


C238383

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
TECHN.PROTOCOL № 390-11 **SPEC.№** 1897/PO45605
 DIN EN 10088-3-05,DIN EN 10272-08,AD2000-Merkblatt W2;AD 2000-Merkblatt W10;ASTM A182/A182M-10;ASME SA-182/SA-182M-10;ASTM A276-10;ASTM A314-08,ASTM A479/A479M-10;ASME SA-479/SA-479M-10;ASTM A484/A484M-10;AMS-QQ-S-763B-06 Cond.A;AMS 5648K-07;AMS 5653F-07;ASTM A193/A193M-10GR B8M,CL1(EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8,CL 1(EXC PAR 7.3);NACE MR 0175-03;NACE MR 0103-10

Sheets: 5 **Sheet: 3**
INSPECTION CERTIFICATE EN10204/3.1 Nr. 343151
PLANT ORDER № 8014901897



CUSTOMER
DSS INTERNATIONAL
SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line.Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 7.00 in/177.80mm L=6.14m/20.131ft;L=6.15 m/20.164ft
Grade: 316/316L/1.4401/1.4404

QUANTITY: **1bund Q-2778lb/1260kg**
(number of pcs) **1bund Q-2782 lb/1262kg**

Delivery condition
 solution annealed :1900° F(1040° C)water 30minutes
 термообработка:закалка в воду

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B
REQUIRED	<.030	<1,00	1.20-2.00	<.040	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A06953	.023	.44	1.41	.040	.026	16.84	10.27	2.06	.069	.28	.05	.07	.005	.10	.01	.031	.0088	.0021

DIN EN 10002-1,ASTM A370-09


MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%		Tensile Strength, Rm, (N/mm ²)	Elongation		Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J		
	L	Q		A5 % L	In 2 inches (50mm) or 4D, min, % L			L	Q	
REQUIRED	205	240	515-690	45	35	40	50	140-217	100	60
EFFECTIVE	275	301	580	61	54	59	77	170	180 180 180	64 64 64
	280	304	586	60	55	58	79	170	186 186 186	62 62 62

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
 2.0 2.0 2.0 1.0 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-12.1:1

Mechanical properties tested in state of delivery

US - testing yes Results: ASTM A388/A388M-FBH1/8";EN 10308 type 1a;class 3:OK

Radiation free; mercury free. No Weld or Weld repair.

Manufacturer:PrJSC DNIPROSPETSSTAL
 Date: 04.03.19 **Manager of quality assurance department - V. Kapaieva**
 Signed: 
 Zaporozhye
 Made in Ukraine.

Oct 26/2020

INS