

Cos6018



QMS Certified



DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE

Contract No.: 07149
 TECHN.PROTOCOL № 237-06 SPEC.№5734/P003307
 „AD 2000-Merkblatt WO/TRD 100(DGRL)97/23/EG“
 AD2000-Merkblatt W2, AD2000-Merkblatt W10
 DIN EN 10222-5, DIN EN 10088-3, DIN EN 10272, ASTM A 276, ASTM A 479, ASME SA-479
 DIN EN 10088-3, DIN EN 10222-5, DIN EN 10272, ASTM A182/A182M-05, ASME SA-182/SA-182M-04, ASTM A276-04, ASTM A 314-97(2002), ASTM A479/A479M-04, ASME SA-479/SA-479M-04, ASTM A484/A484M-05, AMS-QQ-S-763A-03 Cond.A, QQS-763F Cond.A, NACE MR 0175, AMS 5648K-02, AMS 5653F-02, ASTM A193/A193M-04c GR B8M, CL 1, ASME SA-193/SA-193M-04 GR B8M, CL 1, ASTM A320/A320M-08 GR B8M, CL 1, ASME SA-320/SA-320M-04 GR B8M, CL 1

94739 (8.5")

EN10204/3.1
 Sheets: 6 Sheet: 3
 QUALITY CERTIFICATE Nr.231156
 PLANT ORDER № 8071495734

CUSTOMER
 „DSS INTERNATIONAL SA“
 Switzerland

PRODUCT DESCRIPTION
 Bars and rods of corrosion-resistant (stainless) steel, forged, peeled.
 Прутки из коррозионноустойчивых (нержавеющих) сталей кованные, обточенные.
STEEL MAKING PROCESS: Electric furnace
СПОСОБ ВЫПЛАВКИ: Электродуговая печь
 Round 8.50in/215.90 mm L=4.41m L=4.21m L=4.25m
 Grade: 316/316L/1.4401/1.4404

QUANTITY:
 1bund. Q-1326 kg
 1bund. Q-1272 kg
 (number of pcs) 1bund. Q-1288 kg

Delivery condition
 Heat-treated (solution annealing 1010° C water 15minutes)
 С термич.обработкой (закалка в воду 1010°С 15мин.)

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N ₂	Sn	B
REQUIRED	<.030	<1.00	1.20-2.00	<.045	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
HEAT № 94739	.025	.53	1.39	.036	.024	16.85	10.00	2.03	.054	.23	.05	.08	.08	.073	.011	.027	.0068	.0013

DIN EN 10002-1, ASTM A 370

MECHANICAL PROPERTIES	Yield Strength, N/mm ² (ksi) R _{1.2} % R _{1.0} %		Tensile Strength, R _m , N/mm ² (ksi)	Elongation		Reduction of area, Z, %	Brinell Hardness HB	Impact strength, KV, J	
				A ₅ %	In 2 inches (50mm) or 40, min, % (ASTM A370)			L	Q
REQUIRED	205	240	515-690	45	35	40	Max 215	100	60
EFFECTIVE	293 (42.7)	325 (47.3)	589 (85.7)	61	55	-	174	235 245 257	68 77 81
	-	-	-	-	-	58	-	-	-
	290 (42.2)	327 (47.6)	590 (85.9)	60	52	-	174	240 250 239	69 71 75
-	-	-	-	-	59	-	-	-	-

TECHNICAL REQUIREMENTS:

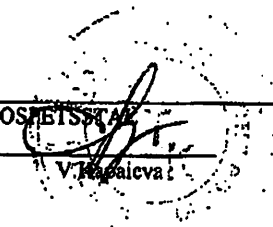
Macrostructure – GOOD
 GRAIN SIZE: 5 to ASTM E 112
 Nonmetallic inclusions ASTM E 45 (Method A)
 A B C D
 thin thick thin thick thin thick thin thick
 1.8 1.5 1.5 1.0 0.0 0.0 1.0 1.0
 ICC-EN ISO 3651-2(EN 114, ASTM A262, method E)-test: O.K.
 „Anti-mixing test-O.K.“
 „Dimension test and surface defects test is accomplished“

Mechanical properties tested in state of delivery

US - testing yes Results: DIN EN 10228-4 type 1a; class 3: O.K.
 «ASME SA-388/SA-388M» «ASTM A388/A388M» «FBH 1/5"»

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

Manufacturer: JSC DNEPROSPETSSTAL
 Date: 23.03.10 Signed:



Zaporozhye
 Made in Ukraine.