

98625 (11")

0073847

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE



Contract No.: 50005
 TECHN.PROTOCOL № 210-11 SPEC.№8163/P028592-ED
 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 B8M,CL1 ;ASME SA-193/SA-193M-10GR B8M,CL1;ASTM 320/A320M-08GR B8M,CL 1;ASME SA-320/SA-320M-10 GR B8M,CL 1;NACE MR 0175-03;NACE MR 0103-10

Sheets:9 Sheet: 9
QUALITY CERTIFICATE EN10204/3.1 Nr.268191
 PLANT ORDER № 8014908163



GMS Certified

CUSTOMER
 DSS INTERNATIONAL SA
 Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel forged, peeled .Прутки из коррозионностойких (нержавеющих) сталей кованые, обточенные.
STEEL MAKING PROCESS: EAF+AOD
СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР
 Round 11.000in/279.40 mm L=4.370m/14.328ft
Grade: 316/F316/316L/F316L

QUANTITY:
 (number of pcs) **1bund Q-4832 lb/2192 kg**

Delivery condition
 solution annealed :1922° F(1050° C)/water 30' minutes
 термообработка:закалка в воду

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂		
REQUIRED	<.030	<1.00	1.25-2.00	<.040	.020-.030	16.00-18.00	10.00-14.00	2.00-3.00	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № 98625	.020	.41	1.31	.034	.023	16.91	10.28	2.05	.065	.27	.04	.15	.005	.08	.012	.034		

ASTM A370

MECHANICAL PROPERTIES	Yield Strength, Ksi(N./mm ²) Re (R _{e2})	Tensile Strength, Rm,ksi (N./mm ²)	Elongation A ₅ %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	40.6(279)	81.6(561)	60	77	163	281

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
2.0	2.0	2.0	2.0
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: «ASTM A388 FBH 1/5 “ »

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

Manufacturer: PJSC DNIPROSPETSSTAL
 Date: 11.12.12 Manager of quality assurance department - V. Kapaieva Signed:

Zaporozhye
 Made in Ukraine.