


<b>CUSTOMER</b> KUNDE ALUMECO FINLAND OY AB Kaviokuja 5	<b>OUR ORDER N°</b> UNSERE AUFT <b>MA 3213</b>	<b>YOUR ORDER N°</b> IHRE BESTELL <b>120584889</b>
		<b>A.O.D.</b>
<b>TRADE MARK</b> STEMPSEL DES HERSTELL		<b>INSPECTOR'S STAMP</b> STEMPSEL DES WERKSACHVERSTÄNDIGEN
		<b>STEELMAKING PROCESS</b> HERSTELLUNGSPROZESS



REQUIREMENTS ANFORDERUNGEN	INTERGRANULAR CORROSION GRADE INTERKRISTALLINE KORROSION	Werkstoff	FINISH AUSFÜHRUNG
EN 10088-2 : 2014 ASTM A240 / A240M Ed 20A / ASME BPVC IIA SA240 / SA240M Ed 2021	ASTM A262 Practice E	Acx 151 Acx 151	1.4301/1.4307 304/304L 2B 2B

COIL / BOX COIL/KISTE	CONTENT INHALT	DIMENSIONS (mm) ABMESSUNGEN			MARKS POS.	QUANTITY STÜCKZAHL	TEST N° PROBE NR.	
		THICKNESS DICKE	WIDTH BREITE	LENGTH LÄNGE				
QPAS02 2788	4354511 E02A03	5,000	1500,00	3000,00	14	6	4354511 E02A03	C / F
QPAS02 2789	4354511 E02A02	5,000	1500,00	3000,00	12	7	4354511 E02A02	C / F
QPAS02 2790	4354511 E02A01	5,000	1500,00	3000,00	13	7	4354511 E02A01	C / F
QPAS02 2794	4354511 E01A01	5,000	1500,00	3000,00	16	7	4354511 E01A01	C / F
QPAS02 2796	4354511 E01A02	5,000	1500,00	3000,00	15	6	4354511 E01A02	C / F
QPAS02 2797	4354511 E01A03	5,000	1500,00	3000,00	17	3	4354511 E01A03	C / F

CHEMICAL ANALYSIS / CHEMISCH ZUSAMMENSETZUN											
HEAT N° SCHMELZE NR	C	CR	MN	N	NI	P	S	SI			
435451	0,026	18,100	1,200	0,070	8,100	0,028	0,003	0,410			

MECHANICAL PROPERTIES / MECHANISCHE EIGENSCHAFTEN											
TEST N° PROBE N.	PROBE SIT TYPE	Rm. MPa	Rp 0.2 MPa	Rp 1.0 MPa	A50 %	A5 %	HRB HRBW				
4354511 E01A01	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A01	F T						82,00				
4354511 E01A02	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A02	F T						82,00				
4354511 E01A03	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A03	F T						82,00				
4354511 E02A01	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A01	F T						82,00				
4354511 E02A02	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A02	F T						82,00				
4354511 E02A03	C T	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A03	F T						82,00				

<b>REMARKS / BEOBACHTUNGEN</b> The delivery is in accordance to the order Heat Treatment temperature = 1050 - 1100 °C Cooling with air/water spray This material meets the Hardness requirement of NACE MR0175 / ISO 15156-3 : 2020 & NACE MR0103 / ISO 17945 : 2015 Certified to Pressure Equipment Directive 2014/68/EU By TÜV Rheinland: Cert. no. 01 2627 ZA/M1-2100010.00	<b>SURFACE AND DIMENSIONAL CONTROL</b> OBERFLÄCHEN- UND ABMESSUNGSKONTROLLE  <p style="text-align: center;"><b>SATISFACTORY</b> OHNE BEANSTANDUNG</p> <hr/> <b>WORK INSPECTOR</b> WERKSACHVERSTÄNDIGER  <div style="text-align: center;">                       Q. Snyman                 </div>
Middelburg, 1 Julio 2022	

