

# PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYYE, UKRAINE



Contract No.: 20002  
 TECHN. PROTOCOL № 390-11 SPEC. № 2013/PO50775  
 DIN EN 10088-3-05; DIN EN 10272-08; AD2000-Merblatt W2; AD 2000-Merblatt W10; 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 5648K-07; AMS 5653E-07; ASTM A193/A193M-10GR B8M, CL1; ASME SA-193/SA-193M-10 GR B8, CL 1; ASTM A320/A320M-08 GR B8M, CL 1; ASME SA-320/SA-320M-10 GR B8M, CL 1; NACE MR 0175-03; NACE MR 0103-10

Sheets: 3  
 Sheet: 1  
 INSPECTION CERTIFICATE EN10204/3.1 Nr. 370362  
 PLANT ORDER № 8014902013



CUSTOMER  
 DSS INTERNATIONAL  
 SA Switzerland

**PRODUCT DESCRIPTION**  
 Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионно-стойких (нежелезистых) сталей горячекатаные, обточенные на линии Ландграф.  
**STEEL MAKING PROCESS: EAF+AOD**  
**СПОСОБ ВЫПУСКА:** Электродуговая печь+АКР  
 Round 5.250in/133.35 mm L=5.650m/18.525ft L=5.650m/18.525ft L=5.650m/18.525ft  
 Grade: 316/316L/1.4401/1.4404

QUANTITY:  
 (number of pcs)  
 1bund Q-4233 1b/1920 kg  
 1bund Q-1411 1b/640 kg  
 1bund Q-1411 1b/640 kg

Delivery condition  
 solution annealed : 1900° F(1040°C) water 30minutes  
 термодобработка: закалка в воду

ANALYSIS, %	C	Si	Mn	P	S	Cr	Ni	Mo	Al	Cu	V	W	Ti	Co	Nb	N	Sn	B
REQUIRED	<.030	<1,00	1.20-2.00	<.040	.015-.030	16.50-18.00	10.00-13.00	2.00-2.50	<.10	<.40	<.10	<.20	<.15	<.40	<.20	<.10		
CAST № A09920	.019	.51	1.41	.037	.023	17.25	10.16	2.02	.077	.28	.05	.05	.005	.14	.01	.032	.008	.0022

DIN EN 10002-1, ASTM A370-09

MECHANICAL PROPERTIES	Yield Strength, (N/mm <sup>2</sup> ) R0.2% R 1.0%	Tensile Strength, (N/mm <sup>2</sup> ) Rm	Elongation		Reduction of area, Z, % L	Brinell Hardness HB	Impact strength, KV, J	
			A5% L Q	In 2 inches (50mm) or 4D, min, % L			L	Q
REQUIRED	205	240	40 -	40	50	140-217	100	-
EFFECTIVE	288 291	320 323	60 - 60 -	59 59	79 79	167 167	211 211 211 209 209 209	-

Mechanical properties tested in state of delivery

US - testing	yes	Results: ASTM A388/A388M-FBH1/8", EN 10308 type 1a; class 3: OK
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Radiation free, mercury free. No Weld or Weld repair.

Date: 31.05.2012  
 Department: V. Kapalceva  
 Zaporozhye  
 Melted and Produced in Ukraine.  
 MELTED and MANUFACTURED  
 PrJSC "Dniprospektstal"  
 Phone number +380612834255  
 e-mail: info@dss.com.ua  
 http://www.dss-ua.com

Quality assurance  
 Signed:

Provided by CPA  
 www.flowconditioner.com, info@cpa.ca

P.O.# 6267 Part # 03-SSRVN-RF-316SS Desc: 31CPA FMX01 Mixer

SSRVN, AUSA RF 316SS