



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 1 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Material requirements and customer information

Product: <small>(A03)</small> Plate	Steel standard and grade: <small>(B02)</small> EN10025-2:2019 S355K2	Surface tolerance: EN 10163-2 B3
Delivery condition: <small>(B04)</small> Normalized rolled (+N)		Length tolerance: EN 10029 Table 3
Customer name and address <small>(A06)</small>	Certificate address	Width tolerance: EN 10029 Table 2
4102	4102001	Thickness tolerance: EN 10029 Class A
BE Group Oy AB	certificates@begroup.fi;	Flatness tolerance: EN 10029 Table 4 Class N
BOX 54		
15101 LAHTI	Finland	
Finland	CERTIFICATES@BEGROUP.FI	

Supplementary information: (C04)

Fully Killed and Fine Grain

Visual examination and dimensional checking: Satisfactory. The results of tests performed are in compliance with the requirements. (Z01)

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
61094A2	7176N	9	10.0	2000	6000	1	942	S355K2+N	Head	P097004
60873F2	8156N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60949N6	8264N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J2	8367N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872E6	8376N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J1	8377N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J3	8384N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I1	8445N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I2	8446N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I4	8449N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 2 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
60872J6	8450N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I3	8455N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I5	8456N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J5	8459N	9	10.0	2000	6000	1	942	S355K2+N	Head	P097004
60872J7	8460N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
61075I2	6657N	15	22.0	2000	6000	2	4 144	S355K2+N	Head	P097004
61075I1	6704N	15	22.0	2000	6000	3	6 216	S355K2+N	Head	P097004
61048A2	5239N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61048C1	5243N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61047I2	5271N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61075I3	6647N	16	20.0	2450	12000	1	4 616	S355K2+N	Head	P097004
61075I4	6648N	16	20.0	2450	12000	1	4 616	S355K2+N	Head	P097004
61075I5	6724N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61047C4	4937N	17	20.0	2000	6000	3	5 652	S355K2+N	Head	P097004
61047C3	4938N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61049C1	5078N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61048G2	5118N	17	20.0	2000	6000	1	1 884	S355K2+N	Head	P097004
61048G1	5119N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61049E3	5188N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048D2	5267N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048D1	5268N	17	20.0	2000	6000	3	5 652	S355K2+N	Head	P097004
61048J2	5529N	17	20.0	2000	6000	1	1 884	S355K2+N	Head	P097004
61048J1	5530N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61048F2	5696N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048F1	5697N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
60935A2	8946N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61049B2	5123N	18	18.0	2000	6000	1	1 696	S355K2+N	Head	P097004



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 3 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
61046B4	4469N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046G3	4569N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F4	5612N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F3	5655N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F2	5666N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F1	5674N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
						94	189 412			



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 4 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Chemical composition (heat analysis) all results in %

Heat No. <small>(B07)</small>	C	Mn	Si	P	S	Cr	Cu	Ni	Mo	Al	Nb	V	Ti	N	B
Set values:	min.		0.15							0.020					
	max.	0.20	1.60	0.25	0.025	0.025	0.290	0.400	0.300	0.080	0.100	0.060	0.100	0.050	0.0120 0.0008
60872	0.16	1.42	0.20	0.008	0.005	0.031	0.039	0.024	0.003	0.043	0.020	0.001	0.001	0.0034	0.0002
60873	0.16	1.41	0.19	0.009	0.005	0.028	0.041	0.028	0.002	0.043	0.020	0.001	0.001	0.0035	0.0002
60935	0.17	1.51	0.20	0.009	0.005	0.023	0.021	0.013	0.002	0.041	0.043	0.001	0.001	0.0038	0.0002
60949	0.15	1.46	0.20	0.008	0.003	0.011	0.017	0.010	0.003	0.037	0.018	0.001	0.001	0.0043	0.0001
61046	0.18	1.50	0.18	0.009	0.008	0.030	0.043	0.025	0.003	0.035	0.018	0.001	0.001	0.0037	0.0002
61047	0.17	1.47	0.17	0.014	0.006	0.032	0.050	0.026	0.003	0.038	0.017	0.001	0.001	0.0037	0.0002
61048	0.18	1.49	0.21	0.012	0.009	0.046	0.045	0.030	0.004	0.036	0.017	0.001	0.001	0.0049	0.0002
61049	0.17	1.46	0.17	0.015	0.008	0.037	0.041	0.024	0.003	0.036	0.015	0.001	0.001	0.0042	0.0003
61075	0.18	1.51	0.20	0.014	0.003	0.033	0.041	0.021	0.003	0.039	0.018	0.001	0.001	0.0042	0.0004
61094	0.17	1.51	0.22	0.016	0.012	0.031	0.041	0.016	0.005	0.038	0.043	0.002	0.002	0.0042	0.0002