<b>COLUMBUS STAINLESS (Pty) Ltd</b> Subsidiary of <b>ACERINOX, S.A.</b> SMB: +27 13 247 9111 FAX: +27 13 246 1681 http://www.columbus.co.za PO BOX 133 MIDDELBURG 1050 MPUMALANGA SOUTH AFRICA	 MANAGEMENT SYSTEMS CERTIFIED ISO 9001:2001 - OHSAS 18001 - ISO 14001	 13 0035-CPR-A304	Authorised Representative <b>EC REP</b> <b>Acerinox Europa, S.A.U.</b> C/Santiago de Compostela nº100 28035 Madrid (Spain) Tel: 9139851 00/9139851	<h1 style="margin:0;">INSPECTION CERTIFICATE</h1> <h2 style="margin:0;">ABNAHMEPRÜFZEUGNIS</h2> <p style="text-align: right; margin:0;">3.1</p> <p style="margin:0;">ACCORDING TO <b>EN 10204</b> CERTIFICATE N° <b>73 2022 1255 10001 Y</b></p> <p style="margin:0;">GEMÄSS ZEUGNIS NR.</p>
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<b>CUSTOMER</b> KUNDE <b>ALUMECO FINLAND OY AB</b> Kiviokuja 5	<b>OUR ORDER N°</b> UNSERE AUFTR <p style="text-align: center; font-weight: bold; font-size: 1.2em;">MA 3213</p>	<b>YOUR ORDER N°</b> IHRE BESTELL <p style="text-align: right; font-weight: bold; font-size: 1.2em;">120584889</p>
	<b>TRADE MARK</b> STEMPSEL DES HERSTELL	<b>INSPECTOR'S STAMP</b> STEMPSEL DES WERKSACHVERSTÄNDIGEN
		<b>STEELMAKING PROCESS</b> HERSTELLUNGSPROZESS <p style="text-align: right;">A.O.D.</p>




REQUIREMENTS	INTERGRANULAR CORROSION	GRADE	FINISH
ANFORDERUNGEN	INTERKRISTALLINE KORROSION	WERKSTOFF	AUSFÜHRUNG
EN 10088-4 : 2009		Acx 151	1.4301/1.4307
			2B

COIL / BOX	CONTENT	DIMENSIONS (mm)			MARKS	QUANTITY	TEST N°
		THICKNESS	WIDTH	LENGTH			
COIL/KISTE	INHALT	DICKE	BREITE	LÄNGE	POS.	STÜCKZAHL	PROBE NR.
QPAS02 2788	4354511 E02A03	5,000	1500,00	3000,00	14	6	4354511 E02A03
QPAS02 2789	4354511 E02A02	5,000	1500,00	3000,00	12	7	4354511 E02A02
QPAS02 2790	4354511 E02A01	5,000	1500,00	3000,00	13	7	4354511 E02A01
QPAS02 2794	4354511 E01A01	5,000	1500,00	3000,00	16	7	4354511 E01A01
QPAS02 2796	4354511 E01A02	5,000	1500,00	3000,00	15	6	4354511 E01A02
QPAS02 2797	4354511 E01A03	5,000	1500,00	3000,00	17	3	4354511 E01A03

CHEMICAL ANALYSIS / CHEMISCH ZUSAMMENSETZUN										
HEAT N°	C	CR	MN	N	NI	P	S	SI		
SCHMELZE NR										
REQUIREMENTS		17,500			8,000					
ANFORDERUNGEN	0,030	19,500	2,000	0,100	10,500	0,045	0,015	1,000		
435451	0,026	18,100	1,200	0,070	8,100	0,028	0,003	0,410		

MECHANICAL PROPERTIES / MECHANISCHE EIGENSCHAFTEN										
TEST N°	Rm	Rp 0.2	Rp 1.0	A50	A5	HRB				
PROBE NR.	MPa	MPa	MPa	%	%	HRBW				
REQUIREMENTS	540,00	230,00	260,00	40,00	45,00	92,00				
ANFORDERUNGEN	700,00									
4354511 E01A01	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A01						82,00				
4354511 E01A02	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A02						82,00				
4354511 E01A03	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E01A03						82,00				
4354511 E02A01	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A01						82,00				
4354511 E02A02	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A02						82,00				
4354511 E02A03	650,00	311,00	346,00	50,00	54,00	87,00				
4354511 E02A03						82,00				

<b>REMARKS / BEOBACHTUNGEN</b> The delivery is in accordance to the order Heat Treatment temperature = 1050 - 1100 °C Cooling with air/water spray This material meets the Hardness requirement of NACE MR0175 / ISO 15156-3 : 2020 & NACE MR0103 / ISO 17945 : 2015 Certified to Pressure Equipment Directive 2014/68/EU By TÜV Rheinland: Cert. no. 01 2627 ZA/M1-2100010.00	<b>SURFACE AND DIMENSIONAL CONTROL</b> OBERFLÄCHEN- UND ABMESSUNGSKONTROLLE <p style="text-align: center; font-weight: bold; font-size: 1.2em;">SATISFACTORY</p> Ohne Beanstandung
	<b>WORK INSPECTOR</b> WERKSACHVERSTÄNDIGER <div style="text-align: center; margin-top: 20px;">  </div>
	Middelburg, 1 Julio 2022

