

## Material Certificate List

Shipping Address		Information	
<b>Ship-to-party</b>	TAMMINIITY OY KETJUTIE 4 27710 KITYLIIN FINLAND	<b>Document Number</b>	80473427
<b>Buyer</b>		<b>Delivery Date</b>	29.04.2021
<b>Sold to Party</b>	TAMMINIITY OY KETJUTIE 4 27710 KITYLIIN FINLAND	<b>Sales Order Number</b>	151313
		<b>Sales Order Date</b>	26.04.2021
		<b>Purchase Order Number</b>	006517
		<b>Customer Number</b>	201512
		<b>Mode of Transportation</b>	
		<b>Delivery Term</b>	DAP EURA
		<b>Country of Origin</b>	
		<b>Country of Destination</b>	FI
		<b>From/Via</b>	35A1
		<b>Route</b>	R00000
<b>Weight-Volume</b>		<b>Delivery Plant</b>	35A1
<b>Total Gross Weight</b>	10.008,00 KG	<b>Certificate Receiver</b>	myynti@tamminiitty.fi
<b>Total Net Weight</b>	10.008,00 KG		
<b>Total Packages</b>	5		

### Shipping Details

Item	Material Description	Cust. Prod Code	Ordered Quantity	Delivered Quantity	Weight
10	13002041 Hot Rolled Pickled,Sheet, 5.00X1500.00X3000.00	4010500	2.500,00	2.510,00	2.510,00 KG
Steel Grade	YMPRESS S355 MC				
Batch	0001213296	Material ID	828157		
20	13002042 HRP,SHEET, 6.00X1500.00X3000.00	4010600	5.000,00	0,00	0,00 KG
Steel Grade	YMPRESS S355 MC				
Batch		Material ID			
30	13001616 Hot Rolled Pickled,Sheet, 8.00X1500.00X3000.00	4010800	2.500,00	2.543,00	2.543,00 KG
Steel Grade	S355				
Batch	0001208838	Material ID	606852		
900001	13002042 Hot Rolled Pickled,Sheet, 6.00X1500.00X3000.00	4010600	5.000,00	1.505,00	1.505,00 KG
Steel Grade	YMPRESS S355 MC				
Batch	0001141359	Material ID	814854		
900002	13002042 Hot Rolled Pickled,Sheet,	4010600	5.000,00	1.730,00	1.730,00 KG

#### Naantali Steel Service Centre Oy

Rautakatu 5, 21110, Naantali, Finland

T: +358 (0)10 28 76 901, naantalissc@tatasteelurope.com

Reg. No. 2674812-1

**Material Certificate List****Information**

**Document Number** 80473427  
**Delivery Date** 29.04.2021

<b>Item</b>	<b>Material Description</b>	<b>Cust. Prod Code</b>	<b>Ordered Quantity</b>	<b>Delivered Quantity</b>	<b>Weight</b>
Steel Grade Batch	6.00X1500.00X3000.00 YMPRESS S355 MC 0001216545	Material ID	824681		
900003	13002042 Hot Rolled Pickled, Sheet, 6.00X1500.00X3000.00	4010600	5.000,00	1.720,00	1.720,00 KG
Steel Grade Batch	YMPRESS S355 MC 0001193151	Material ID	810570		

A01 Tata Steel IJmuiden BV Wenkebachstraat 1 1951 JZ Velsen Noord Postbus 10000 1970 CA IJmuiden The Netherlands Telephone: 0251-492110 Company Trade Register 34040331 E-mail: info.testing@tatasteel.eu	A03 Doc nr. 2021027660 00		A04  <b>TATA STEEL</b>
	A02 Inspection certificate 3.1, EN10204.		
A06 Customer/Consignee NAANTALI STEEL SERVICE CENTRE OY RAUTAKATU 5  21110 NAANTALI FINLAND	A07, A09 Reference 4500035855 11001475	A08 Order nr. 57614 A	C70 STEEL MAKING PROCESS: BO B09,B10,B11 Dimensions 1500 mm X 5 mm B13 Total Mass KG 108005 B08 Total NR, 10 A10 Transport LINDEBORG
	B01,B02,B03,B04,B15 Hot rolled pickled, Coil, S355MC, YMPRESS WG S:01-2010. 1.00 G/M2/Side oiled. Mill edges Tolerance EN 10051 : 2010 (E) (Width tolerance +20/-0 mm) Dev.Tol. (Thickness tolerance +0.15/-0.15 mm). Country of melt and pour: The Netherlands		
	A11 Dispatch Note 85051		

