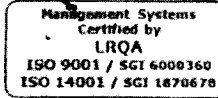


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ACEROS INOXIDABLES

OLARRA

OLARRA U.K. LTD.  
 FOREST PARK - CLEOBURY MORTIMER  
 NR KIDDERMINSTER - DY14 9BD - ENGLAND

Trade Mark - Zeichen des Lieferwerkes  
 Anagrama del suministrador



Works Inspector Stamp - Werkssachverständiger  
 Sello del Inspector



|  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
|--|---------------------------------|------------------------|---|---|--|---|--------|--|--|-------------------------|------|---------------------------|---------|
| Certificate type - APZ Nach<br>Certificado tipo  |                                 | EN 10204/3.1           |   | Certificate n° - Prüf-Nr<br>Certificado n°  |  | 201599  |        | Date - Datum - Fecha<br>23 - 07 - 2014     |  |                         |      |                           |         |
| Our order N°<br>Werks - Nr<br>N° de Referencia   |                                 | 546895                 |   | Heat<br>Schmelze<br>Colada                  |  | 377119  |        | Your order N°<br>Bestell - Nr<br>Pedido N° |  |                         |      |                           |         |
| Steel Grade<br>Werkstoff<br>Calidad  |                                 | 316-S-11 AV            |   | According to<br>Entsprechend<br>Corresponde |  | BS 970:PART 3:1991.   |        |  |  |                         |      |                           |         |
| Shape and Size - Gegenstand<br>Perfil y dimensión  |                                 | HEXAGON 34,93 mm       |   | Tolerance - Toleranz<br>Tolerancia          |  | h 11 / DIN 176  |        | Bundles<br>Bunde<br>Bultos                 | 7  | Bars<br>Stäbe<br>Barras | 142  | Weight<br>Gewicht<br>Peso | 3768 Kg |
| Requirements - Anforderungen - Exigencias  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| EN 10.088-3.2005. Anhang I Absatz 4.3 Certificate/Zertifikat Nr. 348/2008/MUC  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| EN 10.272-2007.  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| ASTM A 182 / A 182M-13a.   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| ASTM A 479 / A 479M-13b.   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| ASTM A 276-13a.  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| ASME SA 479 / SA 479M-13   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| NACE MR-0175-2003/ISO 15156-3 2009.  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| SAE AMS 5653H-12.  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| 316S31AV-1.4404-1.4401-Type 316-Type 316L.   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| PED 97/23/EC, Annex I, Parag.4.3/DGR 97/23/EG  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| Melting process / Erschmelzungsart / Proceso de Fusión   |                                 |                        |   |   | Heat treatment / Wärmebehandlung / Tratamiento térmico |   |        |  |  |                         |      |                           |         |
| E.A.F. / A.O.D.  |                                 |                        |   |   | 1060C 4H/Std WATER/WASSER/AGUA                         |   |        |  |  |                         |      |                           |         |
| Solution annealed/Abgeschreckt/Hipertemple-Cold drawn/Gezogen/Estirado-  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| Test results - Ergebnis der Prüfungen - Resultados de los ensayos  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| Dimension of Specimen<br>Abmessungen des Probestabes<br>Medida de las probetas   |                                 | Rp0.2%<br>N/mm2<br>MPA | Rp 1%<br>N/mm2<br>MPA   | Rm<br>N/mm2<br>MPA                          | A<br>%L 5D   | A<br>%L 4D  | Z<br>% | Hardness<br>Härte<br>HBw                   | Impact test / Kerschlag / Resiliencia<br>ISO V Jules |                         |      |                           |         |
| RD. 10,00 mm.  |                                 | Min                    | 325   | 375   | 550  | 20  |        |  |  |                         |      |                           |         |
|  |                                 | Max.                   |   |   |  |   |        |  |  |                         |      |                           |         |
| Temperature °C<br>20   | Spec. N°<br>Probe Nr.<br>Pro N° | 1                      | 413   | 498   | 612  | 42  | 45     | 71   | 187  |                         |      |                           |         |
|  | C                               | Si                     | Mn  | P   | S  | Cr  | Mo     | Ni   | Cu   | N                       | Co   |                           |         |
| Min.   |                                 |                        |   |   |  | 16,50   | 2,00   | 11,00                                      |  |                         |      |                           |         |
| Max.   | 0,030                           | 1,00                   | 2,00  | 0,045                                       | 0,030  | 18,50   | 2,50   | 14,00                                      | 0,70   |                         |      |                           |         |
|  | 0,019                           | 0,36                   | 1,77  | 0,033                                       | 0,027  | 17,05   | 2,04   | 11,10                                      | 0,37   | 0,0255                  | 0,12 |                           |         |
| Visual and dimensional inspection<br>Besichtigung und Ausmessung<br>Control visual y dimensional   |                                 |                        | Radioactivity inspection<br>Radioaktivitätskontrolle<br>Control de Radioactividad |   |  | Antimixing test<br>Spektroskopverwechslungspr<br>Antimezcla |        |  | Grain Size<br>Korngröße<br>Tamaño de grano           |                         |      |                           |         |
| O.K.   |                                 |                        | O.K.  |   |  | O.K.  |        |  |  |                         |      |                           |         |
| Remarks - Bemerkungen - Observaciones  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| IC test acc./IK prüfung nach ASTM A 262 E.02. OK   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| <div style="border: 2px solid red; padding: 5px; display: inline-block;"> <p style="color: red; margin: 0;">FLOW TECHNOLOGY LTD</p> <p style="color: red; margin: 0;">TEST CERTIFICATE</p> <p style="color: red; margin: 0;">VERIFIED TRUE</p> <p style="color: red; margin: 0;">COPY OF ORIGINAL</p> </div> |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| <p>EDV / EDP<br/>Acc. EN 10.204<br/>Alfredo Molina<br/>Certification<br/>Mng.</p> <p>Works Inspector<br/>Der Werkssachverständige<br/>Inspector de fábrica</p>   |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| F9840  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |
| 1/2" NPT FEM X 1/2" NPT MALE HEX ADAPTOR 10K 316L  |                                 |                        |   |   |  |   |        |  |  |                         |      |                           |         |