

F57331

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|--|---|---------------------|-------------------|
|  <p>Bollinghaus Steel, SA<br/>DIN EN ISO 9001:2008<br/>TÜV CERT No. 01 100 030458</p> | Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade |                     | No.: / Nr.: /Nr.: |
|  | EN 10204:2004 / 3.1   |                     | 0000113243        |
|  | Unsere innere Verweisung /Our Int. Ref/ N/ ref int            | Datum / Date / Data |                   |
| 5600029066 000070  |   | 01.03.2016          |                   |

**Normen / Standards / Normas**

W.Nr. 1.4401/1.4404 acc. to BS EN 10088-3:2014, BS EN 10272:2008-01, AISI 316/316L, acc. to ASTM A479/A479M-16, A182/A182M-15, A320/A320M-15, A276/A276M-16, but with size tolerances of -0 / +1 mm, "Improved Machinability", I.C.C. Tested to ASTM A262-15 Practice E, NACE MR0175, NACE MR0103, DIN 17440, ASME SA182/SA 182M, SA276, SA479/SA479M, EN 10058:2003, EN 10163-2 class B, Sulphur Content 0.020% - 0.030%, Max. Hardness 180 HB  
Heat treatment soaking time 3h

|  |   |
|--|---|
| <b>Kunde / Customer / Cliente</b><br>Offshore Stainless Supplies Ltd.<br>Toll Point, Lichfield Road<br>WS8 6JZ West Midlands | <b>Endgültiger Kunde / Final Customer / Cliente Final</b><br>Offshore Stainless Supplies Ltd.<br>Toll Point, Lichfield Road<br>WS8 6JZ Brownhills |
|--|---|

|                                       |   |
|---------------------------------------|---|
| Bestell Nr./Order Nr./ Enc.Nr. 009897 | Bestell Nr./ Order Nr./ Enc.Nr. 009897.17 |
|---------------------------------------|---|

|  |  |                                      |
|--|--|--------------------------------------|
| <b>Produktgruppe / Product Group / Grupo Produto</b><br>AISI 316/L FLAT 65 X 52,5 MM | <b>Gewicht / Weight / Peso</b><br>2.363 kg | <b>Bunde / Bundle / Atados</b><br>02 |
|--|--|--------------------------------------|

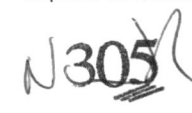
|   |  |
|---|--|
| <b>Werkstoff-Nr. / Material-no. / Qualidade</b><br>1.4404 | <b>Werkstoff-Normbezeichnung / Material standard grade / Norma do material</b><br>X 2 CrNiMo 17-12-2 |
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**Beschreibung / Description / Descrição**

Stainless steel flat bars, hot rolled, annealed, pickled, straightened.

|  |  |   |   |       |    |       |   |       |    |       |    |        |    |        |  |          |          |       |       |       |       |       |       |       |       |       |       |        |        |        |         |         |       |       |       |       |       |       |       |       |       |       |       |       |   |   |
|--|--|---|---|-------|----|-------|---|-------|----|-------|----|--------|----|--------|--|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|---|
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| <b>Proben Nr. / Test no. / Amostra no.</b> | <b>DIN EN 10045</b>                            |  |  |   | <b>DIN EN ISO 6892-1</b>             |  |  |  |
|  | Kerbschlagarbeit<br>Impact Test<br>Resiliência | Streckgrenze<br>Yield point<br>Tensão limite | Dehngrenze<br>1% point<br>Limite de extensão | Zugfestigkeit<br>Tensile strength<br>Tensão de rotura | Dehnung<br>Elongation<br>Alongamento | Einschnürung<br>Reduction of area<br>Coef. Estricção |  |  |
|  | {Charpy V}                                     | Rp 0,2 %                                     | Rp 1,0%                                      | Rm  | A {A5/4D}                            | Z  |  |  |
|  | [ J ]  | [MPa]  | [MPa]  | [MPa]   | [ % ]                                | [ % ]  |  |  |
| 3051142.02.01                              | 230  | 298  | 354  | 632   | 65.4                                 | 75.9   |  |  |
| 3051142.02.02                              | 228  | 306  | 362  | 640   | 62.1                                 | 71.6   |  |  |

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|---|--|--|--|
| <b>Visuelle Kontrolle / Visual inspection / Inspeção visual</b><br><input checked="" type="checkbox"/> OK                     | <b>DIN EN ISO 6506-1</b><br>Härte / Hardness / Dureza<br>148 [ HB ]  | <b>DIN EN ISO 3651 - 2A</b><br>Korrosionsabständigkeit / IC Test / Corrosão Intercristalina<br><input checked="" type="checkbox"/> OK  | Wärmebehandlung / Heat treatment / Tratamento térmico<br><br>Solution annealing 1050 °C<br><br>(Water quenched)<br><b>FLOW TECHNOLOGY LTD</b><br>TEST CERTIFICATE<br>VERIFIED TRUE<br>COPY OF ORIGINAL |
| <b>DIN EN 10058</b><br>Maßkontrolle / Dimensional inspection / Inspeção dimensional<br><input checked="" type="checkbox"/> OK | Korngröße / Grain size / Tamanho de grão<br>-  | Werksachverständiger / Quality Control Representative / Inspetor da Qualidade<br><br><br>Nuno Silva (Ω - NS) |  |
| Verwechslungsprüfung / Test of identity / Teste de identificação<br><input checked="" type="checkbox"/> OK                    | Makroskopische Untersuchung / Macrographic test<br><br>Material free from segregation defects.<br><input checked="" type="checkbox"/> OK | <b>Bollinghaus Steel, SA</b>   |  |

**Bemerkungen / Remarks / Observações**

Country of origin: Portugal. No weld repair done.  
Material is free of mercury and radiation contamination.  
Certified acc. PED 97/23/EC-EN 764-5 and AD 2000 W0  
Notified Body 0035 - TÜV Rheinland Industrie Service GmbH  
01 202 926/Q-02 0040

Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht.  
We confirm that this material meets the specification according to the mentioned standards.  
Confirmamos que este material respeita as especificações de acordo com as normas referidas.