

## Material Certificate List

Shipping Address		Information	
<b>Ship-to-party</b>	TAMMINIITTY OY KETJUTIE 4 27710 KÖYLIÖ FINLAND	<b>Document Number</b>	<b>80465557</b>
		<b>Delivery Date</b>	<b>15.04.2021</b>
		Sales Order Number	149302
		Sales Order Date	13.04.2021
		Purchase Order Number	006452
		Customer Number	201512
		Mode of Transportation	
		Delivery Term	DAP EURA
		Country of Origin	
		Country of Destination	FI
		From/Via	35A1
		Route	R00000
		Delivery Plant	35A1
		Certificate Receiver	myynti@tamminiitty.fi
Buyer			
<b>Sold to Party</b>	TAMMINIITTY OY KETJUTIE 4 27710 KÖYLIÖ FINLAND		
Weight-Volume			
<b>Total Gross Weight</b>	9.988,00 KG		
<b>Total Net Weight</b>	9.988,00 KG		
<b>Total Packages</b>	4		

### 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	2.515,00	2.515,00 KG
Steel Grade	YMPRESS S355 MC				
Batch	0001170170	Material ID	810445		
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	0001175115	Material ID	606855		
900001	13002042 Hot Rolled Pickled,Sheet, 6.00X1500.00X3000.00	4010600	5.000,00	2.570,00	2.570,00 KG
Steel Grade	YMPRESS S355 MC				
Batch	0001141061	Material ID	814853		
900002	13002042 Hot Rolled Pickled,Sheet,	4010600	5.000,00	2.360,00	2.360,00 KG

## Material Certificate List

### Information

Document Number 80465557  
Delivery Date 15.04.2021

Item	Material Description	Cust. Prod Code	Ordered Quantity	Delivered Quantity	Weight
Steel Grade	6.00X1500.00X3000.00				
Batch	YMPRESS S355 MC				
	0001147528	Material ID	6069681		

**AB1**  
Tata Steel IJmuiden BV  
Hendelabstraat 1  
Postbus 18000  
1978 CA IJmuiden The Netherlands  
Telephone: 0251-492110  
E-mail: Info\_testing@tatasteelnl.com

**AB2**  
4500033631  
11001675  
00010  
2021000205 00

**AB3**  
Inspection certificate 3.1, EN10204.



**AB4**  
Customer/Commission  
**MAANTALI STEEL SERVICE CENTRE OY**  
**RAUTAKATU 5**

**AB5**  
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.

**AB6**  
Order nr.: 56442 A  
1500 mm X 5 mm  
C16-C29  
65834  
ALL Dispatch note  
AB7 Transport  
OSTBORG

**TENSILE TEST**

AB7 PROD.- IDENT	B15 MASS kg	B08 NR	B12 CAST NR.	C01 CB1	C02 CB2	B05 Temp C	C11 R <sub>oH</sub> MPa	C12 R <sub>el</sub> MPa	C13 R <sub>p0.2</sub> MPa	C14 R <sub>m</sub> MPa	C15 A %	C16 A %	C17 R <sub>oH</sub> /R <sub>m</sub> %	C18 Value	C19 n-	C20 value	C21 HARD- NESS	C22 CB1	C23 CB2	C24 CB3	C25 CB4	C26 CB5	C27 CB6	C28 CB7	C29 CB8	C30 CB9	C31 IMPACT TEST AND OTHER TESTS						
																											C32 Temp C	C33 Ind.	C34 Ind.	C35 Ind.	C36 mean	C37 ASTM E-112	
810614	10101	1	R8688	32	1L	P	+ 20	383		464	34.5		83																				
810615A	9971	1	"	32	1L	P	+ 20	395		473	34.0		84																				
810615B	9071	1	"	32	1L	P	+ 20	395		473	34.0		84																				
810618	10361	1	"	32	1L	P	+ 20	389		475	34.0		82																				
810619	10321	1	"	32	1L	P	+ 20	395		473	34.0		84																				
810620	10191	1	"	32	1L	P	+ 20	389		475	34.0		82																				
810368	10331	1	R8690	32	1L	P	+ 20	389		475	34.0		82																				
810369	10331	1	"	32	1L	P	+ 20	395		473	34.0		84																				
810370	10101	1	"	32	1L	P	+ 20	395		473	34.0		84																				
810643	10131	1	R8700	32	1L	P	+ 20	395		473	34.0		84																				
<b>SUBTOTAL</b>	<b>100890</b>	<b>10</b>																															

