

Tilaaaja Purchaser: BE GROUP OY AB
 15101 LAHTI FINLAND
 Tilaus nro Order No: P083006
 Tilausvahvistus Order Confirmation 19415

Vastaanottaja Consignee: BE GROUP OY AB
 PAAKARLANTIE 3
 20240 TURKU FINLAND
 Asiakkaan merkki Shipping mark

Päivämäärä Date: 10.08.2020
 VJS



Valmistajan merkki
 Mark of the Manufacturer

Lisävaatimukset Additional requirements

Jaakuvalettua happiterästä
 Oxygen steel, continuous casting
 Fully killed, Fine grain practiced

STEEL FOR GENERAL STRUCTURAL PURPOSES

Pos. Item	Sulatus, k.eriä nro Cast. test No	T-tila Cond	Vetokoe Tensile test		K2	°C	RP02 MPa	RT05 MPa	REL MPa	REH MPa	1	RM ₂ MPa	3	A %	50	80	200	RE /RM	RM * A5	RAZ %			Keskiarvo Average	Huom Nb	Päästö Tempering °C
			1	2																3					
001	56510	351	NR	11					476	572				29											
002	55691	441	NR	11					464	564				26											
002	56687	023	NR	11					445	554				29											
003	56366	121	NR	11					447	551				29											
003	56367	042	NR	11					448	548				26											

K2: 11=TOP,TRANSV.

NR=NORMALIZING ROLLING

Pos. Item	Sulatus, k.eriä nro Cast. test No	Iskukoe Impact test	K3	°C	1	2	3	Keskiarvo Average	W (mm)	FA %	LE (mm)			Erikoiskokeet Special tests	Huom Nb	Päästö Tempering °C	
											1	2	3				
001	56510	351	115	-020	174	180	151	168			1	2	3	Keskiarvo Average			
002	55691	441	115	-020	167	178	163	169			1	2	3	Keskiarvo Average			
002	56687	023	115	-020	181	181	174	179			1	2	3	Keskiarvo Average			
003	56366	121	111	-020	218	236	256	237			1	2	3	Keskiarvo Average			
003	56367	042	111	-020	270	222	232	241			1	2	3	Keskiarvo Average			

K3: 115=CH-V/ISO-V(J),7.5X10.TOP, LONGIT,KV600 111=CH-V/ISO-V(J),10X10.TOP, LONGIT,KV600

LE = Poikittainen laajenema Lateral Expansion

FA = Sitkeämurtuman osuus Shear fracture appearance

Raahe Steel Works

Testaus ja tarkastus Testing and Inspection

MINNA VALKAMA

Valtuutettu tarkastaja Authorized inspection representative

Yhtiön nimi Company Name: SSAB Europe Oy
 Kotipaikka Registered Office: HAMEENLINNA

Osoite Address: PL 93, P.O Box 93
 FIN-92101 RAAHE, FINLAND

Puhelin Telephone: 020 5911
 +358 20 5911

Y-tunnus Business ID: 2389445-7

Täten todistamme, että toimitus on tilausvahvistuksen mukainen.
 We hereby certify that the material described above has been tested and complies with the terms of the order confirmation.

Sulatus nro Cast No Schmelzen Nr. No de coulée № Плавки	Koe nro Test No Prüf Nr. Essai No № Проб	Positio Item Pos. Poste Поз.	Cekv Ceq Câq Céq Cekv	Analyysi % Chemical composition % Zusammensetzung % Composition Chimique % (*=ppm)													
				C	SI	MN	P	S	AL	NB	V	TI	CU	CR	NI	MO	N
56510	001	.40	.154	.20	1.42	.011	.004	.039	.036	.008	.002	.014	0.04	0.03	.004	.004	.0002
55691	002	.40	.148	.20	1.41	.013	.008	.029	.037	.008	.003	.014	0.04	0.03	.002	.003	.0001
56687	002	.40	.153	.20	1.38	.009	.004	.032	.036	.008	.004	.013	0.05	0.04	.005	.004	.0003
56366	003	.40	.149	.20	1.40	.013	.004	.037	.036	.009	.002	.010	0.05	0.04	.004	.003	.0001
56367	003	.40	.150	.20	1.40	.012	.003	.031	.036	.012	.002	.014	0.05	0.04	.004	.003	.0001

CEQ=C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15

Raahе Steel Works

Testaus ja tarkastus
Prüfung und Kontrolle

Испытание и контроль качества

Steel manufactured and supplied by Raahе Steel Works is free from radiation.
Производимая на металлургическом комбинате «Raahе Steel Works» и поставляемая заказчику сталь не излучают радиации.

