ASTM A387 Grade 5 Class 2 Pressure Vessel Steel PLATE

1.Chrome Moly Plate

ASTM A387

ASTM A387 Grade 5 Class 2 | ASTM A387 Grade 9 Class 2 | ASTM A387 Grade 11 Class 2

ASTM A387 Grade 12 Class 2 | ASTM A387 Grade 22 Class 2 | ASTM A387 Grade 91 Class 2

2.A387 Grade 5 chrome moly steel.A387 Grade 5 Class 2 – high quality chromium-molybdenum alloy steel plate, ideal for use in pressure vessels and industrial boilers due to it's excellent heat resistant and anti corrosion properties.

3.We can supply plates from our own stockholding in Birmingham or directly from the mill and all plates come with mill test certification and individual stampings.

Equivalents:

|  |  |  |  |
| --- | --- | --- | --- |
| BS | EN | ASTM/ASME | DIN |
| ... | ... | A387-5-2 | ... |

Specifications:

4.Chromium & Molybdenum content (according to the ASTM specification):

|  |  |  |
| --- | --- | --- |
| Designation | Nominal Chromium Content (%) | Nominal Molybdenum Content (%) |
| A387 Grade 5 | 5.00% | 0.50% |

Tensile Requirements for Class 2 Plates:

|  |  |  |
| --- | --- | --- |
| Designation: | Requirement: | Grade 5 |
| A387 Grade 5 | Tensile strength, ksi [MPA] | 75 to 100 [515 to 690] |
|  | Yield strength, min, ksi [MPa]/(0.2% offset) | 45 [310] |
|  | Elongation in 8 in. [200mm], min % | ... |
|  | Elongation in 2 in. [50mm], min, % | 18 |
|  | Reduction of area, min % | 45 (measured on round specimen) 40 (measured on flat specimen) |

5.Chemical Requirements:

|  |  |  |
| --- | --- | --- |
| Element |  | Chemical Composition (%) inc. Grade & UNS No. |
|  |  | Grade 5 (UNS: S50200) |
| Carbon: | Heat Analysis: | 0.15 max |
|  | Product Analysis: | 0.15 max |
| Manganese: | Heat Analysis: | 0.30 - 0.60 |
|  | Product Analysis: | 0.25 - 0.66 |
| Phosphorus: | Heat Analysis: | 0.035 |
|  | Product Analysis: | 0.035 |
| Sulphur (max): | Heat Analysis: | 0.030 |
|  | Product Analysis: | 0.030 |
| Silicon: | Heat Analysis: | 0.50 max |
|  | Product Analysis: | 0.55 max |
| Chromium: | Heat Analysis: | 4.00 - 6.00 |
|  | Product Analysis: | 3.90 - 6.10 |
| Molybdenum: | Heat Analysis: | 0.45 - 0.65 |
|  | Product Analysis: | 0.40 - 0.70 |

Tension Test Requirements:

The material shall be tested using a test specimen and will confirm to the tensile requirements as outlined in Table 2.

6.Other requirements:

The following requirements and testing procedures (which are not mandatory) are considered suitable for Chrome Molybdenum steel:

Vacuum treatment

Product Analysis

Additional Tension Test

Charpy V-Notch Impact Test

Drop Weight Test

High Temperature Tension Test

Ultrasonic Examination

Magnetic Particle Examination

7.To find out more about our's services and ASTM A387 Grade 5 Class 2 steel plates which we can supply directly to you from stock or from the mill, please contact us.