Heat No. <small>(B07)</small>	CEV	Remark <small>(C70)</small>
Set values:	min.	
	max.	0.45
60872	0.40	1 3 4 6
60873	0.40	1 3 4 6
60935	0.43	1 3 4 6
60949	0.40	1 3 4 6
61046	0.44	1 3 4 6
61047	0.43	1 3 4 6
61048	0.44	1 3 4 6
61049	0.42	1 3 4 6
61075	0.44	1 3 4 6
61094	0.43	1 3 4 6

Supplementary information (C99)

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

1 = Basic Oxygen Steel, 2 = Electric Arc Furnace, 3 = Ladle Refined, 4 = Calcium Treated, 5 = Vacuum Degassed, 6 = Continuous Cast, 7 = Ingot



(A01)



(A04)

Inspection representative NLMK DanSteel A/S (A05)

Zibrandt Greisen

Z. Greisen



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 5 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61046B4	4469N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046B4	4469N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046G3	4569N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046G3	4569N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61047C4	4937N-1-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C4	4937N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C4	4937N-2-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-1-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-1-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-2-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61049C1	5078N-2-1	20.0	R	H	T	430	REH	565	A5	25	0.76
61049C1	5078N-2-2	20.0	R	H	T	430	REH	565	A5	25	0.76
61048G2	5118N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-2-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61049B2	5123N-1-1	18.0	R	H	T	440	REH	570	A5	27	0.77
61049E3	5188N-1-1	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-1-2	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-2-1	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-2-2	20.0	R	H	T	439	REH	564	A5	22	0.78
61048A2	5239N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048A2	5239N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 6 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2

22.04.2022

Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing

Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61048C1	5243N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048C1	5243N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-2-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-3	20.0	R	H	T	412	R02	562	A5	30	0.73
61047I2	5271N-1-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047I2	5271N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61048J2	5529N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048J1	5530N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048J1	5530N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61046F4	5612N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F4	5612N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F3	5655N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F3	5655N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F2	5666N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F2	5666N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F1	5674N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F1	5674N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61048F2	5696N-1-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F2	5696N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F2	5696N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 7 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2

22.04.2022

Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing

Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61048F2	5696N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-1-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61075I3	6647N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I4	6648N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I2	6657N-1-1	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I2	6657N-1-2	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-1	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-2	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-3	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I5	6724N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I5	6724N-2-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61094A2	7176N-1-2	10.0	R	H	T	498	REH	598	A5	26	0.83
60873F2	8156N-2-1	10.0	R	H	T	434	REH	546	A5	35	0.79
60873F2	8156N-2-2	10.0	R	H	T	434	REH	546	A5	35	0.79
60949N6	8264N-1-1	10.0	R	H	T	462	REH	556	A5	32	0.83
60949N6	8264N-2-1	10.0	R	H	T	462	REH	556	A5	32	0.83
60872J2	8367N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J2	8367N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872E6	8376N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872E6	8376N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J1	8377N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J1	8377N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 8 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
60872J3	8384N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J3	8384N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I1	8445N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I1	8445N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I2	8446N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I2	8446N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I4	8449N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I4	8449N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J6	8450N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J6	8450N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I3	8455N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I3	8455N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I5	8456N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I5	8456N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J5	8459N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J7	8460N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J7	8460N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60935A2	8946N-1-1	20.0	R	H	T	434	REH	561	A5	31	0.77
60935A2	8946N-2-1	20.0	R	H	T	434	REH	561	A5	31	0.77

Supplementary Information (C99)

