

EN 10 204-3.1 (2004)

A 76424 -001

20.01.2023

Tilaja Purchaser  
BE GROUP OY AB  
PL 54  
15101 LAHTI FINLAND

Tilausvahvistus Order Confirmation  
76424

Vastaanottaja Consignee  
BE GROUP OY AB  
VANHANRADANKATU 42  
15520 LAHTI FINLAND  
Asiakkaan merkki Shipping mark  
P102885

Päivämäärä Date  
23.01.2023  
Valmistajan merkki  
Mark of the Manufacturer



Todistus Certificate  
31

Laatumerkintä Quality Marking  
S235JR+AR

Tarkastajan leima  
Stamp of Inspector

*Mxx*

Toimitustyyppi Delivery type  
PART DELIVERY

Sulatus nro levy nro Cast No. Plate No.  
XXXXX XXX XX XXX

Vastaanottajan leima  
Stamp of Surveyor

Muut leimaukset  
Other Stamps

Tuote Product  
CUT LENGTHS  
Laji Grade  
S235JR+AR/CHECKER PLATE EN 10025-2:2019  
Laatuseelvitys Quality Specifications  
HOT ROLLED CHECKER PLATES

Toleranssit Tolerances  
DIN 59220/00-SEL014E-79/SFS-EN10363:2016

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

| Positio<br>Item | Mitat mm<br>Dimensions mm | Merkki<br>Marke | Kpl<br>Pcs | Paino kg<br>Weight kg | Sulatus levy nro<br>Cast plate No | SP nro<br>SP No | UT | MT | Turvamerkki<br>Safetymark |
|-----------------|---------------------------|-----------------|------------|-----------------------|-----------------------------------|-----------------|----|----|---------------------------|
|-----------------|---------------------------|-----------------|------------|-----------------------|-----------------------------------|-----------------|----|----|---------------------------|

H.R. CHECKER PLATES IN BUNDLES CUT LENGTHS MILL EDGES  
GALVANIZING CLASS 1 (SI MAX 0.03%, SI+2.5P <= 0.090%)  
003 8.00 X 1500 X 6000 2102104250

34 20980 27043 031 031

\*\*\* 34 20980

### Raahe Steel Works

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.

Testaus ja tarkastus Testing and Inspection

*Minna Valkama*

### 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  
FI-92101 RAAHE, FINLAND

Puhelin Telephone: 020 5911  
+358 20 5911

Y-tunnus Business ID: 2389445-7



| Sulatus nro<br>Cast No<br>Schmelzen Nr.<br>No de coulén | Koe nro<br>Test No<br>Prüf Nr.<br>Essai No | Positio<br>Item<br>Pos.<br>Poste | Cekv<br>Ceq<br>Câq<br>Cég<br>Cekv | Analyysi % Chemical composition % Chemisch Zusammensetzung % Composition Chimique % (*-ppm) |     |      |      |      |      |      |      |      |      |      |      |      |      | Päivämäärä Date Datum Date |            |     |
|---|--|----------------------------------|-----------------------------------|---|-----|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------|------------|-----|
|   |  |                                  |                                   | C   | SI  | MN   | P    | S    | AL   | NB   | V    | TI   | CU   | CR   | NI   | MO   | N    | B                          | 23.01.2023 | AET |
| 27043   |  | 003                              | .21                               | .069  | .01 | 0.76 | .008 | .008 | .030 | .000 | .005 | .016 | .014 | 0.04 | 0.05 | .003 | .003 | .0000                      |            |     |

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

### Raahe Steel Works

Testaus ja tarkastus  
Prüfung und Kontrolle

Testing and Inspection  
Essais et Contrôle

SSAB Europe Oy, Raahe Steel Works testing laboratories T002 and T010 are accredited by the FINAS accreditation service, accreditation requirement SFS-EN ISO/IEC 17025.

Steel manufactured and supplied by Raahe Steel Works is free from radiation.



### MINNA VALKAMA

Valtuutettu tarkastaja  
Sachverständiger

Authorized inspection representative  
Inspector autorisé

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

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

DoP id. S002\_02

Hot rolled strip product S235JR / 1.0038  
according to  
EN 10025-2:2019  
for bolted, welded and riveted structures.

