



DECLARATION OF PERFORMANCE

Pursuant to Annex III of EU Regulation No. 305/2011
(Construction Products Regulation)

No: 2026/001

Name of the manufacturer : Ereğli Demir ve Çelik Fabrikaları T.A.Ş.
Contact and Production Address : Uzunkum No:7, 67330 Kdz.Ereğli, Zonguldak TURKEY

Unique identification code of the product-type : Hot rolled products of structural steels

Type of the construction product as required:

Grade acc. to EN 10025-2	Products in the form of	Dimensions (mm)		
		Thickness	Width	Length
S235JR, S235J0, S235J2 S235JR(Cu), S235JRC, S235J2C+N S235J2+N S275JR, S275J0, S275J2 S275J2+N, S275JRC, S275J2C+N S355JR, S355JR+N, S355J0, S355J0+N, S355J2, S355K2 S355J2C+N, S355J2+N S355J2 (Cu) E295, E355, E360	Coils	1,4 - 25,0	700 - 1600	-
	Sheets cut from coils	1,4 - 15,0	700 - 1600	1500 - 15000
	Slitted coils	1,5 - 6,0	62 - 533	-
	Plates	5,0 - 100,0	1000 - 3800	2000 - 12000

Grade acc. to EN 10025-3	Products in the form of	Dimensions (mm)		
		Thickness	Width	Length
S275N, S275NL, S355N, S355NL S420N, S420NL, S460N, S460NL	Coils	1,4 - 20,0	700 - 1600	-
	Sheets cut from coils	1,4 - 15,0	700 - 1600	1500 - 15000
	Plates	5,0 - 60,0	1000 - 3000	2000 - 14000

Grade acc. to EN 10025-4	Products in the form of	Dimensions (mm)		
		Thickness	Width	Length
S275M, S355M, S420M, S460M	Coils	2,10 - 25,00	700 - 1525	-
	Sheets cut from coils	2,10 - 15,00	700 - 1525	1500 - 15000

Grade acc. to EN 10025-5	Products in the form of	Dimensions (mm)		
		Thickness	Width	Length
S355J2W	Coils	8 - 16,00	700 - 1525	-
	Sheets cut from coils	8 - 15,00	700 - 1525	2000 - 15000
	Plates	8,0 - 60,0	1000 - 3000	2000 - 12000

Note: "S460N" and "S460NL" grades can be produced up to a thickness of 20 mm.

Intended use as foreseen by the manufacturer: Construction works.

System of assessment and verification of constancy of performance of the construction product as set out: System 2 +

Factory Production Control System audit has been carried out on the basis of the certificate by Szutest Uygunluk Değerlendirme A.Ş. Notified Body Number; 2195, under system 2+ Certificate Number: 2195-CPR-1428101



EREĞLİ DEMİR VE ÇELİK FABRİKALARI T.A.Ş.

