P355NH, P355NL1, P355NL2 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.P355NH, NL1 & NL2 – pressure vessel steels used by the worlds leading fabricators supplying the oil and gas industry. A pressure vessel steel grade with good weld ability and high resistance to brittle cracking, P355NH is used by the world's fabricators for the manufacture of pressure vessel tanks for the storage of pressurized gases.

3.Other grade types include...

NL1 – is ideal for use in low temperatures

NL2 – is ideal for use in especially low temperatures

P355NH is a normalized steel grade with a minimum yield strength of 275-460 N/mm² and plates are available ex–stock from our warehouse.

Please refer to the data tables below for more information.

4.Table 1: Chemical Composition of EN 10028 P355 NH, P355 NL1 & P355 NL2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Element | P355NH | P355NL1 | P355NL2 | Element | P355NH | P355NL1 | P355NL2 |
| Carbon (C) max. | 0.18 | 0.18 | 0.18 | Silicon (Si) max. | 0.50 | 0.50 | 0.50 |
| Manganese (Mn) | 1.10 to 1.70 | 1.10 to 1.70 | 1.10 to 1.70 | Phosphorous (P) max. | 0.025 | 0.025 | 0.020 |
| Sculpture (S) max. | 0.015 | 0.015 | 0.010 | Chromium (Cr) min. | 0.30 | 0.30 | 0.30 |
| Molybdenum (Mo) max. | 0.08 | 0.08 | 0.08 | Nickel (Ni) max. | 0.50 | 0.50 | 0.50 |
| Niobium (Nb) max. | 0.05 | 0.05 | 0.05 | Titanium (Ti) max. | 0.03 | 0.03 | 0.03 |
| Vanadium (V) max. | 0.10 | 0.10 | 0.10 | Nitrogen (N) max. | 0.012 | 0.012 | 0.012 |
| Aluminum (Al) max. | 0.020 | 0.020 | 0.020 | Copper (Cu) max. | 0.30 | 0.30 | 0.30 |

The combined quantities of Niobium, Titanium and Vanadium should be 0.12% max.

5.Table 2: Mechanical Properties of EN 10028 P355 NH, P355 NL1 & P355 NL2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade | Type | Thickness (mm) | Yield Strength MPa (min) | Tensile Strength MPa | Elongation % (min) |
| P355 NH P355 NL1 P355 NL2 | Normalized | ≤ 16 16> to ≤40 40> to ≤60 60> to ≤100 100> to ≤150 150> to ≤250 | 355 345 335 315 305 295 | 490 to 630 490 to 630 490 to 630 470 to 610 460 to 600 450 to 590 | 21 21 21 21 21 21 |

(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 P355 NH, NL1 & NL2 and to receive a competitive quotation for the supply of this material, please to contact us.