HT# A06112

C21700

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
TECHN.PROTOCOL № 390-11 SPEC.№ 9398/PO44029
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: 2**
INSPECTION CERTIFICATE EN10204/3.1 **Nr. 335238**
PLANT ORDER № 8014909398

QMS Certified

CUSTOMER
DSS INTERNATIONAL
SA Switzerland

PRODUCT DESCRIPTION
Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line.Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ:Электродуговая печь+АКР
Round 6.250in/158.75 mm L=3 950m/12.951ft L=5.650m/18.525ft L=5.640m/18.492ft
Grade: 316/316L/1.4401/1.4404

QUANTITY: (number of pcs)
1bund Q-1415 lb/642 kg
1bund Q-2024 lb/918 kg
1bund Q-4039 lb/1832 kg

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 № A06112	.018	.34	1.40	.040	.026	17.23	10.28	2.09	.073	.33	.06	.06	.007	.14	.01	.024	.010	.0024

DIN EN 10002-1,ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm²) R0.2%	R 1.0%	Tensile Strength, Rm, (N /mm²)	Elongation A5% L	Q	In 2 inches (50mm) or 4D,min,% L	Reduction of area, Z % L	Brinell Hardness HB	Impact strength, KV, J L	Q
REQUIRED	205	240	515-690	40 -		40	50	140-217	100	-
EFFECTIVE	293 290	329 238	575 572	60 - 61 -		60 60	77 77	170 170	201 201 201 204 204 204	-

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.

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
3.0	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-15.1:1

Manufacturer:PrJSC DNIPROSPETSSTAL
Date: 26.06.18 **Manager of quality assurance department** - V. Kapaieva
Signed:
Zaporozhye
Made in Ukraine.