



# Bromford Iron & Steel Co. Ltd

---

## Declaration of Performance

**1. Product name and identification code:**

Hot rolled products of structural steels, BS EN 10025-2  
Grades S235;S275; S355  
Qualities JR; J0; J2, K2

**2. Name and manufacturing address:**

Bromford Iron and Steel Co. Ltd  
Bromford Lane  
West Bromwich  
West Midlands  
B70 7JJ  
UK

**3. Intended use:**

To be used in welded, bolted and riveted structures

**4. System of assessment and verification of consistency of performance of the product:**

System 2+

**5. CE marking notified certification body:**

UK CARES, Pembroke House, 21 Pembroke Road, Sevenoaks, Kent TN13 1XR  
Notified body No. 1244

Notified factory production control certification body No. 1244 performed the initial inspection of the manufacturing plant and of the factory production control, and the continuous surveillance, assessment and evaluation of factory production control and issued the Factory Production Control certificate 1244-CPR-1004.

The declared performance for the product identified in point 1 is shown in point 6 and is issued under the sole responsibility of the manufacturer named in point 2 above.

## 6. Declared Performance

Essential Characteristics	Performance		Harmonised technical specification					
Tolerances on dimensions and shape	EN 10058 Flats		EN10025-1 2004					
Yield Strength (MPa)	Grade and Quality	Nominal Thickness (mm) ≤ 16						
	S235 JR/J0	235						
	S275 JR/J0/J2	275						
	S355 JR/J0/J2/K2	355						
Tensile Strength (MPa)	Grade and Quality	Nominal Thickness (mm) <3                      ≥ 3 ≤16						
	S235 JR/J0	360-510                      360-510						
	S275 JR/J0/J2	430-580                      410-560						
	S355 JR/J0/J2/K2	-                                      470-630						
Elongation (%) min. Lo=5.65√So (T <3mm Lo=80mm)	Grade and Quality	Nominal Thickness T (mm) >2 ≤2.5    >2.5 <3    ≥ 3 ≤16						
	S235 JR/J0	20	21	26				
	S275 JR/J0/J2	18	19	23				
	S355 JR/J0/J2/K2	-	-	22				
Impact Strength (J)	Grade and Quality	Temperature Degrees C	Value (min) Joules					
	S235/S275/S355 JR	20	27					
	S235/S275/S355 J0	0	27					
	S275/S355 J2	-20	27					
	S355K2	-20	40					
Weldability CEV	Grade and Quality	CEV max (%) Nominal Thickness (mm) ≤16						
	S235 JR/J0	0.35						
	S275 JR/J0/J2	0.40						
	S355 JR/J0/J2/K2	0.45						
Durability (Ladle analysis)	Grade & Quality	C% max	Si% max	Mn% max	P% max	S% max	N% max	Cu% max
	S235JR	.17	-	1.40	.040	.040	.012	.55
	S235J0	.17	-	1.40	.035	.035	.012	.55
	S275JR	.21	-	1.50	.040	.040	.012	.55
	S275J0	.18	-	1.50	.035	.035	.012	.55
	S275J2	.18	-	1.50	.030	.030	-	.55
	S355JR	.24	.55	1.60	.040	.040	.012	.55
	S355J0	.20	.55	1.60	.035	.035	.012	.55
	S355J2	.20	.55	1.60	.030	.030	-	.55
S355K2	.20	.55	1.60	.030	.030	-	.55	

Signed for and on behalf of the manufacturer:



Dennis Pearson  
Quality and Metallurgical Manager  
Bromford Iron and Steel Co. Ltd.