


0154387


PJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYYE, UKRAINE

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|  | Contract No.: 20002 TECHN.PROTOCOL № 390-11 SPEC.№0374/P042646 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 5639H-07; AMS 5647H-07; ASTM A193/A193M-10GR B8,CL1; ASME SA-193/SA-193M-10 GR B8,CL 1; ASTM A320/A320M-08 GR B8,CL 1; ASME SA-320/SA-320M-10 GR B8,CL1; NACE MR 0175-03; NACE MR 0103-10 | Sheets:4 Sheet: 3 INSPECTION CERTIFICATE EN10204/3.1 Nr.305522 PLANT ORDER № 8014900374 |
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|  QMS Certified | CUSTOMER DSS INTERNATIONAL SA Switzerland | 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+AOP Round 7.000in/177.80 mm L=4.990 m/16.361 ft Grade: 304/304L/1.4301/1.4307 | QUANTITY: (number of pcs) 1bund Q-6565 lb/2978 kg Delivery condition solution annealed :1900° F(1040°C)water 30minutes термообработка:закалка в воду |
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| 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 | 18.00-19.50 | 8.00-10.00 | <.30 | <.10 | <.40 | <.10 | <.20 | <.15 | <.40 | <.20 | <.10 | | |
| CAST № A03195 | .023 | .37 | 1.61 | .036 | .023 | 18,68 | 8.32 | .27 | .063 | .24 | .07 | .09 | .005 | .11 | .016 | .050 | .013 | .001 |

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| DIN EN 10002-1, ASTM A370-09 | | | | | | | | | | TECHNICAL REQUIREMENTS: Macrostructure – GOOD GRAIN SIZE : 5 to ASTM E 112-96(2004) Nonmetallic inclusions ASTM E 45-05 (Method A) <table style="width:100%; text-align: center;"> <tr> <td>A</td><td>B</td><td>C</td><td>D</td><td></td><td></td><td></td><td></td> </tr> <tr> <td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td><td>thin</td><td>thick</td> </tr> <tr> <td>2.0</td><td>1.5</td><td>2.0</td><td>1.5</td><td>0.0</td><td>0.0</td><td>1.0</td><td>1.0</td> </tr> </table> 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 | | | | | | | | | | A | B | C | D | | | | | thin | thick | thin | thick | thin | thick | thin | thick | 2.0 | 1.5 | 2.0 | 1.5 | 0.0 | 0.0 | 1.0 | 1.0 |
| A | B | C | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| thin | thick | thin | thick | thin | thick | thin | thick | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 1.5 | 2.0 | 1.5 | 0.0 | 0.0 | 1.0 | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MECHANICAL PROPERTIES | Yield Strength, (N/mm ²) R0.2% R 1.0% | | Tensile Strength, Rm, (N /mm ²) | Elongation As% L Q | | In 2 inches (50mm) or 4D,min,% L | Reduction of area, Z % L | Brinell Hardness HB | Impact strength, KV, J L Q | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REQUIRED | 205 | 230 | 515-700 | 45 | 35 | 40 | 50 | 140-223 | 100 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EFFECTIVE | 345 343 | 377 375 | 608 610 | 60 | 60 59 | 59 | 75,8 79 | 174 174 | 276 271 273 270 272 271 | 91 93 88 87 85 86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| US - testing | yes | Results: ASME SA-388/SA-388M-10(ASTM A 388/A 388M-09)-FBH1/8";EN 10308 type 1a;class 3:OK | Manufacturer: PJSC DNIPROSPETSSTAL Date: 17.03.16 Manager of quality assurance department - V. Kapaieva Signed:  Zaporozhye Made in Ukraine. |
| Radiation free; mercury free. No Weld or Weld repair. | | | |