



C214817

Q# 5342 / 1531

PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE

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|  | <p>Contract No. : 20002 TECHN.PROTOCOL № 390-11 SPEC.№ 8683/PO43415-ED DIN EN 10088-3-05,DIN EN 10272-08,AD2000-Merkblatt W2;AD 2000-Merkblatt 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 5653F-07;ASTM A193/A193M-10GR B8M,CL1(EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8,CL 1(EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10</p> | <p>Sheets. Sheet: INSPECTION CERTIFICATE EN10204/3.1 Nr. 333373 PLANT ORDER № 8014908683</p> |
|  GMS Certified | <p>CUSTOMER DSS INTERNATIONAL SA Switzerland</p> | <p>PRODUCT DESCRIPTION Bars and rods of corrosion-resistant (stainless) steel hot rolled, peeled on Landgraf line. Прутки из коррозионностойких (нержавеющих) сталей горячекатаные, обточенные на линии Ландграф. STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПЛАВКИ: Электродуговая печь+АКР Round 3.750in/95.25 mm L=4.150m/13.607ft L=4.110m/13.475ft L=5.590m/18.328ft L=5.590m/18.328ft Grade: 316/316L/1.4401/1.4404</p> |
| | | <p>QUANTITY: (number of pcs) 1bund Q-538 lb/244 kg 1bund Q-534 lb/242 kg 1bund Q-4308 lb/1954 kg 1bund Q-728 lb/330 kg</p> |
| | | <p>Delivery condition solution annealed :1900°F(1040°C)water 30minutes термообработка:закалка в воду</p> |

| 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 № A05895 | .017 | .43 | 1.30 | .040 | .025 | 16.89 | 10.41 | 2.07 | .08 | .12 | .05 | .15 | .005 | .12 | .011 | .030 | .008 | .0029 |

DIN EN 10002-1,ASTM A370-09


| MECHANICAL PROPERTIES | Yield Strength, (N/mm ²) R0.2% R 1.0% | | Tensile Strength, Rm, (N /mm ²) | Elongation | | Reduction of area, Z % L | Brinell Hardness HB | Impact strength, KV, J | |
|-----------------------|--|------------|---|-------------------------|---------------------------------------|-----------------------------|---------------------|----------------------------|---|
| | L | Q | | A ₅ % L Q | In 2 inches (50mm) or 4D, min, % L | | | L | Q |
| REQUIRED | 205 | 240 | 515-690 | 40 - | 40 | 50 | 140-217 | 100 | - |
| EFFECTIVE | 305 300 | 347 346 | 558 553 | 60 - 59 - | 58 58 | 77 77 | 163 163 | 202 202 202 208 208 208 | - |

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 thin thick thin thick
 3.0 2.0 2.0 1.0 0.0 0.0 1.0 1.0
 ICC-ASTM A262-08 (practice E)-test: O.K.
 Dimension/surface defects test, anti-mixing test – OK
 We acknowledge that the delivered products conform to the requirements of the order

Mechanical properties tested in state of delivery

US - testing yes Results: ASTM A388/A388M-FBH1/8";EN 10308 type 1a;class 3:OK

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

Manufacturer:PrJSC DNIPROSPETSSTAL
 Date: 03.05.18 **Manager of quality assurance department - V. Kapaieva**
 Signed: 
 Zaporozhye
 Made in Ukraine.

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