



PrJSC DNIPROSPETSSTAL, YUZHNOYE SHOSSE 81, 69008 ZAPOROZHYE, UKRAINE																																																																												
 <p>Contract No.: 20002                      TECHN.PROTOCOL № 390-11 SPEC. № 3083/P931996-842                      DIN EN 10088-3-05, DIN EN 10272-08, DIN EN 10222-5-00, AD2000-Merkblatt W2; AD 2000-Merkblatt W10; ASTM A182/A182M-10; ASME SA-182/SA-182M-0; 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; 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 B8, CL1; NACE MR 0175-03; NACE MR 0101-10</p>										<p>Sheets: 5 Sheet: 1                      INSPECTION CERTIFICATE EN10204/3.1 Nr.347744                      PLANT ORDER № 8081903083</p>																																																																		
 <p>CUSTOMER                      DSS INTERNATIONAL                      SA Switzerland                      Purchase number 509378</p>					<p>PRODUCT DESCRIPTION                      Bars and rods of corrosion-resistant (stainless) steel forged, peeled. Прутки из коррозионностойких (нержавеющих) сталей кованные, обточенные.                      STEEL MAKING PROCESS: EAF+AOD                      СПОСОБ ВЪИЛІАВКІ: Електродугова печь+АКР                      Round 8.00in/215.90 mm L=15.836 ft/4.830m L=14.557 ft/4.400m L=14.525 ft/4.430m                      Grade: 316/316L/1.4401/1.4404</p>										<p>QUANTITY:                      1bund Q-3232 lb/1466 kg                      1bund Q-2967 lb/1346 kg                      (number of pcs)                      1bund Q-2959 lb/1342 kg</p>																																																													
<p>Delivery condition                      solution annealed : 1920° F(1050° C) water 25minutes                      термообработка: закалка в воду</p>																																																																												
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<p>DIN EN 10002-1, ASTM A370-09</p> <table border="1"> <thead> <tr> <th rowspan="2">MECHANICAL PROPERTIES</th> <th colspan="2">Yield Strength, (N/mm<sup>2</sup>) R0.2% R1.0%</th> <th rowspan="2">Tensile Strength, Rm, (N/mm<sup>2</sup>)</th> <th colspan="2">Elongatio-1</th> <th rowspan="2">Reducti on of area, Z% L</th> <th rowspan="2">Brinell Hardness HB</th> <th colspan="2">Impact strength, KV J</th> </tr> <tr> <th>205</th> <th>240</th> <th>A5% L Q</th> <th>In 2 inches (50mm) or 4D, min. % L</th> <th>L</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>REQUIRED</td> <td>205</td> <td>240</td> <td>515-690</td> <td>45 35</td> <td>40</td> <td>50</td> <td>140-223</td> <td>100</td> <td>60</td> </tr> <tr> <td>EFFECTIVE</td> <td>288 290</td> <td>304 306</td> <td>559 559</td> <td>58 51 58 51</td> <td>5'' 5''</td> <td>73</td> <td>163 163</td> <td>200 200 200 198 198 198</td> <td>65 65 65 64 64 64</td> </tr> </tbody> </table>										MECHANICAL PROPERTIES	Yield Strength, (N/mm <sup>2</sup> ) R0.2% R1.0%		Tensile Strength, Rm, (N/mm <sup>2</sup> )	Elongatio-1		Reducti on of area, Z% L	Brinell Hardness HB	Impact strength, KV J		205	240	A5% L Q	In 2 inches (50mm) or 4D, min. % L	L	Q	REQUIRED	205	240	515-690	45 35	40	50	140-223	100	60	EFFECTIVE	288 290	304 306	559 559	58 51 58 51	5'' 5''	73	163 163	200 200 200 198 198 198	65 65 65 64 64 64	<p>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 B)-test: O.K.                      Dimension/surface defects test, anti-mixing test – OK                      We acknowledge that the delivered products conform to the requirements of the order/Подтверждаем, что поставленная продукция соответствует требованиям заказа                      Ratio of reduction-8.3:1</p>																														
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<p>Mechanical properties tested in state of delivery</p>										<p>Manufacturer: PrJSC DNIPROSPETSSTAL                      Date: 26.07.19 Manager of quality assurance department - V. Kapaieva                      Signed:                      Zaporozhye                      Made in Ukraine.</p>																																																																		
<p>US - testing</p>					<p>yes</p>					<p>Results: ASTM A383/A388M-FBH1/8"; EN 10228-4 type 1a; class 3:OK</p>					<p><i>[Signature]</i></p>																																																													
<p>Radiation free; mercury free. No Weld or Weld repair.</p>																																																																												

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 SHIP # 20975

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