

C224524

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

Contract No. 20002
 TECHN. PROTOCOL № 390-11 SPEC. № 0111/PO44618
 DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, 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-10, GR B8, CT 1, ASME SA-193/SA-193M-10, GR B8, CT 1, ASTM A320/A320M-08, GR B8M, CT 1, ASME SA-320/SA-320M-10, GR B8, CT 1, ASME MR 0175-03, NACE MR 0103-10



Sheets: 4
Sheet: 4
INSPECTION CERTIFICATE EN10204/3 1 Nr. 336960
PLANT ORDER № 8014900111

CUSTOMER
DSS INTERNATIONAL
SA Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled, Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 15,000mm/381,00 mm L= 8,115 ft/2,475 m
Grade: 316/316L/1.4401/1.4404

QUANTITY:
 1bund Q-5057 lb/2294 kg
 (number of pcs)

Delivery condition
 solution annealed : 1940° F(1060° 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 № A06284	.018	.45	1.29	.040	.025	16,78	10,30	2,06	.076	.33	.05	.07	.005	.12	.011	.028	.011	0022

MECHANICAL PROPERTIES

DIN EN 10002-1, ASTM A370-09

	Yield Strength, (N/mm ²) R0.2% R(1.0%)	Tensile Strength, (N/mm ²) Rm	Elongation		Reduction of area, % L	Brinell Hardness HB	Impact strength, K V, J	
			A, % L	Q			L	Q
REQUIRED	205	515-690	45	35	40	50	100	60
EFFECTIVE	279	549	58	48	37	73	199	190
							163	66
							140-217	66

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
 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-6,3:1
 Manufacturer: PrJSC DNIPROSPETSSTAL
 Date: 16.08.18 Manager of quality assurance department - V. Karavava
 Signed:
 Zaporozhye
 Made in Ukraine.

Mechanical properties tested in state of delivery

US - testing yes Results: ASTM A388/A388M-1B(II)/5"; EN 10228-4 type 1a; class 3; OK

Radiation free; mercury free No Weld or Weld repair.

MS