



INSPECTION CERTIFICATE
EN 10204 / 3.1

DEGERFORS STAINLESS S-693 81 DEGERFORS, SWEDEN Ref.QC-Dept. Jörgen Johansson		Date-Datum-Date 2015-12-02 Your order-Ihre Bestellung-Votre commande		No. LP 1697-15 OU0759							
Product-Erzeugnisform-Produit Stainless steel, hotrolled, peeled bar. Process annealed according to ASTM A 484 and EN 10088-3, 10272 = Blooms heated in pit furnace at >1050°C/ >1.5 h, rolled to intended dimension at ≥ 1010°C and rapid air cooling. Peeled to dimension tolerance ISO-286-2 k13.		Our order Unsere Auftrag Notre commande		Advice of delivery Lieferschein Avie d'expédition							
Requirements-Prüfgrundlagen-Exigences Amodil Supplies spec. QAD 49 Rev.1 Latest revision of following standards: EN 10088-3, EN 10272. ASTM A 182 (analysis), 276, 479. Applicable parts of NACE MR 0103. Applicable parts of NACE MR 0175/ ISO 15156-3: 2003 ISO 286-2 k16.		Purchaser-Besteller-Acheteur AMODIL SUPPLIES LTD FOREST PARK, CLEOBURY MORTIMER NR KIDDERMINSTER, WORCS DY14 9BD GREAT BRITAIN									
Marking-Kennzeichnung-Marquage Type of steel Werkstoff Nr. Nuance Grade 316L/1.4404 316/1.4401, F 316, F 316L 17-11-2L Prococ (Improved machineability)		Brand mark Herstellerzeichen Signe du producteur 	Inspectors' stamp Abnahmestempel Poinçon de l'expert 	Melting process Erschmelzungsart Procède de fusion EAF+AOD-Converter refining CC to bloom 400 x 300							
Extent of delivery-Lieferumfang-Etendue de livraison											
Item	Quantity	Dimensions, mm	Cast No.	Lot No.	Test No	Weight Kg					
Pos.	Anzahl	Abmessungen, mm	Schmelze Nr.	Los Nr.	Probe Nr	Gewicht Kg	Reduction ratio				
Pos.	Nombre	Dimensions, mm	Coulée n.	Lot n.	Eprouvette no	Poid Kg					
04-01	24	Round 152.4	E151470	99271	9937-1,2	17 876	5.97				
Chemical composition-Chemische Zusammensetzung-Composition Chimique (weight %)											
Cast No. Schmelze Nr. Coulee no E151470											
	C	Si	Mn	P	S	Cr	Ni	Mo	N		
	0.017	0.42	1.60	0.034	0.026	16.76	10.10	2.03	0.074		
Mechanical tests - Mechanische Prüfungen - Essais mécaniques Test results-Prüfergebnisse-Résultats d'essais(L=longitudinal/längs/long, T=transversal/quer/travers)											
Test No./L/T	Rp 0,2	Rp 1,0	Rm	A5	Z	HB	Impact test-Kerbschlagbiegeversuch- Temp				
Probe Nr./L/T							Resilience				
Eprouvette n./L/T	MPa	MPa	MPa	%	%	max	J	°C			
	min	min		min	min		min				
Requirements	205	235	515-700	40	50	215	100	20			
Sollwerte	Requirements according to EN 10088-3, 10272, 1.4401,1.4404 and ASTM A 276, 479, grade 316,316L.										
Exigences							1	2	3	Average	
9937-1	L	247	281	574	57	76	145	297	288	307	297
9937-2	L	248	281	575	56	76	144	289	314	303	302
Other tests-Sonstige Prüfungen-Autres essais US-tested according to ASTM A 388, 3mm FBH (DS OFF-228). Corrosion test according to ISO 3651-2 Method A approved. Corrosion test according to ASTM A 262 Practice E approved. Grain size according to ASTM E112 : 9937-1 = 5.0 9937-2 = 4.5				inspection and gauge measurement-Ausmessung und Besichtigung-Contrôle visuel et dimensionnel PMI-test has been performed on every bar/billet with X-ray spectro, without remarks. No weld repair performed. No remarks-Ohne Beanstandung-Pas de remarque							
The order requirements stipulated are satisfied				Free from Mercury contamination at time of shipment. Radioactivity < 0.1 Bq/g (equivalent to Co ⁶⁰). Measured on samples of the material using analysis techniques in accordance with guidelines issued by the IAEA.							
The material is manufactured according to a Quality System, registered to ISO 9001:2008 and approved by TÜV Nord. Certificate Registration Number: 44 100 115412. Approved acc. to AD2000-Merkblatt W0 by TÜV Nord Systems "Certified acc. to Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD ; notified body, reg.-no. 0045." Reg.No.:556001-8748 V.A.T.No.:SE5560011874801 Registered office:Stockholm, Sweden				Outokumpu Stainless AB Degerfors Stainless JÖRGEN JOHANSSON Section Manager Quality Control							