SSAB  
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Grosse Bahnstrasse 31  
D-22525 Hamburg  
Germany  
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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, Raahe Steelworks  
Raahe 2015-06-09



05

0045-CPR-0573  
EN 10025-1:2004

|   |                        |                                |                   |                 |          |                                    |          |
|---|------------------------|--------------------------------|-------------------|-----------------|----------|------------------------------------|----------|
| Dop id: S002_02 EN 10025-2:2019   |                        | Performance                    |                   |                 |          | Harmonized technical specification |          |
| S235JR  | Thickness              | Tolerances for nominal width w |                   |                 |          | EN 10025-1:2004                    |          |
| Tolerances on dimensions and shape.   | Nominal thickness (mm) | w ≤ 1200                       | 1200 < w ≤ 1500   | 1500 < w ≤ 1800 | w > 1800 |                                    |          |
|   |                        |                                |                   |                 |          |                                    | t ≤ 2,00 |
|   | Thickness              | 2,00 < t ≤ 2,50                | ± 0,18            | ± 0,21          | ± 0,23   |                                    | ± 0,25   |
|   |                        | 2,50 < t ≤ 3,00                | ± 0,20            | ± 0,22          | ± 0,24   |                                    | ± 0,26   |
|   |                        | 3,00 < t ≤ 4,00                | ± 0,22            | ± 0,24          | ± 0,26   |                                    | ± 0,27   |
|   |                        | 4,00 < t ≤ 5,00                | ± 0,24            | ± 0,26          | ± 0,28   |                                    | ± 0,29   |
|   |                        | 5,00 < t ≤ 6,00                | ± 0,26            | ± 0,28          | ± 0,29   |                                    | ± 0,31   |
|   |                        | 6,00 < t ≤ 8,00                | ± 0,29            | ± 0,30          | ± 0,31   |                                    | ± 0,35   |
|   |                        | 8,00 < t ≤ 10,00               | ± 0,32            | ± 0,33          | ± 0,34   |                                    | ± 0,40   |
|   |                        | 10,00 < t ≤ 12,50              | ± 0,35            | ± 0,36          | ± 0,37   |                                    | ± 0,43   |
|   |                        | 12,50 < t ≤ 15,00              | ± 0,37            | ± 0,38          | ± 0,40   |                                    | ± 0,46   |
|   |                        | 15,00 < t ≤ 25,00              | ± 0,40            | ± 0,42          | ± 0,45   |                                    | ± 0,50   |
| Width   | Nominal width w        | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | Mill edges                     |                   | Trimmed edges*  |          |                                    |          |
|   |                        | Lower                          | Upper             | Lower           | Upper    |                                    |          |
|   | w ≤ 1 200              | 0                              | +20               | 0               | +3       |                                    |          |
|   | 1 200 < w ≤ 1 850      | 0                              | +20               | 0               | +5       |                                    |          |
|   | w > 1 850              | 0                              | +25               | 0               | +6       |                                    |          |
| * Tolerances for trimmed edges apply to products with nominal thickness t ≤ 10 mm; for nominal thickness t > 10 mm the upper tolerances shall be agreed at the time of enquiry and order. |                        |                                |                   |                 |          |                                    |          |
| Length  | Nominal length         | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | Lower                          |                   | Upper           |          |                                    |          |
|   | l                      | 0                              |                   | +10             |          |                                    |          |
|   | 2 000 ≤ l < 8 000      | 0                              |                   | +0,005 x l      |          |                                    |          |
|   | l ≥ 8 000              | 0                              |                   | +40             |          |                                    |          |
| Flatness  | Nominal thickness t    | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | w ≤ 1 200                      | 1 200 < w ≤ 1 500 | w > 1500        |          |                                    |          |
|   | t ≤ 2,00               | 18                             | 20                | 25              |          |                                    |          |
|   | 2,00 < t ≤ 25          | 15                             | 18                | 23              |          |                                    |          |

|                                   |              |                 |                |
|-----------------------------------|--------------|-----------------|----------------|
| Yield strength                    | thickness mm | min (Mpa)       | max (Mpa)      |
|                                   | ≤ 16         | 235             | -              |
|                                   | > 16 ≤ 25    | 225             | -              |
| Tensile strength                  | thickness mm | min (Mpa)       | max (Mpa)      |
|                                   | < 3          | 360             | 510            |
|                                   | ≥ 3 ≤ 25     | 360             | 510            |
| Elongation                        | thickness mm | min %           |                |
|                                   | > 1.5 ≤ 2    | 17              |                |
|                                   | > 2 ≤ 2.5    | 18              |                |
|                                   | > 2.5 < 3    | 19              |                |
|                                   | ≥ 3 ≤ 25     | 24              |                |
| Impact strength                   | thickness mm | temperature, °C | min. energy, J |
|                                   | ≤ 25         | 20              | 27             |
| Weldability CEV                   | thickness mm | CEV max %       |                |
|                                   | ≤ 25         | 0.35            |                |
| Durability (chemical composition) | element      | max %           |                |
|                                   | C            | 0.17            |                |
|                                   | Mn           | 1.40            |                |
|                                   | P            | 0.035           |                |
|                                   | S            | 0.035           |                |
|                                   | N            | 0.012           |                |
|                                   | Cu           | 0.55            |                |
|                                   | Ni           | 0.42            |                |
|                                   | Cr           | 0.29            |                |
|                                   | Mo           | 0.11            |                |

**Declaration of performance**  
(according to UK CPR 2020 No 1359)

DoP id. S002\_02

Hot rolled strip product S235JR / 1.0038  
according to  
EN 10025-2:2019  
for bolted, welded and riveted structures.

