

220809

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No.: 20002
 TECHN. PROTOCOL № 390-11 SPEC. № 9783/PO44380
 DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, ASTM A182/A182M-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, CL.1, ASME SA-193/SA-193M-10 GR B8, CL.1, ASTM A320/A320M-08 GR B8M, CL.1, ASME SA-320/SA-320M-10 GR B8, CL.1, NACE MR 0175-03, NACE MR 0103-10

Sheets: 5 **Sheet: 5**
INSPECTION CERTIFICATE EN10204/3 I Nr.335801
PLANT ORDER № 8014909783

QUANTITY: 1bund Q=5119 lb/2322 kg
 (number of pcs)

Delivery condition
 solution annealed : 1940° F (1060° C) water 30minutes
 термообработка: закалка в воду

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные.
STEEL MAKING PROCESS: EAF+AOB
СПОСОБ ВЫПЛАВКИ: Электроплавка пель+АКР
 Round 15.000mm/381.00 mm L=8 213 ft/2.505m
Grade: 316/316L/1.4401/1.4404

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 № A06147	.017	.41	1.36	.040	.025	16,85	10.20	2.05	.067	.36	.06	.08	.005	.13	.013	.025	.0129	.0025

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 %	Brinell Hardness HB	Impact strength, KV, J													
			A ₅ % L	Q			L	Q	L	Q	L	Q								
REQUIRED	205	515-690	45	35	50	140-217	100	60												
EFFECTIVE	290	580	61	55	74	170	180	180	180	64	64	64								

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 0.0 1.0 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/Подтверждаем, что поставленная продукция соответствует требованиям заказа
 Ratio of reduction-5.6:1

Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 12.07.18 **Manager of quality assurance department - V. Kapaieva**
 Signed: *[Signature]*
 Zaporozhyc
 Made in Ukraine.

US - testing yes Results: ASTM A388/A388M-FBH/5"; EN 10228-4 type Ia, class 3:OK

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

1NS