

Larrondo LOIU (VIZCAYA) España
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Management Systems
Certified by
LRQA
ISO 9001 / SGI 6000360
ISO 14001 / SGI 1870678

FLOW TECHNOLOGY LTD

**TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINAL**

ACEROS INOXIDABLES

OLARRA

**OLARRA U.K. LTD.
FOREST PARK - CLEOBURY MORTIMER
NR KIDDERMINSTER - DY 14 9BD - ENGLAND**

Trade Mark - Zeichen des Lieferwerkes
Anagrama del suministrador



Works Inspector Stamp - Werkssachverständiger
Sello del Inspector



| | | | | | | | | | | |
|--|---------------------------------|---|---|--|-------------------------|--|--------|--------------------------|--|---|
| Certificate type - APZ Nach Certificado tipo EN 10204/3.1 | | Certificate n° - Prüf-Nr Certificado n° 332475 | | Date - Datum - Fecha 17 - 11 - 2017 | | | | | | |
| Our order N° Werks - Nr 630964 N° de Referencia | | Heat Schmelze 434415 Colada | | Your order N° Bestell - Nr OL7769 Pedido N° | | | | | | |
| Steel Grade Werkstoff X-2-CRNIMO-17-12-2 / 1.4404 MECAMAX Calidad | | | According to Entsprechend EN 10.272-2007. Corresponde | | | | | | | |
| Shape and Size - Gegenstand Perfil y dimensión HEXAGON 20,64 mm | | Tolerance - Toleranz Tolerancia h11 /DIN 176 /EN 10278 | | Bundles Bunde 5 Bultos | Bars Stäbe Barras | | | | | |
| | | | | Weight Gewicht Peso 2632 Kg | | | | | | |
| Requirements - Anforderungen - Exigencias | | | | | | | | | | |
| EN 10.088-3.2014. ASTM A 276/A 276M-17. NACE MR-0175/ISO 15156-3 2015. NACE MR-0103/ISO 17945-2015. Type 316L. PED 2014/68/EU, Annex I, Parag.4.3/DGR 2014/68/EU Anhang I Absatz 4.3 Certificate/Zertifikat Nr. 348/2008/MUC | | | | | | | | | | |
| Melting process / Erschmelzungsart / Proceso de Fusión E.A.F. / A.O.D. | | | Heat treatment / Wärmebehandlung / Tratamiento térmico 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 Abmessungen des Probestabes Medida de las probetas | | Rp0,2% N/mm2 MPA | Rp 1% N/mm2 MPA | Rm N/mm2 MPA | A %L 5D | A %L 4D | Z % | Hardness Härte HBw | Impact test / Kerschlag / Resiliencia ISO V Jules | |
| RD. 10,00 mm. | | Min. 200 | 235 | 500 | 20 | | | | 100 | |
| | | Max. | | 900 | | | | 315 | | |
| Temperature °C 20 | Spec. N° Probe Nr. Pro N° | 1 613 | 697 | 724 | 28 | | 58 | 223 | 164/166/167 | |
| | 2 615 | 699 | 726 | 27 | | | 57 | 223 | 162/164/165 | |
| | | | | | | | | | | |
| | C | Si | Mn | P | S | Cr | Mo | Ni | N | Co |
| Min. | | | | | | 16,50 | 2,00 | 10,00 | | |
| Max. | 0,030 | 1,00 | 2,00 | 0,045 | 0,030 | 18,50 | 2,50 | 13,00 | 0,1000 | |
| | 0,024 | 0,35 | 1,52 | 0,033 | 0,026 | 16,65 | 2,01 | 10,00 | 0,0398 | 0,15 |
| Visual and dimensional inspection Besichtigung und Ausmessung O.K. Control visual y dimensional | | Radioactivity inspection Radioaktivitätskontrolle O.K. Control de Radioactividad | | Antimixing test Spektroskop Verwechslungspr O.K. Antimezcla | | Grain Size Korngröße Tamaño de grano | | | | |
| Remarks - Bemerkungen - Observaciones | | | | | | | | | | |
| IC test acc./IK prüfung nach EN ISO 3651-2/98 Met.A. OK | | | | | | | | | | |
| F13184 3/8" High Pressure Male x 1/4" High Pressure Female Adaptor 60K 316L | | | | | | | | | | |
| | | | | | | | | | | EDV / EDP Acc. EN 10.204 Marian Tejedo Quality Mng. Works Inspector Der Werkssachverständige Inspector de fábrica |

We hereby certify that material described herein complies with the requirements agreed on the order.

Firmado digitalmente por / Signed digitally by:
ACEROS INOXIDABLES OLARRA SA - CIF A48663546
Fecha / Date: 17-11-2017 09:18