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Birmingham  
B37 7ESA

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, Raahe Steelworks  
Raahe 2015-06-09

# UK CA

05

0038/CPR/PRJ11100341405/ 01

EN 10025-1:2004

|   |                        |                                |                   |                 |          |                                    |          |
|---|------------------------|--------------------------------|-------------------|-----------------|----------|------------------------------------|----------|
| Dop id: S002_02 EN 10025-2:2019   |                        | Performance                    |                   |                 |          | Harmonized technical specification |          |
| S235JR  | Thickness              | Tolerances for nominal width w |                   |                 |          | EN 10025-1:2004                    |          |
| Tolerances on dimensions and shape.   | Nominal thickness (mm) | w ≤ 1200                       | 1200 < w ≤ 1500   | 1500 < w ≤ 1800 | w > 1800 |                                    |          |
|   |                        |                                |                   |                 |          |                                    | t ≤ 2,00 |
|   | Thickness              | 2,00 < t ≤ 2,50                | ± 0,18            | ± 0,21          | ± 0,23   |                                    | ± 0,25   |
|   |                        | 2,50 < t ≤ 3,00                | ± 0,20            | ± 0,22          | ± 0,24   |                                    | ± 0,26   |
|   |                        | 3,00 < t ≤ 4,00                | ± 0,22            | ± 0,24          | ± 0,26   |                                    | ± 0,27   |
|   |                        | 4,00 < t ≤ 5,00                | ± 0,24            | ± 0,26          | ± 0,28   |                                    | ± 0,29   |
|   |                        | 5,00 < t ≤ 6,00                | ± 0,26            | ± 0,28          | ± 0,29   |                                    | ± 0,31   |
|   |                        | 6,00 < t ≤ 8,00                | ± 0,29            | ± 0,30          | ± 0,31   |                                    | ± 0,35   |
|   |                        | 8,00 < t ≤ 10,00               | ± 0,32            | ± 0,33          | ± 0,34   |                                    | ± 0,40   |
|   |                        | 10,00 < t ≤ 12,50              | ± 0,35            | ± 0,36          | ± 0,37   |                                    | ± 0,43   |
|   |                        | 12,50 < t ≤ 15,00              | ± 0,37            | ± 0,38          | ± 0,40   |                                    | ± 0,46   |
|   |                        | 15,00 < t ≤ 25,00              | ± 0,40            | ± 0,42          | ± 0,45   |                                    | ± 0,50   |
| Width   | Nominal width w        | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | Mill edges                     |                   | Trimmed edges*  |          |                                    |          |
|   |                        | Lower                          | Upper             | Lower           | Upper    |                                    |          |
|   | w ≤ 1 200              | 0                              | +20               | 0               | +3       |                                    |          |
|   | 1 200 < w ≤ 1 850      | 0                              | +20               | 0               | +5       |                                    |          |
|   | w > 1 850              | 0                              | +25               | 0               | +6       |                                    |          |
| * Tolerances for trimmed edges apply to products with nominal thickness t ≤ 10 mm; for nominal thickness t > 10 mm the upper tolerances shall be agreed at the time of enquiry and order. |                        |                                |                   |                 |          |                                    |          |
| Length  | Nominal length         | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | Lower                          |                   | Upper           |          |                                    |          |
|   | l                      | 0                              |                   | +10             |          |                                    |          |
|   | 2 000 ≤ l < 8 000      | 0                              |                   | +0,005 x l      |          |                                    |          |
|   | l ≥ 8 000              | 0                              |                   | +40             |          |                                    |          |
| Flatness  | Nominal thickness t    | Tolerances                     |                   |                 |          |                                    |          |
|   |                        | w ≤ 1 200                      | 1 200 < w ≤ 1 500 | w > 1500        |          |                                    |          |
|   | t                      | 18                             |                   | 25              |          |                                    |          |
|   | 2,00 < t ≤ 25          | 15                             |                   | 23              |          |                                    |          |

|                                   |              |                 |                |
|-----------------------------------|--------------|-----------------|----------------|
| Yield strength                    | thickness mm | min (Mpa)       | max (Mpa)      |
|                                   | ≤ 16         | 235             | -              |
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|                                   | < 3          | 360             | 510            |
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|                                   | ≥ 3 ≤ 25     | 24              |                |
| Impact strength                   | thickness mm | temperature, °C | min. energy, J |
|                                   | ≤ 25         | 20              | 27             |
| Weldability CEV                   | thickness mm | CEV max %       |                |
|                                   | ≤ 25         | 0.35            |                |
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|                                   | Mn           | 1.40            |                |
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|                                   | S            | 0.035           |                |
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|                                   | Cu           | 0.55            |                |
|                                   | Ni           | 0.42            |                |
|                                   | Cr           | 0.29            |                |
|                                   | Mo           | 0.11            |                |