**CHEMICAL COMPOSITION in %**

AB7 CAST NR.	B17 C	B18 Mn	B19 P	B20 S	B21 Si	B22 Al	B23 Cu	B24 Cr	B25 Ni	B26 Mo	B27 Nb	B28 V	B29 N	B30 B	B31 C-eq	B32 Al-Zn	B33 Sn	B34 Ti	B35 C-eq1
R8688	0.875	0.489	0.015	0.005	0.007	0.029	0.007	0.024	0.021	0.081	0.024	0.003	0.0033	0.0000	0.028	0.002	0.001	0.001	0.164
R8690	0.876	0.499	0.015	0.005	0.010	0.040	0.006	0.025	0.021	0.082	0.027	0.003	0.0031	0.0000	0.039	0.001	0.001	0.001	0.167
R8700	0.869	0.484	0.014	0.007	0.011	0.037	0.007	0.019	0.020	0.081	0.026	0.003	0.0033	0.0000	0.035	0.001	0.001	0.001	0.156

**C50** Buigproef/Bend test/Biegeversuch/Test de flexion : goed/good/gut/concluant  
**Z85** Stamp of the expert :

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

**Z02** Tata Steel IJmuiden BV  
Stamp of the expert :  
**JEFFREY FLEMING**  
**MGR. MECH. TESTING**  
IJMUIDEN, 2 JANUARI 2021

*Jeffrey Fleming*

**Z78** STEELMAKING PROCESS: B0 Page 1 of 2

**Tata Steel IJmuiden BV**  
 Wendelschestrat 1  
 1951 JZ Velzen Noord  
 Postbus 10000  
 1970 CA IJmuiden The Netherlands  
 Telephone: 0251-492110  
 Company Trade Register: 34940331  
 E-mail: info\_testing@tatasteel.eu; open@pe.com

**Inspection certificate 3.1, EN10204.**  
 Doc. nr. 2021000205 00  
 Order nr. 56442 A



809-A18-B11 Dimensions 1500 mm X 5 mm  
 CI8-C29 TENSILE TEST  
 CI0-550,555 IMPACT TEST AND OTHER TESTS

807	815	808	807	801	801/810	805	805	811	811	811	811	812	815	815	816	817	818	822	801/810	805	805	805	805	802	802	802	802	803	804	804	805
PROD.-IDENT	MASS Kg	NR	CAST NR.	CBZ	CBZ	Temp °C	R <sub>H</sub> Mpa	R <sub>H</sub> Mpa	R <sub>0.2</sub> Mpa	R <sub>m</sub> Mpa	A %	A %	R <sub>H</sub> /R <sub>m</sub>	r-value	n-value	HARDNESS	CBZ	mm	Temp °C	Ind.	Ind.	Ind.	mean	ASTM E-112							
810444 810645	10111 9861	1	R8700 "	32	IL P	+ 20	395			473	34.0		84																		
<b>TOTAL</b>		<b>120862</b>																													

**CHEMICAL COMPOSITION in %**

807	807	871	872	873	874	875	876	877	878	879	880	881	882	885	886	885	886	887	888	889
CAST NR.	PROD.-IDENT	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-eq	Al-Z0	Sn	Ti	C-eq1
R8700		.069	0.464	.014	.007	0.011	0.037	.007	0.019	0.020	.001	.026	.003	.0033	.0000	0.035	.001	.001	.15	

C50 Buigproef/Band test/Biegeversuch/Test de flexion : goed/good/gut/concluant  
 Stamp of the expert :

Z01 We hereby confirm that we comply to the terms of our order  
 acknowledge and any agreed concessions  
 JEFFREY FLEMMING  
 MGR. MECH. TESTING  
 IJMUIDEN, 2 JANUARI 2021

**Tata Steel IJmuiden BV**  
 Industriestraat 1  
 Postbus 18080  
 1970 CA IJmuiden The Netherlands  
 Telephone: +31-452118  
 E-mail: info\_tst@tatasteel.com

5500001066 WDA  
 11008665  
 450033646  
 202109576 00  
 801-802-REG-EM-815

Inspection certificate 3.1, EN10204.

