

ASA PO 76559 WD 5550 CPA RTJ 6-160



GMS Certified

**DNEPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE**

95327 (10").

EN10204/3.1

Contract No.: 50005  
 TECHN.PROTOCOL № 237-06 SPEC.№0637/P01027  
 „AD 2000-Merkblatt WO/TRD 100(DGRL)97/23/EG”  
 “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 - 03AMS 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

Sheets:6 Sheet: 6  
 QUALITY CERTIFICATE Nr.238509  
 PLANT ORDER № 8033900637

**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:** Electric furnace  
**СПОСОБ ВЫПЛАВКИ:** Электродуговая печь  
 Round 10.00in/254.00 mm L=4.86m L=4.63m  
Grade: 316/316L/1.4401/1.4404

**QUANTITY:** 1bund. Q-2020 kg  
 (number of pcs) 1bund. Q-1916 kg  
**Delivery condition**  
 Heat-treated (solution annealing 1000° C water 19minutes)  
 С термич.обработ.(закалка в воду 1000° C 19мин.)

ANALYSES, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N <sub>2</sub>	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		
<b>HEAT № 95327</b>	.030	.30	1.30	.038	.028	16,76 ✓	10.09 ✓	2.06 ✓	.062	.23	.06	.10	.13	.07	.012	.031	.0074	.0011

DIN EN 10002-1,ASTM A 370

MECHANICAL PROPERTIES	Yield Strength, N /mm <sup>2</sup> (ksi) R0.2% R10%		Tensile Strength, Rm, N /mm <sup>2</sup> (ksi)	Elongation		Reduction of area, Z % L Q	Brinell Hardness HB	Impact strength, KV, J			
				A <sub>s</sub> %	in 2 inches (50mm) or 4D <sub>min</sub> ,% (ASTM A370) L			L	Q		
										L	Q
REQUIRED	205	240	515-690	45	35	40	50	Max	215	100	60
EFFECTIVE	297 (43.2)	325 (48)	545 (79)	59	50	-	79	159	-	205 193 210	65 61 62
	-	-	-	-	-	59	-	-	-	205 193 210	65 61 62
	302 (43.9)	330 (48)	550 (80)	60	49	-	79	159	-	-	-
	-	-	-	-	-	58	-	-	-	-	-

**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
2.5	2.0	2.5	1.5
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”  
 Твердость в сост.поставки/hardness in supplied condition 140-241HB-180

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”»

Manufacturer: JSC DNEPROSPETSSTAL  
 Date: 05.10.10 Signed:

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

Zaporozhye  
 Made in Ukraine.

5 ✓  
 ME