PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
TECHN.PROTOCOL № 390-11 SPEC.№ 2013/PO50775
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: 1 **Sheet: 1**
INSPECTION CERTIFICATE EN10204/3.1 **Nr. 369930**
PLANT ORDER № 8014902013

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 6.25in/158.75 mm L=18.426ft/5.62 m; L=18.393ft/5.61 m ; L=13.377ft/4.08 m
Grade: 316/316L/1.4401/1.4404

QUANTITY: (number of pcs)
1bund Q-4017 lb/1822 kg
1bund Q-2002 lb/908 kg
1bund Q-1459 lb/662 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 № A09881	.018	.44	1.34	.039	.024	16.82	10.21	2.07	.066	.28	.05	.05	.005	.13	.012	.032	.0087	.0022

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 A,% 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	515-700	40	-	40	50	140-217	100	-
EFFECTIVE	280	310	567	60	-	58	73	167	217 217 217	-
	286	316	571	60	-	58	75	167	223 223 223	

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-22.3:1

Date: 23.05.2021 **Manager of quality assurance department** - V. Kapaieva Signed:
Zaporozhye
Melted and Produced in Ukraine.
MELTED and MANUFACTURED
PrJSC " Dniprospetsstal"
Phone number +380612834255
e-mail:info@dss.com.ua
http://www.dss-ua.com

P.O. #5915 Part # 04-FOE-40 Desc: 4" CPA 50E S-40 316 S/S

ANS