S355J2W Weathering Steel

1.Weather Resistant Steel

Corten Steel | Corten A | Corten B | S355J0WP | S355J0W | S355J2W

2.S355J2W is a weathering steel used in heavy and load bearing structural applications. S355J2W is weather resistant steel which is intended for use in load bearing or heavy structures due to its greater tested impact strength. It is also suitable for low temperature working environments.

3.Like all weather resistant steels, S355J2W is self protecting – the material rusts over time due to the reaction with chemical elements in the air. This rust layer acts a protective barrier which prevents further oxidation. The steel is economical to use and is fully recyclable. As a structural steel it is can be used as easily for load bearing duties as it can for purely cosmetic purposes.

4.Benefits of Using S355J2W

Excellent impact strength

Ideal for heavy use or in low temperature

Can be used in–situ without the need for expensive treatment or painting over time

Popular material with architects for use in steel sculptures and modern structures due to aesthetic appeal

5.Grades & Equivalents

|  |  |
| --- | --- |
| EN 10025-5:2004 | Corten |
| S355J2W | Corten B |

6.Chemical Composition

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | C | Si | Mn | P | S | N | Addition of nitrogen binding elements | Cr | Cu |
| S355J2W | 0.16 | 0.50 | 0.50/1.50 | 0.030 | 0.030 | 0.009 | – | 0.40/0.80 | 0.25/0.55 |

Maximum values unless otherwise stated

7.Mechanical Properties

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | Min. Yield Strength Reh MPa | | | | | | Tensile Strength Rm MPa | | |
| Nominal Thickness (mm) | | | | | | Nominal Thickness (mm) | | |
| ≤16 | >16 ≤40 | >40 ≤63 | >63 ≤80 | >80 ≤100 | >100 ≤150 | >3 | >3 ≤100 | >100 ≤150 |
| S355J2W | 355 | 345 | 335 | 325 | 315 | 295 | 510/680 | 470/630 | 450/600 |

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

8.Contact one of Europe's leading steel socket’s – We can offer S355J2W weathering steel to your requirements. Please contact us with your enquiry.