30 | Molybdenum (Mo) | ≤0.08 |
| Niobium (Nb) | ≤0.020 | Nickel (Ni) | ≤0.30 |
| Titanium (Ti) (max) | 0.03 | Vanadium (Vi) | ≤0.02 |

The combined quantities of Chromium, Copper and Molybdenum should not exceed 0.70%

6.Table 2: Mechanical Properties of EN 10028 P235GH

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | Type | Thickness (mm) | Yield Strength MPa (min) | Tensile Strength MPa | Elongation % (min) | Impact Energy (KV J) (min) | | |
| -20° | 0° | +20° |
| P235GH | Normalized | ≤ 16 16> to ≤40 40> to ≤60 60> to ≤100 100> to ≤150 150> to ≤250 | 235 225 215 200 185 170 | 360 to 480 360 to 480 360 to 480 360 to 480 350 to 480 350 to 480 | 24 24 24 24 24 24 | 27 27 27 27 27 27 | 34 34 34 34 34 34 | 40 40 40 40 40 40 |

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

7.To find out more about P235GH and to receive a competitive quotation for the supply of this material, please contact us.