Loc.: (C01) H = head, T = tail

Dir.: (C02) T = transversal, L = longitudinal

Shape: (C10) Ø = round, R = rectangular

Original gauge length: 200 mm



Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing

Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab (B07)	Plate ID (B06)	Position (C01)	Notch (C40)	Shape (C41)	Loc. (C01)	Dir. (C02)	Temp. °C (C03)	SV J (C42)	SV J (C42)	SV J (C42)	AV J (C43)
61046B4	4469N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046B4	4469N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046G3	4569N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046G3	4569N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61047C4	4937N-1-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C4	4937N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C4	4937N-2-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-1-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-1-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-2-2	1	CV	10x10	H	L	-20	150	148	146	148
61049C1	5078N-2-1	1	CV	10x10	H	L	-20	131	131	133	132
61049C1	5078N-2-2	1	CV	10x10	H	L	-20	131	131	133	132
61048G2	5118N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-2-2	1	CV	10x10	H	L	-20	121	125	136	127
61049B2	5123N-1-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-1-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-1-2	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-2-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-2-2	1	CV	10x10	H	L	-20	131	131	133	132
61048A2	5239N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048A2	5239N-2-1	1	CV	10x10	H	L	-20	121	125	136	127

Our order No.: ^(A08) 2381921Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab ^(B07)	Plate ID ^(B06)	Position ^(C01)	Notch ^(C40)	Shape ^(C41)	Loc. ^(C01)	Dir. ^(C02)	Temp. °C ^(C03)	SV J ^(C42)	SV J ^(C42)	SV J ^(C42)	AV J ^(C43)
61048C1	5243N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048C1	5243N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-2-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-3	1	CV	10x10	H	L	-20	121	125	136	127
61047I2	5271N-1-1	1	CV	10x10	H	L	-20	150	148	146	148
61047I2	5271N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61048J2	5529N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048J1	5530N-2-1	1	CV	10x10	H	L	-20	122	124	127	124
61048J1	5530N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61046F4	5612N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F4	5612N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F3	5655N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F3	5655N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F2	5666N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F2	5666N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F1	5674N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F1	5674N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61048F2	5696N-1-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F2	5696N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F2	5696N-2-1	1	CV	10x10	H	L	-20	122	124	127	124

Our order No.: ^(A08) 2381921Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing

Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab ^(B07)	Plate ID ^(B06)	Position ^(C01)	Notch ^(C40)	Shape ^(C41)	Loc. ^(C01)	Dir. ^(C02)	Temp. °C ^(C03)	SV J ^(C42)	SV J ^(C42)	SV J ^(C42)	AV J ^(C43)
61048F2	5696N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-1-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-2-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61075I3	6647N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I4	6648N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I2	6657N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I2	6657N-1-2	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-2	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-3	1	CV	10x10	H	L	-20	180	177	181	179
61075I5	6724N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I5	6724N-2-1	1	CV	10x10	H	L	-20	180	177	181	179
61094A2	7176N-1-2	1	CV	7.5x10	H	L	-20	88	95	98	94
60873F2	8156N-2-1	1	CV	7.5x10	H	L	-20	143	161	190	165
60873F2	8156N-2-2	1	CV	7.5x10	H	L	-20	143	161	190	165
60949N6	8264N-1-1	1	CV	7.5x10	H	L	-20	149	154	144	149
60949N6	8264N-2-1	1	CV	7.5x10	H	L	-20	149	154	144	149
60872J2	8367N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J2	8367N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872E6	8376N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872E6	8376N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J1	8377N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J1	8377N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171

Our order No.: ^(A08) 2381921Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab ^(B07)	Plate ID ^(B06)	Position ^(C01)	Notch ^(C40)	Shape ^(C41)	Loc. ^(C01)	Dir. ^(C02)	Temp. °C ^(C03)	SV J ^(C42)	SV J ^(C42)	SV J ^(C42)	AV J ^(C43)
60872J3	8384N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J3	8384N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I1	8445N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I1	8445N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I2	8446N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I2	8446N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I4	8449N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I4	8449N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J6	8450N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J6	8450N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I3	8455N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I3	8455N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I5	8456N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I5	8456N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J5	8459N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J7	8460N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J7	8460N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60935A2	8946N-1-1	1	CV	10x10	H	L	-20	175	160	159	165
60935A2	8946N-2-1	1	CV	10x10	H	L	-20	175	160	159	165

Supplementary Information ^(C99)**Position:** ^(C01) 1 = surface, 2 = middle, 3 = 1/3 of thickness, 4 = 1/4 of thickness**Notch:** ^(C40) CU = Charpy U-notch, CV = Charpy V-notch, CVA = Charpy V-notch (ASTM)**Loc.:** ^(C01) H = head, T = tail**Dir.:** ^(C02) T = transversal, L = longitudinal



Europe – Plate

Inspection Certificate ^(A02)

EN 10204:2004/3.1

Page 13 of 13

Date of creation: ^(Z02) 22.04.2022

Certificate No.: ^(A03) 142491/2

Our order No.: ^(A08) 2381921

Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

We hereby certify that the material has been made and tested in accordance with the mentioned specification(s).
Certified according to Construction Products Regulations (305/2011/EU) by TÜV NORD Systems GmbH (Notified Body Reg. No. 0045).
For Declaration of Performance please see www.DanSteel.dk and DoP number 010CPR2013-07-01.