Buigproef/Bend test/Biegeversuch/Test de flexion : 'goed/good/gut/concluant' C50

PROD-IDENT: 828163      MASS KG: 10301      NR: 1      CAST NR: S2659      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	396	476	34.5	83

PROD-IDENT: 828162      MASS KG: 10311      NR: 1      CAST NR: S2659      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	396	476	34.5	83

PROD-IDENT: 828161      MASS KG: 10051      NR: 1      CAST NR: S2659      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	391	473	34.5	83

PROD-IDENT: 828160      MASS KG: 10291      NR: 1      CAST NR: S2659      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	391	473	34.5	83

PROD-IDENT: 828159      MASS KG: 10301      NR: 1      CAST NR: S2659      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	391	473	34.5	83

We hereby confirm that we comply to the terms of our order acknowledgement and any agreed concessions.

Tata Steel IJmuiden BV

Jeffrey Flemming  
Manager Mechanical Testing



IJmuiden, 6 March 2021

A01 Tata Steel IJmuiden BV  Wenckebachstraat 1 1951 JZ Velsen Noord Postbus 10000 1970 CA IJmuiden The Netherlands Telephone: 0251-492110  Company Trade Register 34040331 E-mail: info.testing@tatasteeleurope.com	A03 Doc nr. 2021027660 00		<b>TATA STEEL</b>
	A02 Inspection certificate 3.1, EN10204.		
	A07, A09 Reference 4500035855 11001475  00010	A08 Order nr. 57614 A	

PROD-IDENT: 828158	MASS KG: 10041	NR: 1	CAST NR: S2657	B07,B08,B13			
TENSILE TEST				C10-29			
C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	370	461	35.5	80

PROD-IDENT: 828157	MASS KG: 10291	NR: 1	CAST NR: S2657	B07,B08,B13			
TENSILE TEST				C10-29			
C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	370	461	35.5	80

PROD-IDENT: 828155	MASS KG: 10301	NR: 1	CAST NR: S2657	B07,B08,B13			
TENSILE TEST				C10-29			
C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	370	461	35.5	80

PROD-IDENT: 821543	MASS KG: 12869	NR: 1	CAST NR: S0538	B07,B08,B13			
TENSILE TEST				C10-29			
C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	382	468	35.0	82

PROD-IDENT: 821542	MASS KG: 13248	NR: 1	CAST NR: S0538	B07,B08,B13			
TENSILE TEST				C10-29			
C01	C01/C02	C10	C03	C11	C12	C13	C16
			Temp (°C)	ReH (MPa)	Rm (MPa)	A (%)	ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	382	468	35.0	82

CHEMICAL COMPOSITION in %												
B07	CAST NR.	C71 C	C72 Mn	C73 P	C74 S	C75 Si	C76 Al	C77 Cu	C78 Cr	C79 Ni	C80 Mo	C81 Nb
	S2659	0.069	0.490	0.010	0.006	0.007	0.033	0.005	0.017	0.017	0.001	0.027
	S2657	0.070	0.492	0.015	0.006	0.006	0.033	0.005	0.021	0.016	0.001	0.023
	S0538	0.080	0.509	0.012	0.006	0.008	0.029	0.006	0.026	0.017	0.002	0.024
	CAST NR.	C82 V	C83 N	C84 B	C85 Ti	C86 Sn	C87 Al_ZO	C88 C-eq1				
	S2659	0.002	.0028	.0000	0.001	0.000	0.032	.156				
	S2657	0.002	.0025	.0000	0.001	0.001	0.031	.158				
	S0538	0.002	.0032	.0001	0.001	0.001	0.027	.172				

C-eq1: C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

We hereby confirm that we comply to the terms of our order acknowledgement and any agreed concessions.

Tata Steel IJmuiden BV

Jeffrey Flemming  
Manager Mechanical Testing  
IJmuiden, 6 March 2021

*Jeffrey Flemming*

TATA STEEL

Inspection certificate 3.1, EN10204.

4500033648

Hot rolled pickled, Coil, S355MC, YMPRESS WC S:01-2010.

1.00 G/M2/Side oiled.

Mill edges.

