

0224449

PTJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 20002
 TECHIN.PROTOCOL № 390-11 SPEC. № 9728/P0443.11
 DIN EN 10088-3-05 DIN EN 10272-08 AD2000-Merкblatt W2-AD 2000-Merкblatt 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-5-763B-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,CL1(EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10

Sheets: 6 Sheet: 1
INSPECTION CERTIFICATE EN10204/3.1 Nr. 336300
 PLANT ORDER № 8014909728



GMS 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, обработанные на линии Landgraf.

STEEL MAKING PROCESS: EAF+ AOD
ШОГОВ ВИПЛАВКИ: Электродуговая печь+АКР
 Round 3 750h/95 25 mm L=5 210m/17.082t L=5 630m/18.459t L=5 650m/18.525t
Grade: 316/316L/1.4401/1.4404

Quantity: 1bund Q-670 lb/304 kg
 1bund Q-1446 lb/656 kg
 1bund Q-4317 lb/1958 kg

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

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B
REQUIRED	<.030	<.100	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 № A06239	.017	.37	1.50	.040	.027	17.20	10.35	2.06	.07	.32	.05	.06	.005	.11	.01	.032	.013	.0023

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R0.2% R 1.0%	Tensile Strength, (N/mm ²) Rm	Elongation		Reduction of area, Z, % L	Brinell Hardness HB	Impact strength, KV, J	
			A, % L	Q (30mm) or 4D, min, % L			L	Q
REQUIRED	205	515-690	40 -	40	50	140-217	100	-
EFFECTIVE	289 294	310 313	61 - 60	-	59 59	174 174	190 190 197 197	196 197

Mechanical properties tested in state of delivery

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 1.5 2.0 1.0 0.0 0.0 1.0 1.0
 ICC-ASTM A262-08 (practice E)-test: OK.
 Dimension/surface defects test, anti-mixing test ... OK
 We acknowledge that the delivered products conform to the requirements of the order
 Ratio of reduction-35.1:1

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: PTJSC DNIPROSPETSSTAL
 Date: 27.07.18 Manager of quality assurance department - V. Kapateva
 Signed: Zaporozhye
 Made in Ukraine.

MS