



P O Box 133 Middelburg 1050 South Africa
 Switchboard +27 13 247 9111 Fax +27 13 246 1681
 Website: http://www.columbusstainless.co.za
 A Subsidiary of ACERINOX S.A.

INSPECTION CERTIFICATE 3.1

ACCORDING TO EN 10204

CERTIFICATE NO
3581751PED

Rev
1

ISSUE DATE
2022-07-26

| | | | | | |
|---------------------|--|-------------------|--|-----------------|--------------|
| MANUFACTURER'S MARK | | INSPECTOR'S STAMP | | MELTING PROCESS | E/AOD |
|---------------------|--|-------------------|--|-----------------|--------------|

| | | | |
|--|--|------------------------|---------------------------------------|
| CUSTOMER ALUMECO FINLAND OY/AB KAVIOKUJA 5, TURKU, 20380 Finland | ORDER No. PW04585 | ITEM No. 6 | DELIVERY NOTE No. DEL222485 |
| | CUSTOMER ORDER No. 120584889 | PART No. N/A | |
| | REQUIREMENTS AD 2000 W2 AD 2000 W10 | | |

| SPECIFICATIONS | MATERIAL GRADE | CASE | MATERIAL | MASS | QTY |
|-----------------------------------|-----------------|------------|------------------|--------|-----|
| EN 10088-2-2014 | 1.4301 / 1.4307 | QPAS027344 | 4352364D01A01A01 | 882 Kg | 5 |
| EN 10028-7-2016 | 1.4301 / 1.4307 | | | | |
| ASTM A240 / A240M-20a | 304L / 304 | | | | |
| ASME BPVC IIA SA240 / SA240M-2021 | 304L / 304 | | | | |

| | | |
|---|--|--------------------------|
| TOLERANCE ISO 9445-2 ; ASTM A480/A480M ; ASME SA480/SA480M 2B ; No. 2B | HEAT No. 435236 | TYPE X5CrNi 18-10 |
| PRODUCT Cold rolled, heat treated, pickled & skin passed stainless steel sheet | QUANTITY 5 | TOTAL MASS 882 Kg |
| | DIMENSIONS 5 mm x 1500 mm x 3000 mm | |

| CHEMICAL COMPOSITION(%) | | | | | | | | | | | | | |
|-------------------------|-------|-------|-------|------|------|------|------|------|--|--|--|--|--|
| | C | S | P | Mn | Si | Cr | Ni | N | | | | | |
| Min | | | | | | 18.0 | 8.0 | | | | | | |
| Max | 0.030 | 0.015 | 0.045 | 2.00 | 0.75 | 19.5 | 10.5 | 0.10 | | | | | |
| Heat | 0.026 | 0.002 | 0.032 | 1.19 | 0.46 | 18.3 | 8.1 | 0.08 | | | | | |

| MECHANICAL PROPERTIES | | | | | | | | | | | | | |
|-----------------------|------------|-----------------|--------------|--------------|-----------|----------|---------|--------------|--|--|--|--|--|
| TEMPERATURE | DIRECTION | POSITION | Rp0.2 MPa | Rp1.0 MPa | Rm MPa | A50 % | A5 % | HRBW HRBW | | | | | |
| Ambient | Transverse | Requirement Min | 230 | 260 | 540 | 40 | 45 | | | | | | |
| | | Max | | | 700 | | | 92 | | | | | |
| Ambient | Transverse | Head | 298 | 338 | 652 | 50 | 56 | 84 | | | | | |
| | | Tail | | | | | | 84 | | | | | |

| INTERGRANULAR CORROSION | |
|------------------------------------|------------------|
| TEST | RESULT |
| ASTM A262 Practice E | PASS |
| HEAT TREATMENT (SOLUTION ANNEALED) | |
| Anneal °C | Quench |
| 1050 - 1100 | AIR/ WATER SPRAY |

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.
 Certified by TUV Rheinland to European Directive 2014/68/EU for Pressure Equipment. Certificate no: 01 2627 ZA/MI-2100010.00

Permeability 1.1 Max
 Marking: Material Code, Material 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, Middelburg
 Mpumalanga, South Africa

Q. Snyman
WORKS EXPERT



P O Box 133 Middelburg 1050 South Africa
 Switchboard +27 13 247 9111 Fax +27 13 246 1681
 Website: <http://www.columbusstainless.co.za>
 A Subsidiary of ACERINOX S.A.

