



INSPECTION CERTIFICATE
EN 10204 / 3.1

No. LP 2515-17

DEGERFORS LONG PRODUCTS
S-693 81 DEGERFORS, SWEDEN
Ref. QC-Dept. Jörgen Johansson

Date-Datum-Date Your order-Ihre Bestellung-Votre commande

2017-11-08 OU0822

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
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Requirements-Prüfgrundlagen-Exigences Amodil Supplies spec. QAD49 Rev.1 Latest revision of following standards: EN 10088-3, EN 10272. ASTM A 182 (analysis), 276, 479. ASME SA-182 (analysis), 276. ASME SA-479/SA-479M-2011a. 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	FLOW TECHNOLOGY LTD TEST CERTIFICATE VERIFIED TRUE COPY OF ORIGINAL
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Marking-Kennzeichnung-Marquage Type of steel Werkstoff Nr. Nuance Grade 316L/1.4404 316/1.4401, F 316, F 316L 17-11-2L Prodec (Improved machineability)	Brand mark Herstellerzeichen Signe du producteur 	Inspectors' stamp Abnahmestempel Poinçon de l'expert 	Melting process Erschmelzungsart Procédé de fusion EAF+AOD-Converter refining CC to bloom 400 x 300
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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	
Pos.	Nombre	Dimensions, mm	Coulée n.	Lot n.	Eprouvette no	Poid Kg	Reduction ratio
06-01	9	Round 165.1	E171705	108742	11203-1,2	10 456	5.29

Chemical composition-Chemische Zusammensetzung-Composition Chimique (weight %)										
Cast No.	C	Si	Mn	P	S	Cr	Ni	Mo	N	
E171705	0.019	0.43	1.77	0.026	0.025	16.89	10.04	2.03	0.080	

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							Résilience				
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											
11203-1	L	261	291	588	55	75	155	250	295	246	264
11203-2	L	277	323	602	54	75	157	273	248	298	273

Other tests-Sonstige Prüfungen-Autres essais US-tested according to ASTM A 388, 3mm FBH. Approved. 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 : 11203-1 = 5.5 11203-2 = 5.5	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
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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.
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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.	 JÖRGEN JOHANSSON Section Manager Quality Control
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	