

**Inspection certificate 3.2
DIN EN 10204**

(A02)

No. (A03)

1145544

Page

1/4

Date

13.11.2018

 No. (A07) **ST-5211**
23.04.2018

 No. (A07) **ST-5211**

Purchaser

Customer

(A06)

(A06)

 Product **Heavy plate**

(B01)

Works order No.

0000095187

(A08)

Dispatch note No.

0087902781

 Steel grade and terms of delivery **S460NL**

(B02-B03)

Wst-Nr. 1.8903
DIN EN 10025-3 02/05
DIN EN 10029 K1 C 02/11
DIN EN 10163-2 K1.B UG2 03/05
BMCF ST-5211

Inspection

LR

(A05)

DTM1814038

Marking of the product (B06)

**Trademark/Steelgrade/Heat-No/Product-No/
inspector's stamp**
Material data (B01-B99)

Item	Quantity (B08)	Product No. (B07)	Heat No. (B07)	Cond. of delivery (B04)	Thickness x Width x Length (B09-B11)	mm x mm x mm
03	1	895570 1	69413	N	10,00 x 2500,0 x 12000	
03	1	895570 2	69413	N	10,00 x 2500,0 x 12000	
04	1	904683 1	15539	N	10,00 x 3000,0 x 12000	
14	1	896026 1	69412	N	15,00 x 3000,0 x 12000	
14	1	896026 2	69412	N	15,00 x 3000,0 x 12000	
03	2	Weight	4.710	kgs	N: normalized	
04	1	(B12)	2.826			
14	2		8.478			
Σ	5		16.014			

 Dimensional check and visual examination of the surface condition:
without objection

 This is to certify that the material described above has been
manufactured and tested with satisfactory results in accordance
with the above mentioned Standard and Quality.

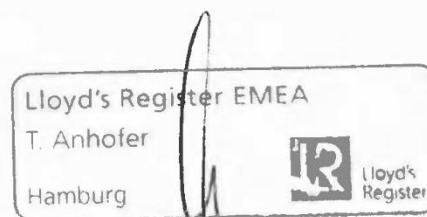
We hereby certify that the delivered material complies with the terms of the order.

(Z01)

QM-System: Certification as per ISO 9001 since 28 February 1990


 Trademark
(A04)

Ilseburger Grobblech GmbH
 Veckenstedter Weg 10
 D-38871 Ilseburg
 (A01)

 Inspection Stamp
(Z03)

 Inspection Representative
(Z02)

 Cyron

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(A05) **DTM1814038**
Ladle analysis (C70-C99)

Manufacturer standard

Heat No. (B07)	C %	Si %	Mn %	P %	S %	N %	Al %	Cu %	Cr %	Ni %
	≤ 0,20	≤ 0,60	1,00 - 1,70	≤ 0,025	≤ 0,020	≤ 0,025		≤ 0,55	≤ 0,30	≤ 0,80
15539	0,16	0,45	1,61	0,008	0,001	0,012	0,032	0,17	0,03	0,49
69412	0,17	0,42	1,59	0,011	0,001	0,011	0,036	0,17	0,03	0,50
69413	0,16	0,43	1,57	0,010	0,001	0,012	0,037	0,17	0,04	0,50
Heat No. (B07)	Mo %	V %	Ti %	Nb %	Cr+Mo %	EV1 1) %	EV2 2) %			
	≤ 0,10	≤ 0,20	≤ 0,05	≤ 0,05	≤ 0,30	≤ 0,22	≤ 0,50			
15539	0,01	0,09	0,01	0,03	0,04	0,13	0,50			
69412	0,005	0,09	0,003	0,03	0,04	0,12	0,50			
69413	0,01	0,09	0,004	0,03	0,05	0,12	0,49			

1) EV1: V+Nb+Ti

2) EV2: CEV=C+Mn/6+Mo/5+Ni/15+Cr/5+V/5+Cu/15

Steel making: Basic oxygen process

(C70)

Holding temperature normalizing 910°C
Soaking time: 1 min/mm
Cooling: still air
Tensile test (C10-C29)

Specimen No. (C00)	Heat No. (B07)	Location (C01)	Direct. (C02)	Cond. (B05)	Type (C10)	Yield point (C11) ReH N/mm ² ≥ 460	Tensile strength (C12) Rm N/mm ² 550 - 720	ReH/Rm	Elongation (C13) A5 7) %
		1) 2) 3)	4)	5)	6)				≥ 17
895570	69413	K4G	Q	N	P	556	642	0,87	24
896026	69412	K4G	Q	N	P	528	632	0,84	26
904683	15539	K4G	Q	N	P	538	625	0,86	28

