

EN 10 204-3.1 (2004)

Tilaja Purchaser BE GROUP OY AB PL 54 15101 LAHTI FINLAND Tilaus nro Order No. P075324	Vastaanottaja Consignee BE GROUP OY AB PAAKARLANTIE 3 20240 TURKU FINLAND Asiakkaan merkki Shipping mark	Päivämäärä Date 16.10.2019
Tilauksen vahvistus Order Confirmation 14940	Laatu-merkintä Quality Marking S355K2 N	Vastustajan leima Stamp of Inspector Mxx
Tuote Product HEAVY PLATES	Sulatus nro levy nro Cast No. Plate No. X X X X X X X X X X X X X X	Vastustajan leima Stamp of Surveyor
Toimitustyyppi Delivery type PART DELIVERY	Toleranssit Tolerances EN 10029:2010 CLASS A	Muut leimaukset Other Stamps

Tekniset vaatimukset ja/tai viralliset määräykset Technical terms of Delivery and/or Official Regulations

STEEL FOR GENERAL STRUCTURAL PURPOSES

Positio Item	Mitat mm Dimensions mm	Merkki Mark	Kpl Pcs	Paino kg Weight kg	Sulatus levy nro Cast plate No	SP nro SP No	UT UT	MT MT
HOT ROLLED STEEL PLATES								
FLATNESS MAX 6MM/M. SURFACE CONDITION EN 10 163-2:2005 CLASS B3								
003	18.00 X 2100	X	1	5080	43927	023	023	
003	18.00 X 2100	X	1	5080	43977	024	024	
003	18.00 X 2100	X	1	5080	43977	043	024	
003	18.00 X 2100	X	1	5080	43977	044	024	
FLATNESS MAX 6MM/M. SURFACE CONDITION EN 10 163-2:2005 CLASS B3								
004	20.00 X 2070	X	1	5332	43975	032	031	

*** 5 25652

Raahe Steel Works

Testaus ja tarkastus Testing and Inspection



MINNA VALKAMA

Vaiuutettu 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.

Tilaja Purchaser
BE GROUP OY AB
PL 54
15101 LAHTI FINLAND
Tilaus nro Order No.
P075324

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

Päivämäärä Date
16.10.2019
Valmistajan merkki
Mark of the Manufacturer



Tilausvahvistus Order Confirmation
14940

Lisävaatimukset Additional requirements

Jaikuvavalettua happiteräsiä
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, MPa	2	3	A %	50	80	200	REH / RMI	RM * A5	RAZ %			Keskiarvo Average	Huom Nb	Päästö Tempering °C
			1	2																	3	1	2			
003	43927	023	NR	11					483	591					28											
004	43977	024	NR	11					444	563					29											
004	43975	031	NR	11					469	571					27											

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 %	1	2	3	Keskiarvo Average	LE (mm)	Erikoiskokeet Special tests			Keskiarvo Average	Huom Nb	Päästö Tempering °C				
																K4	1	2				Keskiarvo Average	K4	1	2
003	43927	023	111	-020	235	242	243	240																	
004	43977	024	111	-020	253	247	245	248																	
004	43975	031	111	-020	224	242	259	242																	

K3: 11=CH-V/ISO-V(J),10X10, TOP, LONGIT, KV600

LE = Poikittainen laajenema Lateral Expansion

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: HAMMILLINNA

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.	Cekiv Ceq Câq Ceq Cekv	Analyysi % Chemical composition % Zusammensetzung % Composition Chimique % (* =ppm)													
				C	SI	MN	P	S	AL	NB	V	TI	CU	CR	NI	MO	N
43927	003	.44	.172	.45	1.45	.020	.002	.036	.042	.012	.005	.014	0.08	0.04	.005	.003	.0005
43977	003	.40	.154	.45	1.38	.012	.002	.034	.042	.012	.005	.016	0.05	0.04	.005	.003	.0004
43975	004	.40	.152	.45	1.39	.014	.002	.031	.042	.009	.005	.013	0.05	0.04	.006	.003	.0004

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

Raahe Steel Works

Testaus ja tarkastus
Prtfung und Kontrolle

Испытание и контроль качества

Minna

MINNA VALKAMA

Valtuutettu tarkastaja
Sachverständiger

Authorized inspection representative
Inspektor autorisé

Уполномоченный инспектор

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

Osoite Address: PL 93, P.O Box 93
FIN-93101 RAAHE, FINLAND

Puhelin Telephone: 020 5911
+358 20 5911

Y-tunnus Business ID: 2389445-7

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

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

DoP id. P011_01

Hot rolled Plate product S355K2 / 1.0596
according to
EN 10025-2:2004
for bolted, welded and riveted structures.

SSAB
P.O Box 70
101 20 Stockholm
SWEDEN
T: +46 8 45 45 700
Email: info@ssab.com
Website: ssab.com

TÜV NORD Systems Gmbh & Co. KG
Grosse Bahnstrasse 31
D-22525 Hamburg
Germany
T: +49 40 8557 2368

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_01		Harmonized technical specification
S355K2 Tolerances on dimensions and shapes.	Thickness	Performance Tolerances on the nominal thickness (acc. EN 10029 Class A unless otherwise stated)
	Nominal thickness (mm)	Lower Upper
Thickness	$3 \leq t < 5$	-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
	$40 \leq t < 80$	-0,9 +1,7
Width	$80 \leq t < 150$	-1,1 +2,1
	$150 \leq t < 250$	-1,2 +2,4
Length	Nominal thickness	Tolerances Lower Upper
	$t < 40$	0 +20
	$40 \leq t < 150$	0 +25
Flatness	$150 \leq t < 400$	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	
	Nominal length l	Tolerances Lower Upper
	$l < 4000$	0 +20
	$4000 \leq l < 6000$	0 +30
	$6000 \leq l < 8000$	0 +40
Harmonized technical specification	$8000 \leq l < 10\ 000$	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.	
	Nominal thickness t	Measuring length
Harmonized technical specification	1000	2000
	$3 \leq t < 5$	9
	$5 \leq t < 8$	8
	$8 \leq t < 15$	7
	$15 \leq t < 25$	7
Harmonized technical specification	$25 \leq t < 40$	6
	$40 \leq t < 250$	5
		8

Yield strength	thickness mm ≤ 16	min (Mpa)	355
	$> 16 \leq 40$		345
	$> 40 \leq 63$		335
	$> 63 \leq 80$		325
	$> 80 \leq 100$		315
	$> 100 \leq 150$		295
Tensile strength	$> 150 \leq 200$		285
	$> 200 \leq 250$		275
	thickness mm	min (Mpa)	max (Mpa)
Elongation	< 3	510	680
	$\geq 3 \leq 100$	470	630
	$> 100 \leq 150$	450	600
	$> 150 \leq 250$	450	600
Impact strength	thickness mm	min %	
	$\geq 3 \leq 40$	20	
	$> 40 \leq 63$	19	
	$> 63 \leq 100$	18	
Weldability CEV	$> 100 \leq 150$	18	
	$> 150 \leq 250$	17	
	thickness mm	temperature, °C	min. energy, J
Durability (chemical composition)	≤ 150	-20	40
	$> 150 \leq 250$	-20	33
	thickness mm	CEV max %	
Durability (chemical composition)	≤ 30	0,45	
	$> 30 \leq 40$	0,47	
	$> 40 \leq 150$	0,47	
	$> 150 \leq 250$	0,49	
	element	Max	
	C	≤ 30	> 30
		0,20	0,22
	Si		0,55
	Mn		1,60
	P		0,025
S		0,025	
N			
Cu		0,55	