TÜV-NORD 0045-CPR-0554

Year of initial inspection: 2005

Intended use: Welded, bolted and riveted structures.

Our products are Cobalt, Gold, Mercury free and are free of radioactive substances and do not exceed the clearing limit value of 100 Bg/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.
Manufactured in Denmark



DanSteel
Havnevej 33
DK - 3300 Frederiksværk

^(A01)



^(A04)

Inspection representative NLMK DanSteel A/S ^(A05)

Zibrandt Greisen

Information description

acc. to EN 10168

A Commercial transactions and parties involved

A01 Manufacturer's works
A02 Type of inspection document
A03 Document number
A04 Manufacturer's mark
A05 Originator of the inspection document
A06 Customer consignee
A07 Purchaser's order number and, where applicable, item number
A08 Manufacturer's works order number
A09 Customer article number
A10 to A99 Supplementary information

B Description of Products

B01 Product
B02 Steel designation
B03 Any supplementary requirements
B04 Product delivery condition
B05 Reference (heat) treatment of samples
B06 Marking of the product
B07 Identification of the product
B08 Number of pieces
B09 to B11 Product dimensions
B12 Theoretical mass
B13 Actual mass
B14 to B99 Supplementary information

C Inspection

C00 Identification of the sample
C01 Location of the sample
C02 Direction of the test pieces
C03 Test temperature
C04 to C09 Supplementary information

C10 Shape of the test piece
C11 Yield or proof strength
C12 Tensile strength
C13 Elongation after fracture
C14 to C29 Supplementary information
C30 Method of test
C31 Individual values
C32 Mean value
C33 to C39 Supplementary information
C40 Type of test piece
C41 Width of test piece
C42 Individual values
C43 Mean value
C44 to C49 Supplementary information
C50 to C69 Supplementary information
C70 Steelmaking process
C71 to C92 Chemical composition
C93 to C99 Supplementary information

D Other tests

D01 Marking and identification, surface appearance, shape and dimensional properties
D02 to D50 Non-destructive tests
D51 to D99 Supplementary information

Z Validation

Z01 Statement of compliance
Z02 Date of issue and validation
Z03 Stamp of the inspection representative
Z04 CE marking
Z05 to Z99 Supplementary information



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 1 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2

142491/2

Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Material requirements and customer information

Product: <small>(A03)</small> Plate	Steel standard and grade: <small>(B02)</small> EN10025-2:2019 S355K2	Surface tolerance: EN 10163-2 B3
Delivery condition: <small>(B04)</small> Normalized rolled (+N)		Length tolerance: EN 10029 Table 3
Customer name and address <small>(A06)</small>	Certificate address	Width tolerance: EN 10029 Table 2
4102	4102001	Thickness tolerance: EN 10029 Class A
BE Group Oy AB	certificates@begroup.fi;	Flatness tolerance: EN 10029 Table 4 Class N
BOX 54		
15101 LAHTI	Finland	
Finland	CERTIFICATES@BEGROUP.FI	

Supplementary information: (C04)

Fully Killed and Fine Grain

Visual examination and dimensional checking: Satisfactory. The results of tests performed are in compliance with the requirements. (Z01)

