

PO0993

C110840

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN. PROTOCOL № 390-11 SPEC № 3734/P033051-ED
 DIN EN 10088-3-05, DIN EN 10272-08, AD2000-Method W2, AD 2000-Method W10, ASTM A182/A182M-10, ASME SA-182/SA-182M-10, ASTM A276-10, ASTM A314/ASME SA-479/A479M-10, ASME SA-479/SA-479M-10, ASTM A484/A484M-10, AMS QQ-S-763B-06, Com. AMS 5688-07, AMS 5655F-07, ASTM A193/A193M-10GR B8M, CL1 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8, CL1 (EXC PAR 7.2) PLATE MR 0175-03, NACE MR 0103-10

INSPECTION CERTIFICATE EN10204/3.1 Nr. 286450
 PLANT ORDER № 8014903734



CUSTOMER
PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, pealed on Landgraf line. Дюгати та стержні з корозійностійких (нержавіюючих) сталей розпекатрич, ошліфовані на лінії Ландграф.
STEEL MAKING PROCESS: EAF+AOB
CHOCOB BИЛЛІАВКН: Знехродитова нест. АКР
 Round 4.000mm/101.60 mm L=5.390mm/17.672ft L=5.460mm/17.902ft
 Grade: 316/316L/1.4401/1.4404

QUANTITY:
 1bund Q-3086 1b/1400 kg
 1bund Q-3135 1b/1422 kg
 Delivery condition
 solution annealed : 1900-2010° F (1040-1100° C) water
 tempering: загарта в воді

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	Sn	B
REQUIRED	<0.30	<1.00	1.20-2.00	<0.040	0.15-0.30	16.50-18.00	10.00-13.00	2.00-2.50	<10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A00993	.018	.39	1.33	.035	.027	17.02	10.18	2.05	.072	.26	.05	.11	.005	.09	.01	.028	.012	.001

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm ²) R _{0.2} , R _{1.96} %	Tensile Strength, R _m (N/mm ²)	Elongation		Reducti on of area, Z% L	Brinell Hardness HB	Impact strength, KV, J
			A ₅ % L	Q			
REQUIRED	205	240	515-700	40	40	140-217	100
EFFECTIVE	330 325	360 358	568 570	61 61	60 60	167 167	250 263 263 248 260 250

TECHNICAL REQUIREMENTS:
 Macrostructure - GOOD
 GRAIN SIZE : 5 to ASTM E 112-96(2004)
 Nonmetallic inclusions ASTM E 45-05 (Method A)
 A thin thick thin thick thin thick thin thick
 3.0 2.0 2.0 1.0 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

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASME SA-388/SA-388M-10/ASTM A 388/A 388M-09) FBH1/8"/EN 10308 type 1 class 3:OK
Radiation free, mercury free. No Weld or Weld repair.		

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 28.07.14
 Manager of quality assurance department - V. Kapaieva
 Signed:
 Zaporozhye
 Made in Ukraine.