

99243.

PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE DSRB3858

Contract No.: 50005
 TECHN. PROTOCOL № 210-11 SPEC. № 0120/P0 L40573
 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 5639H-07; AMS 5647H-07; ASTM A193/A193M-10 GR B8, CL1 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8, CL1 (EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10



Sheets: 9 Sheet: 1
QUALITY CERTIFICATE EN10204.3.1 Nr. 272890
 PLANT ORDER № 8023400120

 GMS Certified	CUSTOMER DSS INTERNATIONAL SA Switzerland Commodity code RB4L0632/DS	PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peened on Landgraf line. Прутки из коррозионноустойчивых (нержавеющих) сталей горячекатаные, обточенные на линии «Ландграф». STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 6.50in/165.10 mm L=1,180m/3,705ft L=1,500m/4,754ft Grade: 304/F304/304L/F304L	QUANTITY: 1bund Q-3025 lb/1372 kg (number of pcs) 1bund Q-3444 lb/1562 kg
	Delivery condition solution annealed: 1900-2010°F (1040-1100°C)/water термическая обработка: 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	18.00-20.00	8.00-10.50	<.30	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10
CAST № 99243	.028	.45	1.67	.035	.025	18.52	8.16	.27	.065	.25	.07	.08	.005	.07	.014	.035

MECHANICAL PROPERTIES	Yield Strength, Ks/KN mm ² Re(R _{e2})	Tensile Strength, Ks/KN (R _m)	Elongation A ₅ %	Reduction of area, Z %	Brinell Hardness HB	Impact strength, KV, J
REQUIRED	30(205)	75 (515)	45	50	140-223	100
EFFECTIVE	48.8(335)	89.9(617)	55	80	179	296

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	1.5	1.5	1.3
0.0	0.0	0.0	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: SEP 1921 group 3/class Dd - OK	Manufacturer: PJSC DNIPROSPETSSTAL Date: 16.05.13 Manager of quality assurance department - V. Kapaieva Signed: Zaporozhye Made in Ukraine.
Radiation free: mercury free. No Weld or Weld repair.			

MILL TEST REPORT
 Customer: RYECAL PO# 744631 SO# INC2533
 Item: RB4L0632 Bundle: DSA8401001 Heat#: 99243

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