

DECLARATION OF PERFORMANCE

1. Unique identification code of the product-type:

Hot rolled steel strip EN 10025-2:2004

S235JR, S275JR, S275JRC, S355JR, S355JRC, S355J0, S355J0C, S355J2, S355J2C

2. Intended use/es:

Metal structures or in composite metal and concrete structures

3. Manufacturer:

G J Steel Public Company Limited

358 M6 Bowin Si Racha Chonburi 20230 Thailand

4. System/s of AVCP:

System 2+

5. Harmonized standard:

EN 10025-1:2004 and EN 10025-2:2004

Notified body/ies:

LRQA Nederland B.V., NB 0343, performed initial inspection of the manufacturing plant and of factory production control, continuous surveillance, assessment, and evaluation of factory production control under system 2+ and issued certificate of conformity of the factory production control.

6. Declared performance/s:

Essential characteristics	Performance	EU Harmonized Standard
Tolerances on dimensions and shape	Strip EN 10051	EN 10025-1:2004
Elongation	EN 10025-2	
Tensile strength		
Yield strength		
Impact strength		
Weldability		
Durability		

The performance of the product identified above is in conformity with the declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



Sudchai Visuddhidham
 Chief Production Officer
 Thailand, 29 March 2024

Steel EN 10025-2:2004 – S235JR

Essential characteristics	Performance			EU Harmonized Standard
Tolerances on dimensions and shape	Strip EN 10051			EN 10025-1:2004
Elongation	Nominal thickness, mm	Minimum elongation, %	Original gauge length, mm	
	$a \leq 1$	15	80	
	$1 < a \leq 1.5$	16	80	
	$1.5 < a \leq 2$	17	80	
	$2 < a \leq 2.5$	18	80	
	$2.5 < a < 3$	19	80	
	$3 \leq a \leq 40$	24	$5.65\sqrt{S_o}$	
Tensile strength	360 to 510 MPa			
Yield strength	Nominal thickness, mm	Minimum yield strength, MPa		
	$a \leq 16$	235		
	$16 < a \leq 40$	225		
Impact strength	Quality	Temperature, °C	KV ₂ , J	
	JR	20	≥ 27	
Weldability	CEV ≤ 0.35 %			
Durability	Class	Si, %	Si+2.5P, %	P, %
	Class 1	≤ 0.030	≤ 0.090	-
	Class 3	0.14 ≤ Si ≤ 0.25	-	≤ 0.035
	Not specified	NPD		

CEV: Carbon equivalent value [CEV = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15]

NPD: No performance determined

Steel EN 10025-2:2004 – S275JR, S275JRC

Steel EN 10025-1:2004 S275JR, S275SR		EU Harmonized Standard/UK Designated Standard		
Essential characteristics	Performance			
Tolerances on dimensions and shape	Strip EN 10051			
Elongation	Nominal thickness, mm	Minimum elongation, %	Original gauge length, mm	
	$a \leq 1$	13	80	
	$1 < a \leq 1.5$	14	80	
	$1.5 < a \leq 2$	15	80	
	$2 < a \leq 2.5$	16	80	
	$2.5 < a < 3$	17	80	
	$3 \leq a \leq 40$	21	$5.65\sqrt{S_o}$	
Tensile strength	Nominal thickness, mm	Tensile strength, MPa		
	$a < 3$	430 to 580		
	$3 \leq a \leq 100$	410 to 560		
Yield strength	Nominal thickness, mm	Minimum yield strength, MPa		
	$a \leq 16$	275		
	$16 < a \leq 40$	265		
Impact strength	Quality	Temperature, °C	KV ₂ , J	
	JR	20	≥ 27	
Weldability	CEV ≤ 0.40 %			
Durability	Class	Si, %	Si+2.5P, %	P, %
	Class 1	≤ 0.030	≤ 0.090	-
	Class 3	0.14 ≤ Si ≤ 0.25	-	≤ 0.035
	Not specified	NPD		

CEV: Carbon equivalent value [CEV = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15]

NPD: No performance determined

Steel EN 10025-2:2004 – S355JR, S355JRC, S355J0, S355J0C, S355J2, S355J2C

Essential characteristics	Performance			EU Harmonized Standard/UK Designated Standard
Tolerances on dimensions and shape	Strip EN 10051			EN 10025-1:2004
Elongation	Nominal thickness, mm	Minimum elongation, %	Original gauge length, mm	
	$a \leq 1$	12	80	
	$1 < a \leq 1.5$	13	80	
	$1.5 < a \leq 2$	14	80	
	$2 < a \leq 2.5$	15	80	
	$2.5 < a < 3$	16	80	
	$3 \leq a \leq 40$	20	$5.65\sqrt{S_o}$	
Tensile strength	Nominal thickness, mm	Tensile strength, MPa		
	$a < 3$	510 to 680		
	$3 \leq a \leq 100$	470 to 630		
Yield strength	Nominal thickness, mm	Minimum yield strength, MPa		
	$a \leq 16$	355		
	$16 < a \leq 40$	345		
Impact strength	Quality	Temperature, °C	KV ₂ , J	
	JR	20	≥ 27	
	J0	0	≥ 27	
	J2	-20	≥ 27	
Weldability	CEV ≤ 0.45 %			
Durability	Class	Si, %	Si+2.5P, %	P, %
	Class 1	≤ 0.030	≤ 0.090	-
	Class 3	$0.14 \leq Si \leq 0.25$	-	≤ 0.035
	Not specified	NPD		

CEV: Carbon equivalent value [CEV = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15]

NPD: No performance determined