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www.erdemir.com.tr

Trade Registry Number:
İstanbul-863637 Ereğli-1574/272

Mersis Number:
0352000642600020

KEP Number:
erdemir@hs01.kep.tr



Basic Characteristics	Performance							Harmonised Technical Specification
Yield Strength ReH (MPa)	Type and Grade	Nominal Thickness						
		t ≤ 16	16 < t ≤ 40	40 < t ≤ 63	63 < t ≤ 80		80 < t ≤ 100	
	S235JR/JR(Cu)JRC/J0/J2/J2+N/J2C+N	235 min	225 min	215 min	215 min		215 min	
	S235JR Mod	235 min	-	-	-	-	-	-
	S275JR/JRC/J0/J2/J2+N/J2C+N	275 min	265 min	255 min	245 min		235 min	
	S275JRC Mod	300 min	-	-	-	-	-	-
	S355JR/JR+N/JR Mod/J0/J0+N/J2/J2+N/J2 (Cu)J2C+N/K2+N	355 min	345 min	335 min	325 min		315 min	
	S355J2 Mod	355 min.	345 min.					
	S355J2C+N Mod	355 min	-	-	-	-	-	-
	E295	295 min	285 min	275 min	265 min		255 min	
	E335	335 min	325 min	315 min	305 min		295 min	
	E360	360 min	355 min	345 min	335 min		325 min	
Tensile Strength Rm (MPa)	Type and Grade	Nominal Thickness						
		t < 3			3 ≤ t ≤ 100			
	S235JR/JR Mod/JR(Cu)JRC/J0/J2/J2+N/J2C+N	360 to 510			360 to 510			
	S275JR/JRC/J0/J2/J2+N/J2C+N	430 to 580			410 to 560			
	S275JRC Mod	430 to 580			430 to 570			
	S355 J2 Mod	min. 470			min. 470			
	S355JR/JR+N/J0/J0+N/J2/J2+N/J2 (Cu)J2C+N/J2C+N Mod/K2+N	510 to 680			470 to 630			
	S355 JR Mod	470 to 630			-			
	E295	490 to 680			470 to 610			
	E335	590 to 770			570 to 710			
E360	690 to 900			670 to 830				
Elongation % (Transverse) GI:80 mm for t < 3.0 mm 5.65Sqrt A for t ≥ 3.0 mm	Type and Grade	Nominal Thickness						
		t = 1.5	1.5 < t ≤ 2	2 < t ≤ 2.5	2.5 < t < 3	3 ≤ t ≤ 40	40 < t ≤ 63	63 < t ≤ 100
	S235JR/JR Mod/JR(Cu)JRC/J0/J2/J2+N/J2C+N	16	17	18	19	24	23	22
	S275JR/JRC/J0/J2/J2+N/J2C+N	14	15	16	17	21	20	19
	S275JRC Mod	14	15	16	17	21	-	-
	S355JR/JR+N/J0/J0+N/J2+N/J2 (Cu)J2C+N/K2+N	13	14	15	16	20	19	18
	S355 JR Mod (A5.65Sqrt A for 8 ≤ t ≤ 50)	-	-	-	-	20 (8 ≤ t ≤ 40)	19 (40 < t ≤ 50)	-
	S355J2	13	14	15	16	20	-	-
	S355J2 Mod	-	-	-	-	20 (8 ≤ t ≤ 40)	-	-
	S355 J2C+N Mod	13	14	15	16	20 (t ≤ 16)	-	-
	E295	11	12	13	14	18	17	16
	E335	7	8	9	10	14	13	12
	E360	4	5	6	7	10	9	8



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Impact Energy (J) (Impact test is not required for thickness thinner than 6 mm)	Type and Grade	Temperature (°C)	Nominal Thickness t ≤ 25			Harmonised Technical Specification			
	JR/JR Mod/JR+N/JR(Cu)/JRC/JRC Mod	20	27						
	J0/J0+N	0	27						
	J2/J2+N/J2+N(Cu)/J2C+N/J2C+N Mod/J2 Mod/J2 (Cu)	-20	27						
	S355K2/K2+N	-20	40						
CEV %max. (CEV is increased by 0.01% for Si ≤ 0.25% and 0.02% for Si ≤ 0.030%)	Type and Grade	Nominal Thickness			EN10025-1				
		t ≤ 30	30 < t ≤ 40	40 < t ≤ 100					
	S235JR/JR(Cu)/JRC/J0/J2/J2+N/J2C+N	0,35	0,35	0,38					
	S235JR Mod	0,35	0,35	0,35					
	S275JR/JRC/J0/J2/J2+N/J2C+N	0,40	0,40	0,42					
	S275JRC Mod	0,43 for t ≤ 25	-	-					
	S355JR Mod	0,43	0,43	0,43					
	S355JR/JR+N/J0/J0+N/J2/J2+N/J2 (Cu)/J2C+N/K2+N	0,45	0,47	0,47					
	S355J2C+N Mod	0,49	-	-					
	S355J2 Mod	0,55	-	-					
Chemical Composition (t ≤ 100 mm)	Type and Grade	C % max.	Si % max.	Mn % max.	P % max.	S % max.	N % max.	Cu % max.	EN10025-1
	S235JR/JR(Cu)	0,20	0,40	1,40	0,035	0,035	0,012	0,55	
	S235JRC/JR Mod	0,17	-	1,40	0,035	0,035	0,012	0,55	
	S235J2/J2+N/J2C+N	0,17	-	1,40	0,025	0,025	-	0,55	
	S275JR	0,22	0,40	1,50	0,030	0,030	0,012	0,55	
	S275JRC	0,21		1,50	0,035	0,035	0,012	0,55	
	S275JRC Mod	0,21	0,05-0,17	1,50	0,035	0,035	0,012	0,55	
	S275J2/J2+N/J2C+N	0,18	-	1,50	0,025	0,025	-	0,55	
	S355JR/JR+N/JR Mod	0,24	0,55	1,60	0,035	0,035	0,012	0,55	
	S355 J2 Mod	0,22	0,55	1,60	0,025	0,025	-	0,55	
	S355J0/J0+N	0,22	0,55	1,60	0,030	0,030	0,012	0,55	
	S355J2+N	0,20	0,03	1,60	0,025	0,025	-	0,55	
	S355J2/J2C+N/J2 (Cu)/K2+N	0,22	0,55	1,60	0,025	0,025	-	0,55	
	S355J2C+N Mod	0,14-0,20	0,10-0,30	1,20-1,60	0,025	0,020	-	-	
	S275JR Mod	0,14-0,20	0,15-0,25	1,00-1,35	0,025	0,025	0,012	0,55	
	E295	-	-	-	0,045	0,045	0,012	-	
	E335	-	-	-	0,045	0,045	0,012	-	
	E360	-	-	-	0,045	0,045	0,012	-	



