

### EQUIVALENTS:

**American:** ASTM A572 grade 50A  
**British:** BS4360 grade 50B (EN10025-2)

### COLOUR CODE:



S355JR+AR

### CHEMICAL COMPOSITION % AS PER 50025/EN10025:

GRADE	Max C Content For t IN MM			Mn Max	Si Max	P Max	S Max	Cu Max	Ni Max
	t ≤ 16	>16 t ≤	t > 40						
S355JR+AR	0.24	0.24	0.24	1.60	0.55	0.035	0.035	0.550	0.012

### CARBON EQUIVALENT VALUE FORMULA TO BE USED:

$$CE = \frac{C+Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Ni+Cv}{5}$$

### MECHANICAL PROPERTIES:

GRADE	Yield (Mpa) Min	Tensile (Mpa) Min	Charpy V-NOTCH Longitudinal	
	Strength at t = 16mm		Temp (°C)	Energy (J) t = 16mm
S355JR+AR	355	470/630	20	27

Note: Verification of the specified impact value is only carried out when agreed at the time of enquiry and order

### CHARACTERISTICS:

- Carbon steel
- Weldable

### TYPICAL APPLICATIONS:

Structural steel works: bridge components, components for offshore structures  
 Mining and earth moving equipment

Load handling equipment  
 Wind tower components  
 Power plants

### TOLERANCES:

Material 6mm and thicker is supplied with dimensional tolerances in accordance with EN10029. If not specified tolerances will be in accordance with "Class A".

S - Symbol for structural steel  
 JR - Symbol for 20° C temperature impact test  
 J2 - Symbol -20° C temperature impact test

Material produced in the hot strip mill is supplied with dimensional tolerances in accordance with EN 10051