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
61094A2	7176N	9	10.0	2000	6000	1	942	S355K2+N	Head	P097004
60873F2	8156N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60949N6	8264N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J2	8367N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872E6	8376N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J1	8377N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J3	8384N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I1	8445N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I2	8446N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I4	8449N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 2 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
60872J6	8450N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I3	8455N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872I5	8456N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
60872J5	8459N	9	10.0	2000	6000	1	942	S355K2+N	Head	P097004
60872J7	8460N	9	10.0	2000	6000	2	1 884	S355K2+N	Head	P097004
61075I2	6657N	15	22.0	2000	6000	2	4 144	S355K2+N	Head	P097004
61075I1	6704N	15	22.0	2000	6000	3	6 216	S355K2+N	Head	P097004
61048A2	5239N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61048C1	5243N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61047I2	5271N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61075I3	6647N	16	20.0	2450	12000	1	4 616	S355K2+N	Head	P097004
61075I4	6648N	16	20.0	2450	12000	1	4 616	S355K2+N	Head	P097004
61075I5	6724N	16	20.0	2450	12000	2	9 232	S355K2+N	Head	P097004
61047C4	4937N	17	20.0	2000	6000	3	5 652	S355K2+N	Head	P097004
61047C3	4938N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61049C1	5078N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61048G2	5118N	17	20.0	2000	6000	1	1 884	S355K2+N	Head	P097004
61048G1	5119N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61049E3	5188N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048D2	5267N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048D1	5268N	17	20.0	2000	6000	3	5 652	S355K2+N	Head	P097004
61048J2	5529N	17	20.0	2000	6000	1	1 884	S355K2+N	Head	P097004
61048J1	5530N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61048F2	5696N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
61048F1	5697N	17	20.0	2000	6000	4	7 536	S355K2+N	Head	P097004
60935A2	8946N	17	20.0	2000	6000	2	3 768	S355K2+N	Head	P097004
61049B2	5123N	18	18.0	2000	6000	1	1 696	S355K2+N	Head	P097004



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 3 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Details of supplied materials dimensions, weights and pieces

Heat/Slab <small>(B07)</small>	Plate No. <small>(B06)</small>	Item	Thickness mm <small>(B09)</small>	Width mm <small>(B10)</small>	Length mm <small>(B11)</small>	Pieces <small>(B08)</small>	Gross kg <small>(B12)</small>	Hard stamp	Stamp location	Customer remark <small>(B99)</small>
61046B4	4469N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046G3	4569N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F4	5612N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F3	5655N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F2	5666N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
61046F1	5674N	19	12.0	2450	12000	2	5 538	S355K2+N	Head	P097004
						94	189 412			



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 4 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Chemical composition (heat analysis) all results in %

Heat No. <small>(B07)</small>	C	Mn	Si	P	S	Cr	Cu	Ni	Mo	Al	Nb	V	Ti	N	B
Set values:	min.		0.15							0.020					
	max.	0.20	1.60	0.25	0.025	0.025	0.290	0.400	0.300	0.080	0.100	0.060	0.100	0.050	0.0120 0.0008
60872	0.16	1.42	0.20	0.008	0.005	0.031	0.039	0.024	0.003	0.043	0.020	0.001	0.001	0.0034	0.0002
60873	0.16	1.41	0.19	0.009	0.005	0.028	0.041	0.028	0.002	0.043	0.020	0.001	0.001	0.0035	0.0002
60935	0.17	1.51	0.20	0.009	0.005	0.023	0.021	0.013	0.002	0.041	0.043	0.001	0.001	0.0038	0.0002
60949	0.15	1.46	0.20	0.008	0.003	0.011	0.017	0.010	0.003	0.037	0.018	0.001	0.001	0.0043	0.0001
61046	0.18	1.50	0.18	0.009	0.008	0.030	0.043	0.025	0.003	0.035	0.018	0.001	0.001	0.0037	0.0002
61047	0.17	1.47	0.17	0.014	0.006	0.032	0.050	0.026	0.003	0.038	0.017	0.001	0.001	0.0037	0.0002
61048	0.18	1.49	0.21	0.012	0.009	0.046	0.045	0.030	0.004	0.036	0.017	0.001	0.001	0.0049	0.0002
61049	0.17	1.46	0.17	0.015	0.008	0.037	0.041	0.024	0.003	0.036	0.015	0.001	0.001	0.0042	0.0003
61075	0.18	1.51	0.20	0.014	0.003	0.033	0.041	0.021	0.003	0.039	0.018	0.001	0.001	0.0042	0.0004
61094	0.17	1.51	0.22	0.016	0.012	0.031	0.041	0.016	0.005	0.038	0.043	0.002	0.002	0.0042	0.0002

Heat No. <small>(B07)</small>	CEV	Remark <small>(C70)</small>
Set values:	min.	
	max.	0.45
60872	0.40	1 3 4 6
60873	0.40	1 3 4 6
60935	0.43	1 3 4 6
60949	0.40	1 3 4 6
61046	0.44	1 3 4 6
61047	0.43	1 3 4 6
61048	0.44	1 3 4 6
61049	0.42	1 3 4 6
61075	0.44	1 3 4 6
61094	0.43	1 3 4 6

Supplementary information (C99)

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

1 = Basic Oxygen Steel, 2 = Electric Arc Furnace, 3 = Ladle Refined, 4 = Calcium Treated, 5 = Vacuum Degassed, 6 = Continuous Cast, 7 = Ingot