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Basic Characteristics	Performance				Harmonised Technical Specification
Yield Strength ReH (MPa)	Type and Grade	Nominal Thickness			
		t ≤ 16	16 < t ≤ 40	40 < t ≤ 63	
	S355N/NL	355 min.	345 min.	335 min.	
	S420N	420 min.	400 min.		
	S460N	460 min.	440 min.		
Tensile Strength Rm (MPa)	Type and Grade	Nominal Thickness			
		1,5 ≤ t ≤ 60			
	S355N/NL	470 to 630			
	S420N	520 to 680			
	S460N	540 to 720			
Elongation % (Transverse) GI:80 mm for t < 3.0 mm 5.65Sqrt A for t ≥ 3.0 mm	Type and Grade	Nominal Thickness			
		1,5 ≤ t ≤ 60			
	S355N/NL	22			
	S420N	19			
	S460N	17			
Impact Energy (J) (Impact test is not required for thickness thinner than 6 mm)	Type and Grade	Temperature (°C)	Nominal Thickness t ≤ 25		
		S355N	-20	40	
	S355NL	-50	27		
	S420N	-20	40		
	S460N	-20	40		
CEV %max. (CEV is increased by 0.01% for Si ≤ 0.25% and 0.02% for Si ≤ 0.030%)	Type and Grade	Nominal Thickness			
		t ≤ 60			
	S355N/NL	0,43			
	S420N/NL	0,48			
	S460N/NL	0,53			

The yield value specified for S460N is not guaranteed above 800°C for thickness greater than 12 mm.

Chemical Composition	Type and Grade	C	Si	Mn	P	S	Nb	V	Al _(total)	Ti	Cr	Ni	Mo	Cu	N	Harmonised Technical Specification
		% max.	% max.	% max.	% max.	% max.	% max.	% max.	% min.	% max.	% max.	% max.	% max.	% max.	% max.	
	S355N	0.20	0.50	0.90-1.65	0.030	0.025	0.05	0.12	0.02	0.05	0.30	0.50	0.10	0.55	0.015	EN 10025-1
	S355NL	0.18	0.50	0.90-1.65	0.025	0.020	0.05	0.12	0.02	0.05	0.30	0.50	0.10	0.55	0.015	
	S420N	0.20	0.60	1.00-1.70	0.030	0.025	0.05	0.20	0.02	0.05	0.30	0.80	0.10	0.55	0.025	
	S460N	0.20	0.60	1.00-1.70	0.030	0.025	0.05	0.20	0.02	0.05	0.30	0.80	0.10	0.55	0.025	