**TATA STEEL**

**SEVICE CENTRE MAASTRICHT B.V.**  
 B.U. FEIJEN  
 POSTBUS 10.000  
 1970 CA IJMUUDEN  
 NOORDHOLLAND

Hot rolled pickled, Coil, S355MC, YMPRESS W6 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 malt and pour : The Netherlands.

1500 mm X 8.00 mm  
 70387  
 SEIMPOST

PROD. IDENT	MASS Kg	NR	CAST NR.	Temp °C	Reh MPa	Rat MPa	Rm0.2 MPa	Rm A %	A %	Reh/Rm %	r-value	n-value	HARDNESS	Impact	Temp °C	Ind.	Ind.	Ind.	mean	ASTM E-112
606854	31880	1	R7792	+ 20	402		495	30.5		81			IL P	5.0	20	115	118	121	118	
606852	31880	1	R7796	+ 20	393		484	30.5		81			IL P	5.0	20	120	112	114	115	
6068531	28860	1	R7796	+ 20	401		487	30.0		82			IL P	5.0	20	102	104	107	104	
606855	31840	1	R7799	+ 20	400		495	30.5		81			IL P	5.0	20	131	121	126	126	
TOTAL	124460	4																		

**CHEMICAL COMPOSITION in %**

CAST NR.	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-bq	Al-ZO	Sn	Ti	C-eql
R7792	0.72	1.030	0.016	0.005	0.011	0.336	0.006	0.026	0.016	0.003	0.026	0.003	0.0030	0.0006	0.035	0.001	0.001	0.001	0.251
R7794	0.76	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	0.026	0.001	0.001	0.001	0.256
R7799	0.74	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

CS9 Buigproef/bend test/Biegeversuch/Test de flexion : good/good/gut/concluant  
 Stamp of the expert :

STEELMAKING PROCESS: BO Page 1 of 1  
 Tata Steel IJmuiden BV

JEFFREY FLEMING  
 MGR. MECH. TESTING  
*Jeffrey Fleming*  
 IJMUUDEN, 25 JANUARI 2021

201 We hereby confirm that we comply to the terms of our order  
 acknowledge and any agreed concessions  
 01M0675E 01M49715

**AB1** Tata Steel IJmuiden BV  
 Henekebaanstrat 1  
 Postbus 18000  
 1970 CA IJmuiden The Netherlands  
 Telephone: 0251-492110  
 E-mail: info\_testing@tatasteel-europe.com  
**AB2** Reference: 4500031865  
 11001477  
 00040  
**AB3** Doc. nr: 2021013147 00  
**AB4** Inspection certificate 3.1, EN10204.  
**AB5** B01.B02.B03.B04.B15

**AB6** Customer/Consigne: NAANTALI STEEL SERVICE CENTRE OY  
 RAUTAKATU 5  
 21110 NAANTALI  
 FINLAND

**AB7** Order nr.: 54701 D  
**AB8** All Dispatch note: 74645  
**AB9** Transport: SYDBORG

**AB10** Dimensions: 1500 mm X 6 mm  
**AB11** TENSILE TEST  
**AB12** HARDNESS  
**AB13** IMPACT TEST AND OTHER TESTS

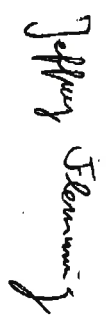
AB7	AB15	AB16	AB17	AB18	AB19	AB20	AB21	AB22	AB23	AB24	AB25	AB26	AB27	AB28	AB29	AB30	AB31	AB32	AB33	AB34	AB35	AB36	AB37	AB38	AB39	AB40	AB41	AB42	AB43	AB44	AB45	AB46	AB47	AB48	AB49	AB50
PROD. IDENT	MASS Kg	NR	CAST NR.	Temp °C	R <sub>H</sub> Mpa	R <sub>el</sub> Mpa	R <sub>p0.2</sub> Mpa	R <sub>m</sub> Mpa	A %	A %	R <sub>H</sub> /R <sub>m</sub> %	r-value	n-value	Temp °C	ind.	ind.	ind.	mean	ASTM E-112																	
814853 814854	14877 13928	1	S0094	+ 20	415		492	30.0			84			- 20	2	110	105	115	110																	
TOTAL	28805	2																																		

