BS1501–224–460A/B Pressure Vessel Steel plate

1.Pressure Vessel Steel Home Page

BS 1501

161-360A/B | 161-430A/B | 223-490A/B | 224-460A/B | 224-490A/B | 225-490A/B

2.BS1501-224-460A & B are no longer current pressure vessel steel grades. Consider equivalents such as ASTM A516 Grade 65 and P295GH. For use in weldable industrial boilers and pressure vessels, BS-224-460A/B is the British Standard specification which is comparable with ASTM A516 Grade 65.

3.This British Standard has now been been superseded by the European specification EN10028 but we still receive enquiries for this specific grade which is why we have included technical information on this website.

4.Please note that this information should only be used for cross referencing purposes when comparing to current specifications.

5.There are two types of BS1501-224-460 available which are ...

Type A :Denotes specified min. room temperature tensile properties

Type B :As per Type A but with elevated temperature properties

Please refer to technical details for BS-224-460A/B in the tables below. Current comparable grades are listed in the menu on the left hand side of this web page.

6.Table 1: Chemical Composition of BS1501-224-460A/B

|  |  |  |  |
| --- | --- | --- | --- |
| Element | BS1501-224-460A/B | Element | BS1501-224-460A/B |
| Carbon (C)\* | max. | 0.22% | Aluminium (Al)\*(metallic) | min. | 0.015% |
| Silicon (Si) | min. | 0.10% |
| max. | 0.40% | Chromium (Cr) | max. | 0.25% |
| Manganese (Mn) | min. | 0.90% | Copper (Cu) | max. | 0.30% |
| max. | 1.60% | Molybdenum (Mo) | max. | 0.10% |
| Phosphorus (P) | max. | 0.030% | Nickel (Ni) | max. | 0.75% |
| Sulphur (S) | max. | 0.030% |

\* Aluminium level meets this requirement as long as value is not less than 0.18%

Table 2: Mechanical Properties of BS1501-224-460A/B

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Nominal Plate Thickness: | Tensile Strength: | Yield Strength: | Elongation: |
| Over (mm) | Up to and inc. (mm) | min. N/mm² | max. N/mm² | min. N/mm² | min. (%) |
| BS1501-224-460A/B | 3 | 16 | 460 | 580 | 325 | 21 |
| 16 | 40 |   |   | 315 | 21 |
| 40 | 63 |   |   | 305 | 20 |
| 63 | 100 |   |   | \* | 19 |
| 100 | 150 |   |   | \* | 19 |

\* Yield strength values for plates over 63mm shall be same values specified for plate thicknesses between 40mm and 63mm reduced by 1% for each 5mm increase over 63mm

(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 our pressure vessel and boiler quality steels and to receive a competitive quotation for the supply of the material, please contact us.