1) K: Top

2) 4: 1/4 Width

3) G: Thickness of product

4) Q: transversal

5) N: normalized

6) P: prismatic

7) A5: $Lo=5,65 \sqrt{So}$

Lloyd's Register EMEA

T. Anhofer

Hamburg


Lloyd's
Register

Inspection Representative
(Z01)

Cyron

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(Z01)

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(B02-B03)

Wst-Nr.1.8903
DIN EN 10025-3 02/05
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Impact test (C40-C49)

Specimen No. (C00)	Heat No. (B07)	Location (C01)	Direct. (C02)	Cond. (B05)	Type of specimen (C40-C41)	Temperature (C03)	Impact energy (C42-C43)			
		1) 2) 3)	4)	5)		°C	1	2	3	MW 6) J
895570	69413	K40	Q	N	KV600/7,5	-050	30	38	71	46
896026	69412	K40	Q	N	KV	-050	28	29	38	32
904683	15539	K40	Q	N	KV450/7,5	-050	78	72	71	74

1) K: Top
2) 4: 1/4 Width
3) 0: near surface

4) Q: transversal
5) N: normalized
6) MW: Average

Our products are free of radioactive substances and do not exceed the clearing limit value of 100 Bq/kg, which guarantees the compliance with limit values given in the Radiation Protection Ordinance (StrlSchV) for the unrestricted clearance of solid material (StrlSchV Annex III, Section 5) for ferrous nuclides.



'This certificate is issued under the arrangements authorised by Lloyd's Register EMEA in accordance with the requirements of the Materials Quality Scheme and scheme Number MQS 057'

We hereby certify that the delivered material complies with the terms of the order.

(Z01)

QM-System: Certification as per ISO 9001 since 28 February 1990

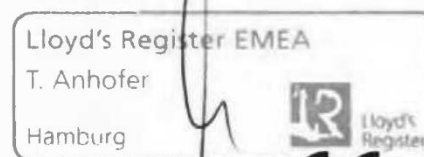


Trademark
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D-38871 Ilseburg
(A01)



Inspection Stamp
(Z03)



Inspection Representative
(Z02)

Cyron

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(A02)

No. (A03) 1145544
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Date 13.11.2018



0045

Ilseburger Grobblech GmbH
Veckenstedter Weg 10
D-38871 Ilseburg

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0045-CPR-0673
DoP: ILGS460NL-CPR-10025-01072013

EN 10025-1 2004

Warmgewalzte Baustahlprodukte
Hot rolled structural steel products
Produits en acier de construction laminé à chaud

Vorgesehene Verwendungen:	Hochbauten und Ingenieurbauwerke
Intended uses:	Building constructions or civil engineering
Usages prévus:	Construction de bâtiments ou génie civil

Grenzabmaße und Formtoleranzen:	Warmgewalztes Grobblech
Tolerances on dimensions and shape:	Hot rolled heavy plates
Tolérances sur les dimensions et la forme:	Tôles fortes refendues laminées à chaud: EN 10029

Dehnung / Elongation / Élongation:	
Zugfestigkeit / Tensile strength /	
Résistance à la traction:	
Streckgrenze / Yield strenght / Limite d'élasticité:	S460NL
Kerbschlagarbeit / Impact strenght /	Wst-Nr.1.8903
Résistance au choc:	
Schweißseignung / Weldability / Soudabilité:	

Dauerhaftigkeit:	Keine Leistung festgestellt
Durability:	No performance determined
Durabilité:	Aucune performance déterminée

Regulierter Stoff:	Keine Leistung festgestellt
Regulated substance:	No performance determined
Substance Réglementée:	Aucune performance déterminée

Die Leistungserklärung (DoP) gemäß EU-Verordnung 305/2011, Anhang III kann unter www.ilseburger-grobbblech.de/de/produkte/qualitaetsphilosophie-ims/zertifikate abgerufen werden.

The Declaration of Performance (DoP) in acc. with EU-Regulation 305/2011, Annex III is available under www.ilseburger-grobbblech.de/en/produkte/qualitaetsphilosophie-ims/zertifikate

Lloyd's Register EMEA

T. Anhofer

Hamburg

