

INSPECTION CERTIFICATE 3.1



**COLUMBUS
STAINLESS**
[Pty] Ltd
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South Africa
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A Subsidiary of ACERINOX, S.A.

To: EN 10204



ZA 0045
13
0045-CPR-1805

Authorized Representative
EC REP
Acerinox Europa, S.A.U.
C/ Santiago de Compostela no 100. 28035
Madrid
Spain
Tel: 91 398 51 00 / 91 398 51 02

Corrosion Resistant Steel for building construction or
civil engineering.

Regulated substances: No performance determined

No. 2770890 - 1 1 / 1

Date 2014/10/30

MANUFACTURER'S MARK



MELTING PROCESS
E/AOD

CUSTOMER BE GROUP OY
LOTILA KIRKKAAT/OVET 5-7/
VANHANRADANKATU 42
15522 LAHTI
Finland

O/A No. DW00243

ITEM No. 004

INSPECTOR'S STAMP



CUSTOMER ORDER No. P02528

REQUIREMENTS
AD 2000 W2
AD 2000 W10
Certified by TUV Rheinland to European Directive 97/23/EC for Pressure
Equipment. Certificate no: 01 202 ZA-U-00 0001

PRODUCT No:1
1D: Hot rolled, heat treated, pickled

HEAT No. 397798

MPO No.* 3977981/3

* The first six numbers are the heat number. The seventh character is the slab indicator and any further characters represent a part of the slab with common mechanical properties.

SPECIFICATIONS	MATERIAL CODE	CASE
EN 10088-2 2005 HOT ROLLED COIL & PLATE	1.4307 1.4301	ICPL03965
EN 10028-7 2007 HOT ROLLED COIL & PLATE	1.4307 1.4301	ICPL03966
ASTMA240/A240M-14	304L 304	ICPL03967
ASME 2013 SECTION II PART A SA240	304L 304	ICPL03968
EN 10088-4 2009 HOT ROLLED COIL / PLATE	1.4307 1.4301	ICPL03969
		ICPL03970
		ICPL03971
		ICPL03972
		ICPL03973

TOLERANCE ISO9444-02/09 1L/R Coil/Plate-ASTMA480/A480M-ASMESA480/SA480M

Delivery Note Number: 72380

DIMENSIONS 6.000 mm x 1500 mm x 3000 mm

TYPE X5CRNI 18-10 X2CRNI 18 9

QUANTITY 45
MASS 9371 kg

%	REQUIREMENT		LADLE
	MIN	MAX	
C		0.030	0.024
S		0.015	0.004
P		0.045	0.022
Mn		2.00	1.17
Si		1.00	0.35
Ni	8.0	10.5	8.0
Cr	17.5	19.5	18.0
Mo			
Ti			
N		0.11	0.07
V			
Co			
Cu			
Nb			
Sn			
Al			
B			

MECHANICAL PROPERTIES										
Test Direction	Test Pos.	Rp0.2 0.2% Proof Stress (MPa)	Rp1.0 1% Proof Stress (MPa)	Rm UTS (MPa)	A 5 (% Elongation)	A 50 (% Elongation)	Hardness HRB	Bend Test	Impact Test ISO V	Z (% Reduction of Area)
Transverse	Ambient Temperature	Head 315	357	682	51	51	89			
		Tail 341	375	666	51	51	89			
	Req @ °C									
	Req @ °C									
ADDITIONAL TEST						INTERGRANULAR CORROSION				
TEST NAME		RESULT		TEST NAME		RESULT		SPECIFICATION		RESULT
								ASTM A262-13:E		Pass
								ISO 3651-2 METHOD A		Pass

This material is free from mercury contamination. The radiation level exhibited by this material is not greater than the normal background level.
This document is issued without alteration or erasure and may only be reproduced in full.
Visual and dimensional control: no exceptions. The delivery is in accordance with the order. Made and melted in South Africa.
This material meets the Hardness requirement of Nace MR-0175/ISO 15156-3:2009 & MR-0103-2012
Columbus Stainless (Pty) Ltd. certifies that the analysis and material on this certification is correct and meets the specifications stated.
Columbus Stainless is ISO 9001:2008 & ISO 14001:2004 Certified.

HEAT TREATMENT (Solution Annealed)	
Anneal °C	Quench
1050 - 1100	AIR/SPRAY

Permeability 1.1 Max

COLUMBUS STAINLESS [Pty] Ltd
Hendrina Road, Middelburg
Mpumalanga, South Africa

P.H. de Vos
WORKS EXPERT