(A01)



(A04)

Inspection representative NLMK DanSteel A/S (A05)

Zibrandt Greisen

Z. Greisen



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 5 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing

Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61046B4	4469N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046B4	4469N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046G3	4569N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046G3	4569N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61047C4	4937N-1-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C4	4937N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C4	4937N-2-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-1-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-1-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047C3	4938N-2-2	20.0	R	H	T	418	REH	548	A5	28	0.76
61049C1	5078N-2-1	20.0	R	H	T	430	REH	565	A5	25	0.76
61049C1	5078N-2-2	20.0	R	H	T	430	REH	565	A5	25	0.76
61048G2	5118N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048G1	5119N-2-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61049B2	5123N-1-1	18.0	R	H	T	440	REH	570	A5	27	0.77
61049E3	5188N-1-1	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-1-2	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-2-1	20.0	R	H	T	439	REH	564	A5	22	0.78
61049E3	5188N-2-2	20.0	R	H	T	439	REH	564	A5	22	0.78
61048A2	5239N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048A2	5239N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 6 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2

22.04.2022

Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing

Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61048C1	5243N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048C1	5243N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-2-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D2	5267N-2-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-1	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-2	20.0	R	H	T	412	R02	562	A5	30	0.73
61048D1	5268N-1-3	20.0	R	H	T	412	R02	562	A5	30	0.73
61047I2	5271N-1-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61047I2	5271N-2-1	20.0	R	H	T	418	REH	548	A5	28	0.76
61048J2	5529N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048J1	5530N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048J1	5530N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61046F4	5612N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F4	5612N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F3	5655N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F3	5655N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F2	5666N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F2	5666N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F1	5674N-1-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61046F1	5674N-2-1	12.0	R	H	T	454	REH	571	A5	30	0.80
61048F2	5696N-1-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F2	5696N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F2	5696N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 7 of 13

Date of creation: (Z02) 22.04.2022Certificate No.: (A03) 142491/2

142491/2

Our order No.: (A08) 2381921Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing

Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
61048F2	5696N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-1-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-1-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-2-1	20.0	R	H	T	448	REH	573	A5	24	0.78
61048F1	5697N-2-2	20.0	R	H	T	448	REH	573	A5	24	0.78
61075I3	6647N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I4	6648N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I2	6657N-1-1	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I2	6657N-1-2	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-1	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-2	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I1	6704N-1-3	22.0	R	H	T	407	R02	572	A5	26	0.71
61075I5	6724N-1-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61075I5	6724N-2-1	20.0	R	H	T	407	R02	572	A5	26	0.71
61094A2	7176N-1-2	10.0	R	H	T	498	REH	598	A5	26	0.83
60873F2	8156N-2-1	10.0	R	H	T	434	REH	546	A5	35	0.79
60873F2	8156N-2-2	10.0	R	H	T	434	REH	546	A5	35	0.79
60949N6	8264N-1-1	10.0	R	H	T	462	REH	556	A5	32	0.83
60949N6	8264N-2-1	10.0	R	H	T	462	REH	556	A5	32	0.83
60872J2	8367N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J2	8367N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872E6	8376N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872E6	8376N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J1	8377N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J1	8377N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80

(A01)



Europe – Plate

Inspection Certificate (A02)

EN 10204:2004/3.1

Page 8 of 13

Date of creation: (Z02) 22.04.2022

Certificate No.: (A03) 142491/2

Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Tensile testing Tensile tests were performed in accordance with EN 10002/ISO 6892-1 with results as stated below:

Heat/slab <small>(B07)</small>	Plate ID <small>(B06)</small>	Thickness mm	Shape <small>(C10)</small>	Loc. <small>(C01)</small>	Dir. <small>(C02)</small>	Yield MPa <small>(C11)</small>	Yield type	UTS Rm MPa <small>(C12)</small>	Elong. type	Elongation % <small>(C13)</small>	Yield/UTS
60872J3	8384N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J3	8384N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I1	8445N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I1	8445N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I2	8446N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I2	8446N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I4	8449N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I4	8449N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J6	8450N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J6	8450N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I3	8455N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I3	8455N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I5	8456N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872I5	8456N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J5	8459N-2-2	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J7	8460N-1-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60872J7	8460N-2-1	10.0	R	H	T	447	REH	558	A5	31	0.80
60935A2	8946N-1-1	20.0	R	H	T	434	REH	561	A5	31	0.77
60935A2	8946N-2-1	20.0	R	H	T	434	REH	561	A5	31	0.77