INSPECTION CERTIFICATE 3.1

ACCORDING TO EN 10204



ZA 0035
 13
 0035-CPR-A304

Authorised 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

Corrosion Resistant Steel for building construction or civil engineering.
Regulated substances: No performance determined

CERTIFICATE NO 3581751CPR
Rev 1
ISSUE DATE 2022-07-26

| | | | | | |
|---------------------|--|-------------------|--|-----------------|-------|
| MANUFACTURER'S MARK | | INSPECTOR'S STAMP | | MELTING PROCESS | E/AOD |
|---------------------|--|-------------------|--|-----------------|-------|

| | | | |
|--|--|------------------------|---------------------------------------|
| CUSTOMER ALUMECO FINLAND OY/AB KAVIOKUJA 5, TURKU, 20380 Finland | ORDER No. PW04585 | ITEM No. 6 | DELIVERY NOTE No. DEL222485 |
| | CUSTOMER ORDER No. 120584889 | PART No. N/A | |
| | REQUIREMENTS | | |

| | | | | |
|--|--|---------------------------|-------------------------------------|-----------------------------|
| SPECIFICATIONS EN 10088-4-2009 | MATERIAL GRADE 1.4301 / 1.4307 | CASE QPAS027344 | MATERIAL 4352364D01A01A01 | MASS QTY 882 Kg 5 |
|--|--|---------------------------|-------------------------------------|-----------------------------|

| | | |
|---|--|--------------------------|
| TOLERANCE ISO 9445-2 | HEAT No. 435236 | TYPE X5CrNi 18-10 |
| 2B | QUANTITY 5 | TOTAL MASS 882 Kg |
| PRODUCT Cold rolled, heat treated, pickled & skin passed stainless steel sheet | DIMENSIONS 5 mm x 1500 mm x 3000 mm | |

| CHEMICAL COMPOSITION(%) | | | | | | | | | | |
|-------------------------|-------|-------|-------|------|------|------|------|------|--|--|
| | C | S | P | Mn | Si | Cr | Ni | N | | |
| Min | | | | | | 17.5 | 8.0 | | | |
| Max | 0.030 | 0.015 | 0.045 | 2.00 | 1.00 | 19.5 | 10.5 | 0.10 | | |
| Heat | 0.026 | 0.002 | 0.032 | 1.19 | 0.46 | 18.3 | 8.1 | 0.08 | | |

| MECHANICAL PROPERTIES | | | | | | | |
|-----------------------|------------|-----------------|--------------|--------------|-----------|---------|--|
| TEMPERATURE | DIRECTION | POSITION | Rp0.2 MPa | Rp1.0 MPa | Rm MPa | A5 % | |
| Ambient | Transverse | Requirement Min | 230 | 260 | 540 | 45 | |
| | | Max | | | 700 | | |
| Ambient | Transverse | Head | 298 | 338 | 652 | 56 | |
| | | 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. For the Declaration of Performance, please visit www.columbusstainless.co.za/declaration.html | | | |
|---|---|-----------|--------|-------------|
| HEAT TREATMENT (SOLUTION ANNEALED) | | | | |
| <table border="1"> <tr> <th>Anneal °C</th> <th>Quench</th> </tr> <tr> <td>1000 - 1100</td> <td>AIR/ WATER SPRAY</td> </tr> </table> | | Anneal °C | Quench | 1000 - 1100 |
| Anneal °C | Quench | | | |
| 1000 - 1100 | AIR/ WATER SPRAY | | | |

Permeability 1.1 Max
 Marking: Material Code, Material 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, Middelburg
 Mpumalanga, South Africa

Q. Snyman