

Tata Steel IJmuiden BV
 Mannebeekstraat 1
 1951 JZ Velsen Noord
 Postbus 10008
 1970 CA IJmuiden The Netherlands
 Telefoon: 0251-492110
 E-mail : info.testing@tatasteel.com
 Company Trade Register: 54040331

A01 Reference
 4500000678
 11001473
 A05 Desc. nr
 2016086719-00

00020
 801: 802: 803: 804: 815
 Test report 2.2, EN 10204.

Hot rolled pickled, Coil, S355MC, YMPRESS WG S:01-2010.
 Mill edges.
 Tolerance EN 10051 : 2010 (E) (Width tolerance +20/-0 mm) Dev. Tol. (Thickness tolerance +0.14/-0.14 mm).

Purchase Order:
 4500000678
 Vendor Batch:
 819022

Purchase Order:
 4500000678
 Vendor Batch:
 819023

TATA STEEL

NAANTALI STEEL SERVICE CENTRE OY
 RAUTAKATU 5
 21110 NAANTALI
 FINLAND

A03 Order nr.
 54491 B
 A11 Dispatch note
 73518
 A12 Transport
 PLYCA

A13 Dispatch note
 110014730000034109

A13 Dispatch note
 110014730000034108

TOP-610: Bill Dimensions
 1500 mm X 4 mm
 C20-C29
 TENSILE TEST
 HARDNESS
 C50, C60, C65
 IMPACT TEST AND OTHER TESTS

PROD. IDENT	MASS KG	NR	CAST NR.	COIL/COE	COIL/COE	Temp °C	Rel MPa	Rel MPa	Rp MPa	Rm MPa	A %	A %	Rel/Rm %	r'-value	n'-value	HARDNESS	Temp °C	Ind.	Ind.	Ind.	mean	ASTM E-112	
819023	10556	1	S9886		32 IL P	+ 20	391		478	30.4			82										
819022	10556	1	"																				
819024	9960	1	"																				
TOTAL	31076	3																					

CHEMICAL COMPOSITION in %
 C21 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C88 C89

C44 1: J/cm²
 2: J/cm²
 3: later. exp. (mm)
 4: Contraction (%)
 5: Shear area (mm²)

C50 1: Top 2: Middle 3: Bottom
 1: Surface 2: Middle 3: Surface
 C52 1: Surface 2: In thickness 3: Surface

C61 C62 C63 C64 C65 C66 C67 C68 C69

C70 STEELMAKING PROCESS: B0 Page 1 of 1

Tata Steel IJmuiden BV
 Test House, IJmuiden.

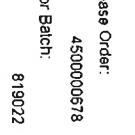
SIHON BRAH
 MANAGER TESTING

IJMUIDEN, 10 AUGUSTUS 2016

Stamp of the expert :



Purchase Order:
 4500000678
 Vendor Batch:
 819024



Purchase Order:
 4500000678
 Vendor Batch:
 819023



Purchase Order:
 4500000678
 Vendor Batch:
 819024

We certify that the delivery complies with the order prescriptions.

Tata Steel IJmuiden BV
 Menckebachstraat 1
 Postbus 10000
 1770 CA IJmuiden, The Netherlands
 Telephone: 020-492110
 Company Trade Register: 34040551
 Email: info@tatasteel.com

NAANTALI STEEL SERVICE CENTRE OY
RAUTAKATU 5
 21110 NAANTALI
 FINLAND

4500000470
 11001473
 20
 2016078418 00

Test report 2.2, EN 10204.
 11001473000029004

TATA STEEL

Purchase Order: 4500000470
 Vendor Batch: 815318

A01 Order nr.: 53239 B
 A11 Dispatch note: 68045
 A10 Transport: TBN RAUMA

A02 Customer/consigne: NAANTALI STEEL SERVICE CENTRE OY
 A03 Dec. nr.: 2016078418 00

A04 Tolerance EN 10051 : 2010 (E) (width tolerance +20/-0 mm) Dev. Tol. (Thickness tolerance +0.14/-0.14 mm).
 Hot rolled pickled, Coil, S555MC, YMPRESS WG S:01-2010.
 Mill edges.

A05 QR Code: 11001473000029004

A07 A10, A11 Dimensions: 1500 mm X 4.00 mm

PROD.-IDENT	MASS Kg	NR	CAST NR.	CO1 COE	CO1/CO2	CO1/CO2	TEMP °C	ReH Mpa	ReL Mpa	Rp Mpa	Rm Mpa	A %	A %	Rm/Rp %	r-value	n-value	HARDNESS	IMPACT TEST AND OTHER TESTS
815318	10490	1	S9190	32	1L	P	+20	412	412	492	30.6	84	84					
815317	10090	1	"	32	1L	P	+20	412	412	490	30.7							
TOTAL	20580	2																

A06 CHEMICAL COMPOSITION in %

CAST NR.	C	Mn	P	S	Si	Al	Cu	Cr	Ni	Mo	Nb	V	N	B	C-eq	Al-ZO	Sn	Ti	C-eq1
S9190	0.069	0.502	0.016	0.005	0.015	0.041	0.019	0.026	0.019	0.005	0.026	0.002	0.0030	0.0001	0.039	0.006	0.001		0.162

A07 1: J/cm²
 2: Later. exp. (mm)
 3: Shear area
 4: Contraction (%)
 5: Shear area (%)

A08 STEELMAKING PROCESS: B0 Page 1 of 1

A09 Stamp of the expert:

A10 Purchase Order: 4500000470
 Vendor Batch: 815317

A11 We certify that the delivery complies with the order prescriptions.

A12 IMUIDEN, 20 JULI 2016

A13 SIMON BRAAM
 MANAGER TESTING

A14 QR Code: 11001473000029002