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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**  
3473516

**Rev**  
1

**ISSUE DATE**  
2021-01-20

MANUFACTURER'S MARK



INSPECTOR'S STAMP



MELTING PROCESS

**E/AOD**

**CUSTOMER**

**ORDER No.**

PW03754

**ITEM No.**

4

**DELIVERY NOTE No.**

DEL175899

**CUSTOMER ORDER No.**

202000465

**PART No.**

N/A

**REQUIREMENTS**



**SPECIFICATIONS**

**MATERIAL GRADE**

**CASE MATERIAL**

**MASS QTY**

SEW 470-5thEd

1.4828

OPA3049272 4280522A01

21

EN 10095-1999

1.4828

**TOLERANCE** ISO 9445-2

**HEAT No.** 428052

**TYPE** X15CrNiSi 20-12

**PRODUCT**  
2B  
Cold rolled, heat treated, pickled & skin passed stainless steel sheet

**QUANTITY** 21

**TOTAL MASS**

**DIMENSIONS** 3 mm x 1000 mm x 2000 mm

**CHEMICAL COMPOSITION(%)**

	C	S	P	Mn	Si	Cr	Ni	N										
Min					1.50	19.0	11.0											
Max	0.200	0.015	0.045	2.00	2.50	21.0	13.0	0.110										
Heat	0.055	0.001	0.027	1.48	1.64	19.2	11.4	0.052										

**MECHANICAL PROPERTIES**

TEMPERATURE	DIRECTION	POSITION	Rp0.2	Rpl.0	Rm	A5	Hardness											
			MPa	MPa	MPa	%	Breidell											
Ambient	Transverse	Requirement Min	230	270	550	30												
		Max			750		223											
Ambient	Transverse	Head	336	387	625	55	170											
		Tail																

**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 : 2020 & NACE MR0103 / ISO 17945 : 2015  
 Columbus Stainless is ISO 9001:2015 & ISO 14001:2015 Certified.

**HEAT TREATMENT (SOLUTION ANNEALED)**

Anneal °C

Quench

1050 - 1100

AIR/ WATER SPRAY

Permeability 1.1 Max  
 Marking: Material Code, MPO No., Manufacturing Brand  
 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, Middleburg  
 Mpumalanga, South Africa



**WORKS EXPERT**