



**COLUMBUS
STAINLESS**
[Pty] Ltd

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Website: <http://www.columbusstainless.co.za>
A Subsidiary of ACERINOX S.A.

INSPECTION CERTIFICATE 3.1

ACCORDING TO EN 10204

CERTIFICATE NO
3376131PED

Rev
1

ISSUE DATE
2019-07-16

MANUFACTURER'S MARK



INSPECTOR'S STAMP



MELTING PROCESS

E/AOD

CUSTOMER

USINA METAIS LTDA.
RODOVIA BR 280 - 10565 BOX 1
BAIRRO AVAI, GUARAMIRIN, CEP 89270 - 000

Brazil

ORDER No.

EP24878

ITEM No.

6

DELIVERY NOTE No.

DEL138356

CUSTOMER ORDER No.

REQUIREMENTS



SPECIFICATIONS

ASTM A240 / A240M-17

ASME BPVC IIA SA240 / SA240M-2017

MATERIAL GRADE

430

430

CASE

NCP5004299 4218142A

MATERIAL

MASS QTY

5370 Kg 1

TOLERANCE ASTM A480/A480M ; ASME SA480/SA480M

HEAT No. 421814

TYPE

PRODUCT No. 2B

Cold rolled, heat treated, pickled & skin passed

QUANTITY 1

TOTAL MASS 5370 Kg

DIMENSIONS 2 mm x 1250 mm x COIL

CHEMICAL COMPOSITION(%)

	C	S	P	Mn	Si	Cr	Ni												
Min						16.0													
Max	0.120	0.030	0.040	1.00	1.00	18.0	0.75												
Heat	0.048	0.001	0.025	0.40	0.69	16.0	0.35												

MECHANICAL PROPERTIES

TEMPERATURE	DIRECTION	POSITION	Rp0.2 MPa	Rp1.0 MPa	Rm MPa	A50 %	HRBW HRBW	Bend											
Ambient	Transverse	Requirement Min	205		450	22													
		Max					89												
Ambient	Transverse	Head	320	321	505	33	79	PASS											
		Tail					79												

INTERGRANULAR CORROSION

Columbus Stainless (Pty) Ltd. certifies that the analysis and material on this certification is correct and meets the specifications stated.
This document is issued without alteration or erasure and may only be reproduced in full.
Made and melted in South Africa. This Material is PMI Tested.
Visual and dimensional control: no exceptions. The delivery is in accordance with the order.
This material is free from mercury contamination.
The radiation level exhibited by this material is not greater than the normal background level.
This material meets the Hardness requirement of NACE MR0175 / ISO 15156-3 : 2015 & NACE MR0103 / ISO 17945 : 2015
Columbus Stainless is ISO 9001:2015 & ISO 14001:2015 Certified.

Certified by TUV Rheinland to European Directive 2014/68/EU for Pressure Equipment. Certificate no: 01 202 ZA/Q-00 0001


HEAT TREATMENT (SOLUTION ANNEALED)

Anneal °C	Quench
810 - 990	AIR/ WATER SPRAY

Marking: Material Code, MPO No, Manufacturers Brand, Inspectors Stamp
Number on material might differ from this document due to a split in material after marking, with a character and/or number added to the end.

COLUMBUS STAINLESS (PTY) LTD

Hendrina Road, Middelburg
Mpumalanga, South Africa


Q. Snyman



WORKS EXPERT