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<b>CUSTOMER</b> KUNDE ALUMECO FINLAND OY AB Kaviokuja 5		<b>OUR ORDER N°</b> UNSERE AUFT <b>MA 3213</b>	<b>YOUR ORDER N°</b> IHRE BESTELL <b>120584889</b>
<b>REQUIREMENTS</b> ANFORDERUNGEN EN 10028-7 : 2016 / AD W0 / TRD 100 / AD2000 W2/W10 / PED 2014/68/EU		<b>TRADE MARK</b> STEMPEL DES HERSTELL 	<b>INSPECTOR'S STAMP</b> STEMPEL DES WERKSACHVERSTÄNDIGEN
<b>INTERGRANULAR CORROSION</b> INTERKRISTALLINE KORROSION		<b>GRADE</b> WERKSTOFF Acx 151	<b>FINISH</b> AUSFÜHRUNG 1.4301/1.4307 2B
<b>COIL / BOX</b> COIL/KISTE		<b>DIMENSIONS (mm)</b> ABMESSUNGEN	
<b>CONTENT</b> INHALT	<b>THICKNESS</b> DICKE	<b>WIDTH</b> BREITE	<b>LENGTH</b> LÄNGE
QPAS02 2788 QPAS02 2789 QPAS02 2790 QPAS02 2794 QPAS02 2796 QPAS02 2797	4354511 E02A03 4354511 E02A02 4354511 E02A01 4354511 E01A01 4354511 E01A02 4354511 E01A03	5,000 5,000 5,000 5,000 5,000 5,000	1500,00 1500,00 1500,00 1500,00 1500,00 1500,00
3000,00 3000,00 3000,00 3000,00 3000,00 3000,00	14 12 13 16 15 17	6 7 7 7 6 3	4354511 E02A03 4354511 E02A02 4354511 E02A01 4354511 E01A01 4354511 E01A02 4354511 E01A03
<b>HEAT N°</b> SCHMELZE NR	<b>REQUIREMENTS</b> ANFORDERUNGEN	C 0,030 0,026	CR 17,500 19,500 18,100
435451	MN 2,000 1,200	N 0,100 0,070	NI 8,000 10,500 8,100
P 0,045 0,028	S 0,015 0,003	SI 1,000 0,410	
<b>MECHANICAL PROPERTIES / MECHANISCHE EIGENSCHAFTEN</b>			
<b>TEST N°</b> PROBE N.	<b>PROBE TYPE</b> SIT TYPE	<b>Rm</b> MPa	<b>Rp 0.2</b> MPa
<b>REQUIREMENTS</b> ANFORDERUNGEN	T T T T T T T T T T T T T T	540,00 700,00 650,00 650,00 650,00 650,00 650,00 650,00 650,00 650,00 650,00 650,00	230,00 311,00 311,00 311,00 311,00 311,00 311,00 311,00 311,00 311,00 311,00 311,00
4354511 E01A01 4354511 E01A01 4354511 E01A02 4354511 E01A02 4354511 E01A03 4354511 E01A03 4354511 E02A01 4354511 E02A01 4354511 E02A02 4354511 E02A02 4354511 E02A03 4354511 E02A03	260,00 346,00 346,00 346,00 346,00 346,00 346,00 346,00 346,00 346,00 346,00 346,00	40,00 50,00 50,00 50,00 50,00 50,00 50,00 50,00 50,00 50,00 50,00 50,00	45,00 54,00 54,00 54,00 54,00 54,00 54,00 54,00 54,00 54,00 54,00 54,00
<b>HRB</b> HRBW	92,00 87,00 82,00 87,00 82,00 87,00 82,00 87,00 82,00 87,00 82,00 87,00		
<b>REMARKS / BEOBACHTUNGEN</b> The delivery is in accordance to the order Heat Treatment temperature = 1050 - 1100 °C Cooling with air/water spray This material meets the Hardness requirement of NACE MR0175 / ISO 15156-3 : 2020 & NACE MR0103 / ISO 17945 : 2015 Certified to Pressure Equipment Directive 2014/68/EU By TÜV Rheinland: Cert. no. 01 2627 ZA/M1-2100010.00		<b>SURFACE AND DIMENSIONAL CONTROL</b> OBERFLÄCHEN- UND ABMESSUNGSKONTROLLE  <div style="text-align: center;"> <b>SATISFACTORY</b>          OHNE BEANSTANDUNG       </div>	
<b>WORK INSPECTOR</b> WERKSACHVERSTÄNDIGER		 Q. Snyman	
Middelburg, 1		Julio 2022	