**AB51** CHEMICAL COMPOSITION in %

AB52	AB53	AB54	AB55	AB56	AB57	AB58	AB59	AB60	AB61	AB62	AB63	AB64	AB65	AB66	AB67	AB68	AB69		
CAST NR.	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-eq	Al-ZO	Sn	Ti	C-eq1
S0094	0.71	1.099	0.011	0.006	0.010	0.037	0.008	0.022	0.019	0.002	0.024	0.002	0.0040	0.0000	0.836	0.001	0.001	0.246	

**AB70** STEELMAKING PROCESS: B0 Page 1 of 1

**AB71** C50 Buigproef/Band test/Biegeversuch/Test de flexion : goed/good/gut/concluant  
**AB72** Stamp of the expert :

**AB73** Z01 We hereby confirm that we comply to the terms of our order  
 acknowledge and any agreed concessions  
**AB74** JIMUIDEN, 2 FEBRUARI 2021  
**AB75** JEFFREY FLEMING  
 MGR. MECH. TESTING  




**A01** Tata Steel IJmuiden BV  
 Handelsbeheerstraat 1  
 Postbus 10000  
 1970 CA IJmuiden The Netherlands  
 Telephone: 8251-692110  
 Company Trade Register: 54049351  
 E-mail: info\_cstm@tatasteel.nl; tse@tse.com

**A02** Reference: 4500033890  
 11001477  
 2021013153 00

**A03** Doc. nr: 000440  
 B01.B02.B03.B04.B15

**A04** Inspection certificate 3.1, EN10204.

**NAANTALI STEEL SERVICE CENTRE OY**  
**RAUTAKATU 5**  
 21110 NAANTALI  
 FINLAND

Hot rolled pickled, Coil, S355MC, VMPRESS 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.

**A05** Order nr.: 564444 D  
**A10** Dispatch note: 74645  
**A10** Transport: SYDBORG

DIMENSIONS		TENSILE TEST		HARDNESS		IMPACT TEST AND OTHER TESTS																	
PROD. IDENT	MASS kg	NR	CAST NR.	Temp °C	R <sub>eh</sub> Mpa	R <sub>el</sub> Mpa	R <sub>p0.2</sub> Mpa	R <sub>m</sub> Mpa	A %	A %	R <sub>eh</sub> /R <sub>m</sub> %	r-value	n-value	Temp °C	ind.	ind.	ind.	mean	ASTM E-112				
6069681	14700	1	R8302	32	11 P	+	20	489	25.0		84			11 P	0	5.0	ISO-V	-20	2	117	137	123	126
<b>TOTAL</b>		<b>14700</b>		<b>1</b>																			

**CHEMICAL COMPOSITION in %**

C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87	C88	C89	
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
R8302		.075	1.017	.012	.005	0.009	0.029	.006	0.021	0.022	.002	.022	.003	.0026	.0000	0.028	.001	.001	.252

**C90** 1: J/cm<sup>2</sup>  
**C91** 2: Later. exp. (mm)  
**C92** 3: Contraction (%)  
**C93** 4: Shear area (%)

**C94** 1: 1=Top 2: 1=Edge 3=Middle  
 1=Surface 2=Centre 3=Surface  
 C-eq1: C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

**C95** Perismatical C-cylindrical  
**C96** Perismatical C-cylindrical

**C50** Buigproef/Bend test/Biegeversuch/Test de flexion : goed/good/gut/concluant  
**Z03** Stamp of the expert :

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

**Z02** Tata Steel IJmuiden BV  
 JEFFREY FLEMING  
 MGR. MECH. TESTING  
 IJMUIDEN, 2 FEBRUARI 2021

**Z04** TATA STEEL  
 Page 1 of 1