Impact test.

Suitable for: Part galvanising, Cutting into sheet.

Tolerance EN 10051 : 2010 (E) (Width tolerance +20/-0 mm)

Dev.Tol. (Thickness tolerance +0.18/-0.18 mm).

PRODUCE AND TEST ACCORDING TO EN 10149-2

Country of melt and pour : The Netherlands.

Tata Steel IJmuiden BV

Wencesloobstraat 1

1951 JZ Velsen Noord

9500S 10000

1970 CA IJmuiden The Netherlands

Telephone: 0251-492110

Company Trade Register 50406551

E-mail: info-testing@tatasteel.europa.com

404 Customer/Classification

SERVICE CENTRE MAASTRICHT B.V.

B.O. FEIJEN

POSTBUS 10.000

1970 CA IJMUIDEN

NOORDHOLLAND

56529 A

70387

1500 mm X 8.00 mm

IMPACT TEST AND OTHER TESTS

PROD. IDENT	MASS kg	NR	CAST NR.	Temp °C	TENSILE TEST			HARDNESS			IMPACT TEST AND OTHER TESTS																
					Rm MPa	RA %	A %	RA %	A %	R <sub>H</sub> /R <sub>m</sub> %	r <sub>1</sub> value	r <sub>2</sub> value	n <sup>o</sup> value	C12	C01/C02	C01/C02	C01/C02	C01/C02	C01/C02	C01/C02	C01/C02	C01/C02					
606854	31880	1	R7792	+ 20	402	30.5	495	30.5	81			LL	P	0	5.0	ISO-V	- 20	2	115	118	121	118					
606852	31880	1	"	+ 20	393	30.5	484	30.5	81			LL	P	0	5.0	ISO-V	- 20	2	120	112	114	115					
6068531	28860	1	R7794	+ 20	401	30.0	487	30.0	82			LL	P	0	5.0	ISO-V	- 20	2	102	104	107	104					
606855	31840	1	R7799	+ 20	400	30.5	495	30.5	81			LL	P	0	5.0	ISO-V	- 20	2	131	121	121	126	126				
TOTAL	124460	4																									

CHEMICAL COMPOSITION in %

CAST NR.	PROD. IDENT	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-eq	AL-ZO	Sn	Ti	C-eq1
R7792		0.072	1.030	0.016	0.005	0.011	0.036	0.008	0.024	0.016	0.003	0.024	0.003	0.0030	0.0000	0.035	0.001	0.001	0.001	0.251
R7794		0.076	1.040	0.013	0.006	0.008	0.029	0.008	0.020	0.016	0.003	0.023	0.003	0.0030	0.0000	0.028	0.001	0.001	0.001	0.256
R7799		0.074	1.018	0.015	0.004	0.009	0.033	0.007	0.031	0.016	0.002	0.023	0.002	0.0029	0.0001	0.032	0.001	0.001	0.001	0.252

C50 Buisproof/Bend test/Biegeversuch/Test de flexion : goed/good/gut/concluant

Stamp of the expert :

Tata Steel IJmuiden BV

JEFFREY FLEMMING  
MGR. MECH. TESTING

Stamp of the expert : *Jeffrey Fleming*

IJMUIDEN, 25 JANUARI 2021

Z01 We hereby confirm that we comply to the terms of our order acknowledgement and any agreed concessions

01M0675E

01M0671S

Page 1 of 1

Z04

**A01**  
Tata Steel IJmuiden BV  
Hennekebosstraat 1  
Postbus 1000  
1370 CA IJmuiden The Netherlands  
Telephone: 0251-492110  
E-mail: jtr@texting@tatasteel.europa.com

