STRUCTURAL STEEL

LOW CARBON STRUCTURAL STEEL



We are a division of the Smiths Metal Centres Limited Group

Revision: tsm/heat-treated/s2355j2/21-03-23

EN 10025-2.

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S355J2



Corrosion Resistance:

S355J2 steel has moderate corrosion resistance in atmospheric conditions, making it suitable for outdoor structures. However, it is not recommended for direct exposure to seawater or other highly corrosive environments. **S355J2** steel contains small amounts of alloying elements, such as manganese, silicon, and carbon, which enhance its mechanical properties but do not significantly improve its corrosion resistance. Therefore, if the steel is used in environments prone to corrosion, appropriate measures, such as protective coatings or cathodic protection, must be taken to prevent or reduce corrosion.

Typical Applications:

S355J2 is a versatile steel that offers a wide range of applications in various industries. Its excellent strength, toughness, and workability make it a popular choice for a range of structural and engineering applications and offshore structures, such as oil rigs and wind turbines.

Chemical Composition (weight, %)

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	С	Si	Mn	Р	S	Cu	
Max.	0.20	0.55	1.60	0.025	0.025	0.55	

S355J2 is a low carbon manganese, high tensile strength structural steel that belongs to the European standard

Some typical material applications include bridges, pressure vessels, offshore structures, wind turbines, mining equipment, and cranes.

* Properties as per EN 10025-2

Strength & Durability:

The product is known for its high strength and durability, making it a popular choice for various structural and engineering applications. Its minimum yield strength is 355 MPa, which means it can withstand high stress and loads without deforming or breaking. **S355J2** has excellent toughness and impact resistance, which makes it suitable for use in low-temperature environments. The steel has been subjected to a Charpy V-notch impact test at -20°C and has a minimum impact energy of 27 Joules, indicating its ability to withstand sudden and severe impacts without cracking or breaking.

Benefits:

- Good corrosion resistance
- High strength and durability
- Versatile
- Superior weldability

We stock **S355J2** in round and square bars of various diameters.



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