A01
Tata Steel IJmuiden BV
Wenckebachstraat 1
1951 JZ Velsen Noord
Postbus 10000
1970 CA IJmuiden the Netherlands
Telephone: 0251-492110

Company Trade Register 54048551
E-mail : info.testing@tatasteel.com

A07.A09 Reference
4500002584
11001475 00030

A02
Inspection certificate 3.1, EN10204.

A05 Doc. nr
2017130670 00

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).

TATA STEEL

Z04

A06 Customer/Consignee
NAANTALI STEEL SERVICE CENTRE OY
RAUTAKATU 5

21110 NAANTALI

FINLAND

A08 Order nr.
59877 C

A11 Dispatch note
66896

A10 Transport
JOLYN

B09.B10.B11 Dimensions
1500 mm X 5.00 mm

C10-C29 TENSILE TEST | HARDNESS | C40.C60.C65 IMPACT TEST AND OTHER TESTS

B07 PROD.-IDENT	B15 MASS kg	B08 NR	B07 CAST NR.		C01	C01/C02	C10	B05	C05 Temp °C	C11 R_{eH} MPa	C11 R_{eL} MPa	C11 R_p MPa	C12 R_m MPa	C13 A %	C15 A %	C16 R_{eH}/R_m %	C17 n-value	C18 n-value	C52	C01/C02	C10	B05	C41 mm	C40.C60.C65	C05 Temp °C	C44	C42 ind.	C42 ind.	C42 ind.	C45 mean	C95 ASTM E-112
742696	10450	1	H7668		32	1L	P		+ 20	390			468	33.0		83														
742697	10460	1	"																											
742698	10250	1	"																											
742688	10450	1	"		32	1L	P		+ 20	386			464	32.0		83														
742689	10440	1	"																											
742690	10190	1	"																											
TOTAL	62240	6																												

C71-C92 CHEMICAL COMPOSITION in %

B07 CAST NR.	B07 PROD.-IDENT	C71 C	C72 Mn	C75 P	C74 S	C75 Si	C74 Al	C77 Cu	C78 Cr	C79 Ni	C80 Mo	C81 Nb	C82 V	C83 N	C84 B	C85 C-eq	C86 Al-ZO	C87 Sn	C88 Ti	C89 C-eql
H7668		.065	0.495	.011	.006	0.008	0.036	.0_0	0.015	0.014	.001	.025	.002	.0029	.0000		0.035	.001	.001	.153

C44 1: J/cm² 4: Contraction (%)
2: J 5: Shear area (%)
3: Later. exp. (mm)

C01 1:1=Top 2:1=Edge 2=Middle 2=Middle 3=Bottom

C01 C02 L=Longitudinal T=Transverse Z=in Thickn dir S=Surface Dsin Diagonal dir

C10 P=prismatical C=cylindrical

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

C78 STEELMAKING PROCESS: BO

Z03
Stamp of the expert :

Z02
Tata Steel IJmuiden BV

SIMON BRAAM
MANAGER TESTING

IJMUIDEN, 5 DECEMBER 2017

Z05

B06

A04

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

A01
Tata Steel IJmuiden BV
Wenckebachstraat 1
1951 JZ Velsen Noord
Postbus 10000
1970 CA IJmuiden The Netherlands
Telephone: 0251-492110

Company Trade Register 54040551
E-mail : info.testing@tatasteel.com

A07.A09 Reference
4500002827
11001473 00020

A02
Inspection certificate 3.1, EN10204.

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 +0.14/-0.14 mm).

A05 Doc. nr
2018000447 00

TATA STEEL

Z04

A06 Customer/Consignee
NAANTALI STEEL SERVICE CENTRE OY
RAUTAKATU 5

21110 NAANTALI

FINLAND

Purchase Order: 4500002827
Vendor Batch: 747673
110014730000144309

Purchase Order: 4500002827
Vendor Batch: 747674
110014730000144310

A08 Order nr.
51248 B

A11 Dispatch note
74430

A10 Transport
HATHOR

B09.B10.B11 Dimensions
1500 mm X 4.00 mm

C10-C29 TENSILE TEST

HARD-NESS

C40.C60.C66 IMPACT TEST AND OTHER TESTS

B07 PROD.-IDENT	B11 MASS kg	B08 NR	B07 CAST NR.		C01	C01/C02	C10	B05	C05 Temp °C	C11 R_{eH} MPa	C11 R_{eL} MPa	C11 R_p MPa	C12 R_m MPa	C15 A %	C15 A %	C16 R_{eH}/R_m %	C17 r-value	C18 n-value	C52	C01/C02	C10	B05	C41 mm	C40.C60.C66	C05 Temp °C	C44	C42 ind.	C42 ind.	C42 ind.	C43 mean	C95 ASTM E-112
747673	10568	1	H8657		32	1L	P		+ 20	399			481	31.5		83														
747674	10568	1	"																											
747675	10360	1	"																											
TOTAL	31496	3																												

Purchase Order: 4500002827
Vendor Batch: 747675
110014730000144151

C71-C92 CHEMICAL COMPOSITION in %

B07 CAST NR.	B07 PROD.-IDENT	C71 C	C72 Mn	C73 P	C74 S	C75 Si	C76 Al	C77 Cu	C78 Cr	C79 Ni	C80 Mo	C81 Nb	C82 V	C83 N	C84 B	C85 C-eq	C86 Al-ZO	C87 Sn	C88 Ti	C89 C-eq1
H8657		.070	0.517	.010	.004	0.010	0.034	.016	0.021	0.018	.001	.025	.002	.0027	.0000		0.031	.001	.001	.163

C44 1: J/cm² 2: J 3: Later. exp. (mm) 4: Contraction (%) 5: Shear area (%)

C01 1:1=Top 2:1=Edge 3=Middle 2=Middle 3=Bottom

C01 C02 L=Longitudinal T=Transverse Z=In thickn dir S=Surface D=In Diagonal dir

C10 P=prismatical C=cylindrical

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

C70 STEELMAKING PROCESS: BO

Z03 Stamp of the expert :

Z05

B06

A04

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

Z02
Tata Steel IJmuiden BV

SIMON BRAAM
MANAGER TESTING

IJMUIDEN, 3 JANUARI 2018