Supplementary Information (C99)

Loc.: (C01) H = head, T = tail

Dir.: (C02) T = transversal, L = longitudinal

Shape: (C10) Ø = round, R = rectangular

Original gauge length: 200 mm

Our order No.: ^(A08) 2381921Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing

Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab ^(B07)	Plate ID ^(B06)	Position ^(C01)	Notch ^(C40)	Shape ^(C41)	Loc. ^(C01)	Dir. ^(C02)	Temp. °C ^(C03)	SV J ^(C42)	SV J ^(C42)	SV J ^(C42)	AV J ^(C43)
61046B4	4469N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046B4	4469N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046G3	4569N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046G3	4569N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61047C4	4937N-1-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C4	4937N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C4	4937N-2-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-1-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-1-2	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61047C3	4938N-2-2	1	CV	10x10	H	L	-20	150	148	146	148
61049C1	5078N-2-1	1	CV	10x10	H	L	-20	131	131	133	132
61049C1	5078N-2-2	1	CV	10x10	H	L	-20	131	131	133	132
61048G2	5118N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048G1	5119N-2-2	1	CV	10x10	H	L	-20	121	125	136	127
61049B2	5123N-1-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-1-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-1-2	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-2-1	1	CV	10x10	H	L	-20	131	131	133	132
61049E3	5188N-2-2	1	CV	10x10	H	L	-20	131	131	133	132
61048A2	5239N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048A2	5239N-2-1	1	CV	10x10	H	L	-20	121	125	136	127



Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab (B07)	Plate ID (B06)	Position (C01)	Notch (C40)	Shape (C41)	Loc. (C01)	Dir. (C02)	Temp. °C (C03)	SV J (C42)	SV J (C42)	SV J (C42)	AV J (C43)
61048C1	5243N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048C1	5243N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-2-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D2	5267N-2-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-1	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-2	1	CV	10x10	H	L	-20	121	125	136	127
61048D1	5268N-1-3	1	CV	10x10	H	L	-20	121	125	136	127
61047I2	5271N-1-1	1	CV	10x10	H	L	-20	150	148	146	148
61047I2	5271N-2-1	1	CV	10x10	H	L	-20	150	148	146	148
61048J2	5529N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048J1	5530N-2-1	1	CV	10x10	H	L	-20	122	124	127	124
61048J1	5530N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61046F4	5612N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F4	5612N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F3	5655N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F3	5655N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F2	5666N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F2	5666N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F1	5674N-1-1	1	CV	10x10	H	L	-20	165	168	157	163
61046F1	5674N-2-1	1	CV	10x10	H	L	-20	165	168	157	163
61048F2	5696N-1-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F2	5696N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F2	5696N-2-1	1	CV	10x10	H	L	-20	122	124	127	124



Our order No.: (A08) 2381921

Your order No.: (A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab (B07)	Plate ID (B06)	Position (C01)	Notch (C40)	Shape (C41)	Loc. (C01)	Dir. (C02)	Temp. °C (C03)	SV J (C42)	SV J (C42)	SV J (C42)	AV J (C43)
61048F2	5696N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-1-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-1-2	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-2-1	1	CV	10x10	H	L	-20	122	124	127	124
61048F1	5697N-2-2	1	CV	10x10	H	L	-20	122	124	127	124
61075I3	6647N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I4	6648N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I2	6657N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I2	6657N-1-2	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-2	1	CV	10x10	H	L	-20	180	177	181	179
61075I1	6704N-1-3	1	CV	10x10	H	L	-20	180	177	181	179
61075I5	6724N-1-1	1	CV	10x10	H	L	-20	180	177	181	179
61075I5	6724N-2-1	1	CV	10x10	H	L	-20	180	177	181	179
61094A2	7176N-1-2	1	CV	7.5x10	H	L	-20	88	95	98	94
60873F2	8156N-2-1	1	CV	7.5x10	H	L	-20	143	161	190	165
60873F2	8156N-2-2	1	CV	7.5x10	H	L	-20	143	161	190	165
60949N6	8264N-1-1	1	CV	7.5x10	H	L	-20	149	154	144	149
60949N6	8264N-2-1	1	CV	7.5x10	H	L	-20	149	154	144	149
60872J2	8367N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J2	8367N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872E6	8376N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872E6	8376N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J1	8377N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J1	8377N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171

