




C195000

10/2017 To: ASA ALLOYS (EDMONTON) SO#: S103151 L#: 1 PO#: PO42489 Part: 11111005 Qty: 1672
 Feature: AU3453 Tag: 193901

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE																			
	Contract No.: 20002 TECHN.PROTOCOL № 210-11 SPEC.№ 1598/P04463 ASTM A182/A182M-15; ASME SA-182/SA-182M-13; ASTM A276-15; ASTM A314-15; ASTM A479/A479M-15; ASME SA-479/SA-479M-13; ASTM A484/A484M-15; AMS-QQ-S-763D-15 Cond.A; AMS 5639H-07; AMS 5647J-11; ASTM A193/A193M-15a GR B8,CL1; ASME SA-193/SA-193M-13 GR B8,CL1; ASTM A320/A320M-15a GR B8,CL 1; ASME SA-320/SA-320M-13 GR B8,CL 1; ANSI/NACE MR0175/ISO 15156-3-15; NACE MR 0103-12												Sheets: 8 Sheet: 4 INSPECTION CERTIFICATE EN10204/3.1 Nr.308144 PLANT ORDER № 8015201598						
	CUSTOMER DSS INTERNATIONAL SA Switzerland			PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЕЩЛІАВКІ: Електродугова пель+АКР Round 11.000in/279.40 mm L=4.280m/14.033ft Grade: 304/F304/304L/F304L									QUANTITY: (number of pcs) 11bund Q-4687 lb/2126 kg Delivery condition solution annealed : 1900-2010° F (1040-1100° C) / water термообработка: закалка в воду						
ANALYSIS, %		C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N		
REQUIRED		<.030	<1.00	1.25-2.00	<.040	.020-.030	18.00-20.00	8.00-10.50	<.30	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A03453		.020	.50	1.58	.040	.025	18.83	8.35	.30	.081	.28	.06	.07	.005	.07	.035	.072		
MECHANICAL PROPERTIES		Yield Strength, Ksi(N/mm ²) Re (R _{eL})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation in 2Inches(50mm) or 4D, min, %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J												
REQUIRED		30(205)	75 (515)	45	50	140-223	100												
EFFECTIVE		43.5(299)	83.1(571)	60	77	167	203												
Technical requirements: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) A B C D thin thick thin thick thin thick thin thick 2.5 2.0 2.5 2.0 0.0 0.0 1.0 1.0 ICC-ASTM A262-08 (practice E)-test: O.K. Dimension/surface defects test, anti-mixing test – OK We acknowledge that the delivered products conform to the requirements of the order Ratio of reduction-5.6:1 Manufacturer: PJSC DNIPROSPETSSTAL Date: 01.06.16 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine.																			
Mechanical properties tested in state of delivery																			
US - testing		yes	Results: SEP 1921, group 3/class Cc - OK																
Radiation free; mercury free. No Weld or Weld repair.																			