



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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° | | 292821 | | Date - Datum - Fecha 22 - 11 - 2016 | | |
| Our order N° Werks - Nr N° de Referencia | | 606529 | | Heat Schmelze Colada | | 420539 | | Your order N° Bestell - Nr Pedido N° | | |
| Steel Grade Werkstoff Calidad | | 316-S-11 AV | | According to Entsprechend Corresponde | | | | | | |
| Shape and Size - Gegenstand Perfil y dimensión HEXAGON 27,94 mm | | Tolerance - Toleranz Tolerancia h 11 /DIN 176 | | Bundles Bunde Bultos | | 2 | | Bars Stäbe Barras | | |
| | | | | | | 78 | | Weight Gewicht Peso | | |
| | | | | | | | | 1289 Kg | | |
| Requirements - Anforderungen - Exigencias | | | | | | | | | | |
| EN 10.088-3.2014. EN 10.272-2007. ASTM A 182 / A 182M-15. ASTM A 479 / A 479M-15. ASTM A 276-16a. ASME SA 479 / SA 479M-15 NACE MR-0175/ISO 15156-3 2009. SAE AMS 5653H-12. 316S31AV-1.4404-1.4401-Type 316-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 | | | | 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 Abmessungen des Probestabes Medida de las probetas | | Rp0,2% | Rp 1% | Rm | A | A | Z | Hardness | Impact test / Kerschschlag / Resiliencia | |
| RD. 10,00 mm. | | N/mm2 MPA | N/mm2 MPA | N/mm2 MPA | %L 5D | %L 4D | % | Härte HBw | ISO V Jules | |
| Min. | | 325 | 375 | 550 | 20 | | | | | |
| Max. | | | | | | | | | | |
| Temperature °C 20 | Spec. N° Probe Nr. 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 | 16,50 | 2,50 | 14,00 | 0,70 | |
| | 0,023 | 0,63 | 1,60 | 0,032 | 0,026 | 17,20 | 2,02 | 11,00 | 0,36 | 0,0245 0,19 |
| Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional | | | Radioactivity inspection Radioaktivitätskontrolle Control de Radioactividad | | | Antimixing test Spektrosk Verwechslungspr Antimezcla | | | Grain Size Korngröße Tamaño de grano | |
| O.K. | | | O.K. | | | O.K. | | | | |
| Remarks - Bemerkungen - Observaciones | | | | | | | | | | |
| IC test acc./IK prüfung nach ASTM A 262 E.14. OK Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK | | | | | | | | | | |
| F12780 7/8" JIC Swivel Female x 1/2" BSPP Cone Seat Male Adaptor 10K | | | | | | | | | | |
| EDV / EDP Acc. EN 10.204 Marian Tejedo Quality Mng. Works Inspector Der Werkssachverständige Inspector de fábrica | | | | | | | | | | |