Our order No.: ^(A08) 2381921Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

Impact testing Impact tests were performed in accordance with EN 10045/ISO 148-1 with results as stated below:

Heat/slab ^(B07)	Plate ID ^(B06)	Position ^(C01)	Notch ^(C40)	Shape ^(C41)	Loc. ^(C01)	Dir. ^(C02)	Temp. °C ^(C03)	SV J ^(C42)	SV J ^(C42)	SV J ^(C42)	AV J ^(C43)
60872J3	8384N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J3	8384N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I1	8445N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I1	8445N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I2	8446N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I2	8446N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I4	8449N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I4	8449N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J6	8450N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J6	8450N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I3	8455N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I3	8455N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I5	8456N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872I5	8456N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J5	8459N-2-2	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J7	8460N-1-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60872J7	8460N-2-1	1	CV	7.5x10	H	L	-20	178	165	170	171
60935A2	8946N-1-1	1	CV	10x10	H	L	-20	175	160	159	165
60935A2	8946N-2-1	1	CV	10x10	H	L	-20	175	160	159	165

Supplementary Information ^(C99)**Position:** ^(C01) 1 = surface, 2 = middle, 3 = 1/3 of thickness, 4 = 1/4 of thickness**Notch:** ^(C40) CU = Charpy U-notch, CV = Charpy V-notch, CVA = Charpy V-notch (ASTM)**Loc.:** ^(C01) H = head, T = tail**Dir.:** ^(C02) T = transversal, L = longitudinal



Europe – Plate

Inspection Certificate ^(A02)

EN 10204:2004/3.1

Page 13 of 13

Date of creation: ^(Z02) 22.04.2022

Certificate No.: ^(A03) 142491/2

Our order No.: ^(A08) 2381921

Your order No.: ^(A07) P097004

Order registration date: 17.02.2022

Date of dispatch: 22.04.2022 B

We hereby certify that the material has been made and tested in accordance with the mentioned specification(s).
Certified according to Construction Products Regulations (305/2011/EU) by TÜV NORD Systems GmbH (Notified Body Reg. No. 0045).
For Declaration of Performance please see www.DanSteel.dk and DoP number 010CPR2013-07-01.



TÜV-NORD 0045-CPR-0554

Year of initial inspection: 2005

Intended use: Welded, bolted and riveted structures.

Our products are Cobalt, Gold, Mercury free and are free of radioactive substances and do not exceed the clearing limit value of 100 Bg/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.
Manufactured in Denmark



DanSteel
Havnevej 33
DK - 3300 Frederiksværk

^(A01)



^(A04)

Inspection representative NLMK DanSteel A/S ^(A05)

Zibrandt Greisen

Information description

acc. to EN 10168

A Commercial transactions and parties involved

A01 Manufacturer's works
A02 Type of inspection document
A03 Document number
A04 Manufacturer's mark
A05 Originator of the inspection document
A06 Customer consignee
A07 Purchaser's order number and, where applicable, item number
A08 Manufacturer's works order number
A09 Customer article number
A10 to A99 Supplementary information

B Description of Products

B01 Product
B02 Steel designation
B03 Any supplementary requirements
B04 Product delivery condition
B05 Reference (heat) treatment of samples
B06 Marking of the product
B07 Identification of the product
B08 Number of pieces
B09 to B11 Product dimensions
B12 Theoretical mass
B13 Actual mass
B14 to B99 Supplementary information

C Inspection

C00 Identification of the sample
C01 Location of the sample
C02 Direction of the test pieces
C03 Test temperature
C04 to C09 Supplementary information

C10 Shape of the test piece
C11 Yield or proof strength
C12 Tensile strength
C13 Elongation after fracture
C14 to C29 Supplementary information
C30 Method of test
C31 Individual values
C32 Mean value
C33 to C39 Supplementary information
C40 Type of test piece
C41 Width of test piece
C42 Individual values
C43 Mean value
C44 to C49 Supplementary information
C50 to C69 Supplementary information
C70 Steelmaking process
C71 to C92 Chemical composition
C93 to C99 Supplementary information

D Other tests

D01 Marking and identification, surface appearance, shape and dimensional properties
D02 to D50 Non-destructive tests
D51 to D99 Supplementary information

Z Validation

Z01 Statement of compliance
Z02 Date of issue and validation
Z03 Stamp of the inspection representative
Z04 CE marking
Z05 to Z99 Supplementary information