


0048009

96816

| | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---|---|-----------------|----------------------|---------------------|--|-------------|-----------|------|------|---|------|------|------|------|----------------|
|  | | DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, ZAPOROZHYE 69008, UKRAINE | | | | | | | | | | | | | | | | | |
| Contract No.: 50005 TECHN. PROTOCOL № 210-11 SPEC. № 5819/P01441 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-10 GR B8M, CL 1 (EXC PAR 7.2); ASME SA-193/SA-193M-10 GR B8M, CL 1 (EXC PAR 7.3); NACE MR 0175-03; NACE MR 0103-10 | | EN10204/3.1 Sheets: 6 Sheet: 5 QUALITY CERTIFICATE Nr.251481 PLANT ORDER № 8015203819 | | | | | | | | | | | | | | | | | |
| 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 (нержавеющих) сталей горячекатаные обточенные на линии Ландграф STEEL MAKING PROCESS: EAF+AOD СПОСОБ ВЫПУСКА: Электродуговая печь+AOP Round 6.25in/158.75 mm L=3.00-4.90m/9.84-16.07ft Grade: 316/F316/316L/F316L | | | | | | | | | | QUANTITY: 1bund Q-3258/19147kg (number of pcs) 1bund Q-3029/12134kg | | | | | |
| ANALYSES, % | | | | 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-.050 | 16.00-18.00 | 10.00-14.00 | 2.00-3.00 | <.10 | <.40 | <.10 | <.20 | <.15 | <.40 | <.20 | <.10 |
| HEAT № 96816 | | | | .022 | .32 | 1.39 | .034 | .024 | 17.09 | 10.12 | 2.05 | .068 | .26 | .04 | .07 | .082 | .08 | .01 | .030 |
| MECHANICAL PROPERTIES | | | | Yield Strength, Ksi(N/mm ²) Re (R _{e2}) | Tensile Strength, Ksi,kg (N/mm ²) | Elongation A, % | Reduction of area, % | Brinell Hardness HB | 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; 3.0 2.0 0.0 0.0 ; 1.0 1.0 ICC-ASTM A262-08(practice E)-test: O.K. „Dimension/surface defects test, anti-mixing test - O.K.“ Ratio of reduction - >20:1 | | | | | | | | | | |
| REQUIRED | | | | 30(205) | 75 (515) | 45 | 50 | 140-223 | 100 | | | | | | | | | | |
| EFFECTIVE | | | | 37.1(255) | 79.4(546) | 63 | 79 | 159 | 204 | | | | | | | | | | |
| Mechanical properties tested in state of delivery | | | | | | | | | | | | | | | | | | | |
| US - testing | | yes Results: SEP 1921, group 3/class Dd - OK | | Manufacturer: PJSC DNIPROSPETSSTAL Date: 24.08.11 Signed: | | | | | | | | | | | | | | | |
| Radiation free; mercury free. No Weld or Weld repair. | | | | Zaporozhye Made in Ukraine. | | | | | | | | | | | | | | | |



Lnr.: 1
 SO#: 5046200
 Heat#: 96816
 Qty: 2653
 Date: 2/1/2012 To: ASA ALLOYS EDMONTON
 Part: 11400255
 P... r...274