MINNA VALKAMA

Valtuutettu tarkastaja
Sachverständiger

Authorized inspection representative
Inspector autorisé

Уполномоченный инспектор

Yhtiön nimi Company Name: SSAB Europe Oy
Kotipaikka Registered Office: HAMÉENLINNA

Osoite Address: PL 93, P.O Box 93
FIN-92101 RAAHE, FINLAND

Puhelin Telephone: 020 5911
+358 20 5911

Y-tunnus Business ID: 2389445-7

Declaration of performance
(according to EU No 305/2011 and 574/2014)

DoP id. P011_02

Hot rolled Plate product S355K2 / 1.0596
according to
EN 10025-2:2019
for bolted, welded and riveted structures.

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Grosse Bahnstrasse 31
D-22525 Hamburg
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Assessment system and verification for constancy
of performance

System 2+

The performance of the product identified in this document is
in conformity with the set of declared performance. This declaration of performance
is issued in accordance with Regulations (EU) No 305/2011 and 574/2014,
under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



Jarkko Matkala
Vice President, hot rolled plate and strip products,
SSAB Europe Oy, Raahе Steelworks
Raahе 2015-06-09

CE

05

0045-CPR-0573
EN 10025-1:2004

Dop id: P011_02	EN 10025-2:2019	Performance	Harmonized technical specification
S355K2	Thickness	Tolerances on the nominal thickness (acc. EN 10029 Class A unless otherwise stated)	EN 10025-1:2004
Tolerances on dimensions and shapes.	Nominal thickness (mm)	Lower	Upper
	$3 \leq t < 5$	-0,3	+0,7
	$5 \leq t < 8$	-0,4	+0,8
	$8 \leq t < 15$	-0,5	+0,9
	$15 \leq t < 25$	-0,6	+1,0
	$25 \leq t < 40$	-0,7	+1,3
Thickness	$40 \leq t < 80$	-0,9	+1,7
	$80 \leq t < 150$	-1,1	+2,1
	$150 \leq t < 250$	-1,2	+2,4
Width	Nominal thickness	Tolerances	
	$t < 40$	Lower	Upper
	$40 \leq t < 150$	0	+25
	$150 \leq t < 400$	0	+30
Tolerances on width for plates with untrimmed edges (NK) shall be the subject of agreement between the manufacturer and purchaser at the time of enquiry and order			
Length	Nominal length	Tolerances	
	l	Lower	Upper
	$l < 4000$	0	+20
	$4000 \leq l < 6000$	0	+30
	$6000 \leq l < 8000$	0	+40
	$8000 \leq l < 10\ 000$	0	+50
	$10\ 000 \leq l < 15\ 000$	0	+75
$15\ 000 \leq l < 20\ 000$	0	+100	
Tolerances on plates with nominal length $l > 20\ 000$ mm shall be agreed at the time of enquiry and order.			
Flatness	Nominal thickness t	Measuring length	
	t	1000	2000
	$3 \leq t < 5$	9	14
	$5 \leq t < 8$	8	12
	$8 \leq t < 15$	7	11
	$15 \leq t < 25$	7	10
$25 \leq t < 40$	6	9	
$40 \leq t < 250$	5	8	

Yield strength	thickness mm	min (Mpa)	
	≤ 16	355	
	$> 16 \leq 40$	345	
	$> 40 \leq 63$	335	
	$> 63 \leq 80$	325	
	$> 80 \leq 100$	315	
Tensile strength	thickness mm	min (Mpa)	max (Mpa)
	< 3	510	680
	$\geq 3 \leq 100$	470	630
	$> 100 \leq 150$	450	600
Elongation	thickness mm	min %	
	$\geq 3 \leq 40$	20	
	$> 40 \leq 63$	19	
	$> 63 \leq 100$	18	
Impact strength	thickness mm	temperature, °C	min. energy, J
	$> 150 \leq 250$	-20	40
Weldability CEV	thickness mm	CEV max %	
	≤ 30	0,45	
	$> 30 \leq 40$	0,47	
Durability (chemical composition)	thickness mm	Value	
	$> 40 \leq 150$	≤ 30	> 30
	$> 150 \leq 250$	0,20	0,22
	element		
	C, max	0,55	
	Si, max	0,025	
	Mn, max	1,60	
	P, max	0,025	
	S, max	0,025	
	N, max	0,55	
Cu, max	0,42		
Ni, max	0,29		
Cr, max	0,11		
Mo, max	0,11		