95348

OMS Certified

DNEPROSPETSSTAL,YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008,UKRAINE

Contract No.: 50005
TECHN.PROTOCOL № 237-06 SPEC.№0637/P01027
„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 5639H-02,AMS 5647H-02 ASTM A193/A193M-04c GR B8,CL 1,ASME SA-193/SA-193M-04 GR B8,CL 1
ASTM A320/A320M-08 GR B8,CL 1, ASME SA-320/SA-320M-04 GR B8,CL 1

EN10204/3.1
Sheets:6 Sheet: 2
QUALITY CERTIFICATE Nr.237907
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 кованые обточенные.
STEEL MAKING PROCESS: Electric furnace
СПОСОБ ВЫПЛАВКИ:Электродуговая печь
Round 9.000in/228.60 mm L=5.76m L=5.46m
Grade: 304/304L/1.4301/1.4307

QUANTITY: 1bund. Q-1932 kg
(number of pcs) 1bund. Q-1828 kg

Delivery condition
Heat-treated (solution annealing 1000°+10 C water 16minutes)
С термич.обраб.(закалка в воду 1000°+10C 16мин.)

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	18.00-19.50	8.00--10.00	<.30	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
HEAT № 95348	.024	.32	1.56	.034	.025	18,39	8.25	.22	.061	.27	.05	.07	.014	.07	.01	.063	.0075	.001

DIN EN 10002-1,ASTM A 370

MECANICAL PROPERTIES	Yield Strength, N /mm²(R0.2% R1.0%		Tensile Strength, Rm, (N / mm²)	Elongation A, % L	Q	in 2 inches (50mm) or 4D,min,% (ASTM A370) L	Reduction of area, Z % L	Q	Brinel Hardness HB	Impact strength, KV, J L	Q
REQUIRED	205	230	515-700	45	35	40	50		Max 215	100	60
EFFECTIVE	290 (42.2)	327 (47.6)	570 (82.9)	59	54	-	75		167	297 290 290	75 80 81
	-	-	-	-	-	56	-		-		
	287 (41.7)	323 (47)	574 (83.5)	59	54	-	75		167	295 290 297	83 80 87
	-	-	-	-	-	56	-		-		

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.

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
2.0	2.0	2.0	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 "
Hardness in supplied condition 140-241HB:179

Manufacturer: JSC DNEPROSPETSSTAL
Date: 22.09.10 Signed
V.Kapaieva
Zaporozhye
Made in Ukraine.

4228-2.00