

94488

C001512



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

QMS Certified

Contract No.: 07149
 TECHN.PROTOCOL № 210-06 SPEC.№4730/PO19485
 ASTM A182/A182M-05; ASME SA-182/SA-182M-04; ASTM A276-04;
 ASTM A479/A479M-04; ASTM SA-479/SA-479M-04; ASTM A484/A484M-05; AMS-QQ-S-763A-03
 Cond.A; NACE MR 0175-2003; AMS 5648K-02; AMS 5653F-02; ASTM A193/A193M-04c GR B8M, CL1 ;
 ASME SA-193/SA-193M-04GR B8M, CL1;

Sheets:6 Sheet: 6
QUALITY CERTIFICATE EN10204/3.1Nr.228294
 PLANT ORDER № 8071494730

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION
 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 18.750in/476.25 mm L=2.92m/9.57ft
 Grade: 316/F316/316L/F316L

QUANTITY:
 (number of pcs) 1bund Q-9381 lb/4255 kg

Delivery condition
 solution annealed :1900-2010° F(1040-1100° C)/water/32 minytes
 термообработка:закалка в воду /32 МИН.

ANALYSES, %	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 № 94488	.025	.27	1.35	.040	.030	16.64	10.07	2.11	.059	.28	.04	.14	.069	.08	.01	.026		

ASTM A370-08a

MECHANICAL PROPERTIES	Yield Strength, Ksi(N/mm ²) Re (R _{0.2})	Tensile Strength, Rm,ksi (N/mm ²)	Elongation In 2 inches (50mm) or 411, min % (ASTM A370)	Reduction of area, Z %	Brinel Hardness HB	Impact strength, KV, J
REQUIRED	36(248)	75 (515)	45	50	140-223	100
EFFECTIVE	36.2(249)	78.2(537)	63	73	159	207

TECHNICAL REQUIREMENTS:
 Macrostructure – GOOD
 GRAIN SIZE : 3 to ASTM E 112
 Nonmetallic inclusions ASTM E 45 (Method A)

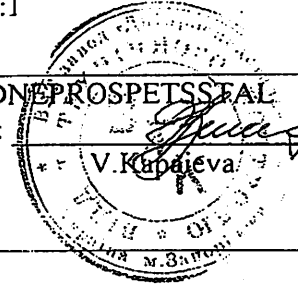
A	B	C	D
thin	thick	thin	thick
2.0	2.0	1.5	1.0
0.0	0.0	0.0	1.0

 ICC-ASTM A262-02a(Method E)-test: O.K.
 „Dimension/surface defects test,anti-mixing test – O.K.“
 Ratio of reduction- 4.08:1

Mechanical properties tested in state of delivery

US - testing	yes	Results: SEP 1921, 3/ Cc - O.K.
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Manufacturer: JSC DNEPROSPETSSTAL
 Date: 10.12.09 Signed:
 V. Kapajeva
 Zaporozhye
 Made in Ukraine.



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