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Basic Characteristics	Performance			Harmonised Technical Specification
Yield Strength ReH (MPa)	Type and Grade	Nominal Thickness min.		
		t ≤ 16	16 < t ≤ 20	
	S275M	275 min,	265 min.	
	S355M	355 min	345 min.	
	S420M	420 min	400 min.	
	S460M	460 min	440 min.	
Tensile Strength Rm (MPa)	Type and Grade	Nominal Thickness		
		1,5 ≤ t ≤ 200		
	S275M	370 - 530		
	S355M	470 - 630		
	S420M	520 - 680		
	S460M	540 - 720		
Elongation % (Transverse) 5.65Sqrt A	Type and Grade	Nominal Thickness		
		1,5 ≤ t ≤ 60		
	S275M	24 min.		
	S355M	22 min.		
	S420M	19 min.		
	S460M	17 min.		
Impact Energy (J) (Impact test is not required for thickness thinner than 6 mm)	Type and Grade	Temperature (°C)	Nominal Thickness t ≤ 20	
	S275M, S355M, S420M, S460M	-20	40	
CEV %max. (CEV is increased by 0.01% for Si ≤ 0.25% and 0.02% for Si ≤ 0.030%)	Type and Grade	Nominal Thickness		
		t ≤ 16	t > 16	
	S275M	0,34		
	S355M	0,39		
	S420M	0,43	0,45	
	S460M	0,45	0,46	

Chemical Composition	Type and Grade	C	Mn	p	S	Si	Al	Cr	Cu	Mo	Ni	Nb	Ti	V	N	Harmonised Technical Specification
		% max.	% max.	% max.	% max.	% max.	% min.	% max.	% max.	% max.	% max.	% max.	% max.	% max.	% max.	
	S275M	0.13	1.50	0.030	0.025	0.50	0.020	0.30	0.55	0.10	0.30	0.05	0.05	0.08	0.015	EN 10025-1
	S355M	0.14	1.60	0.030	0.025	0.50	0.020	0.30	0.55	0.10	0.50	0.05	0.05	0.10	0.015	
	S420M	0.16	1.70	0.030	0.025	0.50	0.020	0.30	0.55	0.20	0.80	0.05	0.05	0.12	0.025	
	S460M	0.16	1.70	0.030	0.025	0.60	0.020	0.30	0.55	0.20	0.80	0.05	0.05	0.20	0.025	



MINING
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Basic Characteristics	Performance						Harmonised Technical Specification
Yield Strength ReH (MPa)	Type and Grade	Nominal Thickness					EN10025-1
		t ≤ 16	16 < t ≤ 40	40 < t ≤ 63	63 < t ≤ 80	80 < t ≤ 100	
	S355J2W	355 min.	345 min.	335 min.	325 min.	315 min.	
Tensile Strength Rm (MPa)	Type and Grade	Nominal Thickness					
		t < 3			3 ≤ t ≤ 100		
	S355J2W	510 - 680			470 - 630		
Elongation % (Transverse) GI: 80 mm for t < 3.0 mm 5.65Sqrt A for t ≥ 3.0 mm	Type and Grade	Nominal Thickness					
		2 < t ≤ 2.5	2.5 < t < 3	3 ≤ t ≤ 40	40 < t ≤ 63	63 < t ≤ 100	
	S355J2W	15	16	20	19	18	
Impact Energy (J) (Impact test is not required for thickness thinner than 6 mm)	Type and Grade	Temperature (°C)			Nominal Thickness t ≤ 25		
	S355J2W	-20			27		
CEV %max. (C Eeq (IIW) = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15 formula is applied for S355J2W according to ladle analysis.	Type and Grade	Nominal Thickness					
	S355J2W	0,52					

Chemical Composition	Type and Grade	C % max.	Mn	P % max.	S % max.	Si	Al % min.	Cr	Cu	Ni % max.	V, Nb, Ti	Harmonised Technical Specification
	S355J2W	0.20	0.50-1.50	0.030	0.030	0.15-0.50	0.02	0.40-0.80	0.20-0.55	0.65	*	EN 10025-1

* The steels shall contain at least one of the following elements: Al total ≥ 0,020%, Nb: 0,015-0,060%, V: 0,02-0,12%, Ti: 0,02-0,10%. If these elements are used in combination, at least one of them shall be present with the minimum content indicated for the grade S355J2W.

Impact test is not carried out for thickness thinner than 6 mm for all grades.

Signed for and on behalf of the Ereğli Demir ve Çelik Fabrikaları T.A.Ş. by:


Serkan DİKEÇ

Manager
Quality Metallurgy


Sinan BOZKURT

Executive Vice President
Operations

2026 / ZONGULDAK



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