

Declaration of Performance

DoP-nr: **GeuJa-Venlo – EN 10025-1 – 001**

1. Product name - types - grades:

Hot rolled products of structural steel, **EN 10025-1:2004**,
Types S235/S275/S355/S450,
Grades JR/J0/J2/K2

2. Name and address supplier:

B.A. Geurts-Janssen BV
Tjalkkade 9
5928 PZ Venlo
The Netherlands

3. Intended use:

To be used in welded, bolted and riveted structures

4. System of assessment and verification of constancy of performance of the product:

System 2+

5. Notified Body:

KIWA Nederland BV (NoBo-nr: 0620) has based on:

- The initial inspection of the factory production control
- Continuous surveillance, assessment and evaluation of factory production control

The certificate of conformity of the factory production control has been issued under unique number: 82706

Signed for and on behalf of B.A. Geurts-Janssen BV:

Venlo, 22-08-2014

Essential characteristics	Performance	Harmonised technical specifications EN 10025-1:2004											
Dimensional and shape tolerances	EN 10017	Carbon steel for wire drawing and / or cold rolling											
	EN 10024	INP profiles											
	EN 10029	Hot Rolled steel plates ≥ 3 mmr											
	EN 10034	I and H profiles											
	EN 10048	Hot rolled narrowband steel											
	EN 10051	Continuously hot rolled strip and plate cut from broadband unalloyed and alloyed steels											
	EN 10055	Equal legged T profiles											
	EN 10056-1	Equal and Unequal leg angles											
	EN 10056-2	Equal and Unequal leg angles											
	EN 10058	Merchant Flat bars											
	EN 10059	Merchant Squared											
	EN 10060	Merchant Round bars											
	EN 10061	Hot rolled hexagonal steel											
	EN 10067	Hot rolled bulb steel											
	EN 10162	Cold rolled steel profiles											
	EN 10279	U profiles											
	Elongation (%)												
Type & Grade		Position of the test pieces	L ₀ =80mm Nominal thickness (mm)					L ₀ =5,65√S ₀ Nominal thickness (mm)					
			≤1	>1 ≤1.5	>1.5 ≤2	>2 ≤2.5	>2.5 ≤3	>3 ≤40	>40 ≤63	>63 ≤100	>100 ≤150	>150 ≤250	>250 ≤400
S235JR/J0		l	17	18	19	20	21	26	25	24	22	21	-
S235J2		t	15	16	17	18	19	24	23	22	22	21	21 (l&t)
S275JR/J0		l	15	16	17	18	19	23	22	21	19	18	-
S275J2		t	13	14	15	16	17	21	20	19	19	18	18 (l&t)
S355JR/J0		l	14	15	16	17	18	22	21	20	18	17	-
S355J2		l	14	15	16	17	18	22	21	20	18	17	17 (l&t)
S355K2		t	12	13	14	15	16	20	19	18	18	17	17 (l&t)
S450J0		l	-	-	-	-	-	17	17	17	17	-	-
Tensile strenght (MPa)													
		Type & Grade	Nominal thickness (mm)										
			≤3	>3≤100			>100≤150		>150≤250		>250≤400		
		S235JR/J0	360 to 510	360 to 510			350 to 500		340 to 490		-		
		S235J2	360 to 510	360 to 510			350 to 500		340 to 490		330 to 480		
		S275JR/J0	430 to 580	410 to 560			400 to 540		380 to 540		-		
	S275J2	430 to 580	410 to 560			400 to 540		380 to 540		380 to 540			
	S355JR/J0	510 to 680	470 to 630			450 to 600		450 to 600		-			
	S355J2/K2	510 to 680	470 to 630			450 to 600		450 to 600		450 to 600			
	S450J0	-	550 to 720			530 to 700		-		-			
Yield strength (MPa)													
	Type & Grade	Nominal thickness (mm)											
		≤16	>16 ≤40	>40 ≤63	>63 ≤80	>80 ≤100	>100 ≤150	>150 ≤200	>200 ≤250	>250 ≤400			
	S235JR/J0	235	225	215	215	215	195	185	175	-			
	S235J2	235	225	215	215	215	195	185	175	165			
	S275JR/J0	275	265	255	245	235	225	215	205	-			
	S275J2	275	265	255	245	235	225	215	205	195			
	S355JR/J0	355	345	335	325	315	295	285	275	-			
	S355J2/K2	355	345	335	325	315	295	285	275	265			
	S450J0	450	430	410	390	380	380	-	-	-			
Impact strenght (J)													
	Type & Grade	Nominal thickness (mm)											
		°C	≤150			>150≤250			>250≤400				
	S235JR	20	27			27			-				
	S235J0	0	27			27			-				
	S235J2	-20	27			27			27				
	S275JR	20	27			27			-				
	S275J0	0	27			27			-				
	S275J2	-20	27			27			27				
	S355JR	20	27			27			-				
	S355J0	0	27			27			-				
	S355J2	-20	27			27			27				
	S355K2	-20	40			33			33				
S450J0	0	27			-			-					
Weldability (chemical composition)													
	Type & Grade	Method of dioxidation	CEV% max Nominal thickness (mm)										
			≤30	>30≤40		>40≤150		>150≤250		>250≤400			
	S235JR/J0	FN	0.35	0.35		0.38		0.40		-			
	S235J2	FF	0.35	0.35		0.38		0.40		0.40			
	S275JR/J0	FN	0.40	0.40		0.42		0.44		-			
	S275J2	FF	0.40	0.40		0.42		0.44		0.44			
	S355JR/J0	FN	0.45	0.47		0.47		0.49		-			
	S355J2/K2	FF	0.45	0.47		0.47		0.49		0.49			
	S450J0	FF	0.47	0.49		0.49		-		-			
Durability (chemical composition)													
	Type & Grade	Method of dioxidation	C % max Nominal thickness (mm)			Si % max	Mn % max	P % max	S % max	N % max	Cu % max	Other % max	
		≤16	>16≤40	>40									
	S235JR	FN	0.19	0.19	0.23	-	1.50	0.045	0.045	0.014	0.60	-	
	S235J0	FN	0.19	0.19	0.19	-	1.50	0.040	0.040	0.014	0.60	-	
	S235J2	FF	0.19	0.19	0.19	-	1.50	0.035	0.035	-	0.60	-	
	S275JR	FN	0.24	0.24	0.25	-	1.60	0.045	0.045	0.014	0.60	-	
	S275J0	FN	0.21	0.21	0.21	-	1.60	0.040	0.040	0.014	0.60	-	
	S275J2	FF	0.21	0.21	0.21	-	1.60	0.035	0.035	-	0.60	-	
	S355JR	FN	0.27	0.27	0.27	0.60	1.70	0.045	0.045	0.014	0.60	-	
	S355J0	FN	0.23	0.23	0.24	0.60	1.70	0.040	0.040	0.014	0.60	-	
	S355J2/K2	FF	0.23	0.23	0.24	0.60	1.70	0.035	0.035	-	0.60	-	
	S450J0	FF	0.23	0.23	0.24	0.60	1.80	0.040	0.040	0.027	0.60	-	
	Art. 7.2 + 7.4.3 (EN 10025-2 chart 4)												