**A02**  
Inspection certificate 3.1, EN10204.  
00040  
801.002.805.804.B15

**A03** Doc. nr  
2021013147 00  
NAANTALI STEEL SERVICE CENTRE OY  
RAUTAKATU 5  
21110 NAANTALI  
FINLAND

**A04** Customer/Consignee

**A05** Trade Register 54940551

**A06** Order nr.  
54701 D  
1500 mm X 6 mm

**A07** ADP Reference  
4500031885  
11001477

**A08** Dispatch note  
74645

**A09** 810-810-811 Dimensions  
1500 mm X 6 mm

**A10** Transport  
SYDBORG

**A11** Dev.Tol. (Thickness)  
+20/-0 mm

**A12** Dev.Tol. (Width tolerance)  
+20/-0 mm

**A13** Dev.Tol. (Thickness tolerance)  
+0.16/-0.16 mm

**A14** Dev.Tol. (Country of melt and pour)  
The Netherlands

**A15** Dev.Tol. (PRODUCE AND TEST ACCORDING TO EN 10149-2)

**A16** Dev.Tol. (Country of melt and pour)  
The Netherlands

**A17** Dev.Tol. (PRODUCE AND TEST ACCORDING TO EN 10149-2)

**A18** Dev.Tol. (Country of melt and pour)  
The Netherlands

TENSILE TEST									
807	808	809	810	811	812	813	814	815	816
PROD. IDENT	MASS kg	NR	CAST NR.	Temp °C	ReH MPa	Rel MPa	Rp0.2 MPa	Rm MPa	A %
814853	14877	1	S0094	+ 20	415		492	30.0	
814854	13928	1							
TOTAL		28805	2						

IMPACT TEST AND OTHER TESTS									
817	818	819	820	821	822	823	824	825	826
Temp °C	mm	mm	mm	mm	mm	mm	mm	mm	mm
- 20	5.1	ISO-V	11	P	0	110	105	115	110

CHEMICAL COMPOSITION in %									
827	828	829	830	831	832	833	834	835	836
C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo
0.071	1.009	0.011	0.006	0.010	0.057	0.008	0.022	0.019	0.002

CHEMICAL COMPOSITION in %									
837	838	839	840	841	842	843	844	845	846
V	Nb	Ni	B	C-eq	A1-Z0	Sn	Ti	C	eq1
0.002	0.024	0.040	0.0000	0.246	0.036	0.001	0.001		

**847** 1: J/cm<sup>2</sup>  
2: J/cm<sup>2</sup>  
3: Later, exp. (mm)

**848** 4: Contraction (%)  
5: Shear area (%)

**849** 1: Top  
2: Edge  
3: Middle  
4: Bottom

**850** C01: C  
C-eq1: C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

**851** C02: Longitudinal  
1: Surface  
2: Centre  
3: Middle  
4: Bottom

**852** C03: Transverse  
1: Surface  
2: Centre  
3: Middle  
4: Bottom

**853** C04: Diagonal  
1: Surface  
2: Centre  
3: Middle  
4: Bottom

**854** STEELMAKING PROCESS: BO Page 1 of 1

Tata Steel IJmuiden BV

JEFFREY FLEMING  
MGR. MECH. TESTING

Stamp of the expert :

2 FEBRUARI 2021

01M49115

01M49115

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01M49115

A01 Tata Steel IJmuiden BV Wenckebachstraat 1 1951 JZ Velsen Noord Postbus 10000 1970 CA IJmuiden The Netherlands Telephone: 0251-492110 Company Trade Register 34040331 E-mail: info.testing@tatasteel.eu	A03 Doc nr. 2021027663 00	A04 <b>TATA STEEL</b>
	A02 Inspection certificate 3.1, EN10204.	
A06 Customer/Consignee NAANTALI STEEL SERVICE CENTRE OY RAUTAKATU 5  21110 NAANTALI FINLAND	A07, A09 Reference 4500035855 11001477  00040	A08 Order nr. 57614 D
	B01,B02,B03,B04,B15 Hot rolled pickled, Coil, S355MC, YMPRESS WG S:01-2010, 1.00 G/M2/Side oiled, Mill edges. Impact test. Tolerance EN 10051 : 2010 (E) (Width tolerance +20/-0 mm) Dev.Tol. (Thickness tolerance +0.16/-0.16 mm) Country of melt and pour: The Netherlands	
		C70 STEEL MAKING PROCESS: BO
		B09,B10,B11 Dimensions 1500 mm X 6 mm
		B13 Total Mass KG 29604
		B08 Total NR. 2
		A11 Dispatch Note 85051
		A10 Transport LINDBORG

Buigproef/Bend test/Biegeversuch/Test de flexion : 'goed/good/gut/concluant' C50

PROD-IDENT: 824682      MASS KG: 14667      NR: 1      CAST NR: S2007      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03 Temp (°C)	C11 ReH (MPa)	C12 Rm (MPa)	C13 A (%)	C16 ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	401	478	29.5	84

