



Business Unit / QCM Avesta Works / Jerker Sterneland  
Date Datum Date 04-Jun-2018  
Load, Ladung, Charge No FI/171360  
Acknowledged ID, Bestätigung, Commande ID 6610/300473869

Your ref, Ihre Ref., Votre ref 007614-2		Requirements, Anforderungen, Exigences <b>ASTM A 240M-17</b> <b>ASME BPVC SEC II PART A SA-240/SA-240M Ed 2017</b> <b>EN 10088-2:2014</b> <b>EN 10028-7:2016</b> <b>NACE MR0175 / ISO 15156-3:2015</b> <b>EN ISO 9444-2 / ASTM A480M</b>	
Buyer, Besteller, Acheteur Ovako Metals Oy Ab ATOMITIE 5 A FI 00370, HELSINKI FINLAND			
Consignee, Empfänger, Lieu de livraison Ovako Metals Oy Ab			

Mark of Manufacturer Zeichen des Lieferwerkes Signe de producteur <b>outokumpu</b> 	Process Erschmelzungsart Mode de fusion <b>E+AOD</b>	Inspector's stamp Zeichen des Sachverständigen Poicon de l'expert 	Grade, Werkstoff, Nuance <b>Outokumpu Forta DX 2205</b> <b>UNS S31803</b> <b>UNS S32205</b> <b>1.4462</b>
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Product, Erzeugnisform, Produit  
**Stainless Steel Hot Rolled, Coil-Plate**  
**finish 1D, cut edge**

Line Reihe Ligne	Item Position Poste	Heat-Lot No Schmelze-Lot Nr Coulée n° - Lot No	Size Abmessungen Dimensions	Pieces Stückzahl Nombre	Quantity / Unit Menge / Einheit Quantité / Unité
1	2	581641-003	5,00 X 1500 X 3000 mm	12	2108 KG

Chemical composition – Chemische Zusammensetzung – Composition chimiques

	C	Si	Mn	P	S	Cr	Ni	Mo	Nb	Cu	Co	N
Heat	.014	.36	1.33	.027	.001	22.35	5.70	3.16	.004	.25	.150	.168

Radioactive contamination check acc. IAEA recommendations: **Approved**

Test results – Prüfergebnisse – Results dessais (1N/mm<sup>2</sup> = 1 MPa) F = Front – Anfan – Debut B = Back – Ende – Fin T = Transverse – Quer – Travers

Test Ref	Temp °C	RP 0.2	RP 1.0	RM	A5	2"	HB	FEH
		N/MM2	N/MM2	N/MM2	%	%	HB	%
Min	+20	480		700	25	25		
Max				950			293	
F T	+20	664	753	865	33	33	257	51.0
B T		643	727	843	31	31	252	

**Corrosion acc. EN ISO 3651-2C: Approved**  
**PREN: Cr + 3,3Mo + 16N = 35.5**  
**Material conforms to NACE MR0175 / ISO 15156-3 in supplied condition**  
**Heat treatment / Solution annealed: Material temp minimum 1040 °C / Quenched (forced air + water)**  
**Steel grade verification (PMI-spectroscopic): Approved**  
**Marking, visual insp. and gauge measurement: Approved**  
**Certified acc. Pressure Equipment Directive (2014/68/EU) by TÜV CERT-Certification body**  
**for pressure equipment of the TÜV NORD Systems; notified body, reg-no. 0045.**