






INSPECTION CERTIFICATE 3.1 To: EN 10204		 COLUMBUS STAINLESS [Pty] Ltd Columbus Stainless [Pty] Ltd P O Box 133 Middelburg 1050 South Africa Switchboard: +27 13 247 9111 Fax: +27 13 246 1681 Website: http://www.columbus.co.za A Subsidiary of ACERINOX, S.A.		 ZA 0045 13 0045-CPR-1805 Corrosion Resistant Steel for building construction or civil engineering. Regulated substances: No performance determined		No. 2882647 - 1 1 / 1 Date 2015/06/29									
						MANUFACTURER'S MARK  MELTING PROCESS E/AOD									
CUSTOMER BE GROUP OY LOTILA KIRKKAAT/OVET 5-7/ VANHANRADANKATU 42 15522 LAHTI Finland		O/A No. PW00715		ITEM No. 003		INSPECTOR'S STAMP 									
		CUSTOMER ORDER No. P032941		REQUIREMENTS AD 2000 W2 AD 2000 W10											
PRODUCT 2B 2B: Cold rolled, heat treated, pickled, cold rolled		HEAT No. 400948		MPO No. * 4009483/1/3		* 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 10088-2/14 COLD ROLLED COIL/SHEET 1.4404 1.4401 EN 10028-7 2007 COLD ROLLED COIL & SHEET 1.4404 1.4401 ASTM A240 / A240M -15A 316L 316 ASME 2013 SECTION II PART A SA240 316L 316 EN 10088-4 2009 COLD ROLLED COIL/SHEET 1.4404 1.4401		JHAN56002 JHAN56003 JHAN56004 JHAN56005													
TOLERANCE ISO 9445-02/09-ASTM A480/A480M-ASME SA480/SA480M C/R		Delivery Note Number: 20159													
DIMENSIONS 4.000 mm x 1500 mm x 3000 mm		TYPE X2CRNIMO 17-12-2		QUANTITY 28		MASS 3909 kg									
CHEMICAL ANALYSIS			MECHANICAL PROPERTIES												
%	REQUIREMENT		LADLE	Test Direction Transverse	Test Pos.	Rp0.2 0.2% Proof Stress (NPa)	Rp1.0 1% Proof Stress (NPa)	Rm UTS (NPa)	A 5 (% Elongation)	A 50 (% Elongation)	Hardness HRB	Bend Test	Impact Test ISO V	Z (% Reduction of Area)	
	MIN	MAX													
C		0.030	0.023	Ambient Temperature	Head	283	317	612	57	54	81				
S		0.015	0.001		Tail	302	334	623	54	51	82				
P		0.045	0.023	Req @ °C											
Mn		2.00	1.32	Req @ °C											
Si		1.00	0.47												
Ni	10.0	13.0	10.0												
Cr	16.5	18.5	16.7												
Mo	2.00	2.50	2.01												
Ti															
N		0.11	0.04												
V															
Co															
Cu															
Nb															
Sn															
Al															
B															
HEAT TREATMENT (Solution Annealed)			ADDITIONAL TEST INTERGRANULAR CORROSION												
Anneal °C		Quench		TEST NAME				RESULT				SPECIFICATION		RESULT	
1050 - 1100		AIR/SPRAY										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 has been PMI Tested. 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. For the Declaration of Performance, please visit http://www.columbusstainless.co.za/declaration Certified by TUV Rheinland to European Directive 97/23/EC for Pressure Equipment. Certificate no: 01 202 ZA/Q-00 0001											
Permeability 1.1 Max										COLUMBUS STAINLESS [Pty] Ltd Hendrina Road, Middelburg Mpumalanga, South Africa  G. van Nickerk WORKS EXPERT					