IMPACT TEST AND OTHER TESTS C40,C60,C65

C01	C01/C02	C10	C03 Temp °C	B05	C41 mm	C40,C60,C65	C44	C42 ind.	C42 ind.	C42 ind.	C43 mean
Bottom Middle	Surface Longitudinal	Prismatical	-20	0	5.0	ISO-V	J	101	108	112	107

PROD-IDENT: 824681      MASS KG: 14937      NR: 1      CAST NR: S2007      B07,B08,B13

TENSILE TEST C10-29

C01	C01/C02	C10	C03 Temp (°C)	C11 ReH (MPa)	C12 Rm (MPa)	C13 A (%)	C16 ReH/Rm (%)
Bottom Middle	Surface Longitudinal	Prismatical	+20	401	478	29.5	84

IMPACT TEST AND OTHER TESTS C40,C60,C65

C01	C01/C02	C10	C03 Temp °C	B05	C41 mm	C40,C60,C65	C44	C42 ind.	C42 ind.	C42 ind.	C43 mean
Bottom Middle	Surface Longitudinal	Prismatical	-20	0	5.0	ISO-V	J	101	108	112	107

CHEMICAL COMPOSITION in %

B07	CAST NR.	C71	C	C72	Mn	C73	P	C74	S	C75	Si	C76	Al	C77	Cu	C78	Cr	C79	Ni	C80	Mo	C81	Nb
	S2007		0.069		0.999		0.014		0.006		0.007		0.033		0.007		0.021		0.017		0.002		0.023
	CAST NR.	C82	V	C83	N	C84	B	C85	Ti	C86	Sn	C87	Al_ZO	C88	C-eql								
	S2007		0.002		0.0021		0.0000		0.001		0.001		0.032		0.242								

C-eql: C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

We hereby confirm that we comply to the terms of our order acknowledgement and any agreed concessions.

Tata Steel IJmuiden BV

Jeffrey Flemming  
Manager Mechanical Testing  
IJmuiden, 6 March 2021

*Jeffrey Flemming*

Page 1 of 1 Z01, Z02

AD2 Inspection certificate 3.1, EN10204.  
00030

801.802.805.804.815

Hot rolled pickled, Coil, S355MC, YMPRESS WG S:01-2010.  
1.00 G/M2/Side oiled.  
Mill edges.  
Impact test.

Tolerance EN 10051 : 2010 (E) (Width tolerance +20/-0 mm) Dev.Tol. (Thickness tolerance +0.16/-0.16 mm).  
PRODUCE AND TEST ACCORDING TO EN 10149-2  
Country of melt and pour : The Netherlands.

AD3 Doc. nr  
2021013148 00

NAANTALI STEEL SERVICE CENTRE OY  
RAUTAKATU 5

21110 NAANTALI  
FINLAND

AD4 Dispatch note  
74645

AD5 Transport  
SYDBORG

AD6 Customer/consignee  
1500 mm X 6 mm

AD7 Reference  
C10-C60-C65

TENSILE TEST			IMPACT TEST AND OTHER TESTS																					
807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	
PROD.- IDENT	MASS kg	NR	CAST NR.	Temp °C	ReH MPa	Rel MPa	Rp0.2 MPa	Rm MPa	A %	A %	ReH/Rm %	r-value	n-value	HARDNESS	Temp °C	mm	mm	mm	mm	mm	mm	mm	mm	mm
810569	12449	1	R7909	+ 20	421			496	29.5					IL P 0	- 20	5.1	ISO-V	90	112	105	102			
810570	12599	1																						
<b>TOTAL</b>	<b>25048</b>	<b>2</b>																						

**CHEMICAL COMPOSITION in %**

CHEMICAL COMPOSITION in %														CONTRACTION (%)			
831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848
CAST NR.	PROD. IDENT	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-eq	Ti
R7909		.077	1.022	.014	.005	0.009	0.029	.007	0.025	0.019	.003	.022	.003	.0038	.0000	.255	.001

AD8 STEELMAKING PROCESS: BO Page 1 of 1  
Tata Steel IJmuiden BV  
Stamp of the expert :  
JEFFREY FLEMING  
MGR. MECH. TESTING

AD9 We hereby confirm that we comply to the terms of our order acknowledgement and any agreed concessions  
IJMUIDEN, 2 FEBRUARI 2021  
JEFFREY FLEMING