



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° | | 354774 | | Date - Datum - Fecha 25 - 05 - 2018 | | | | | | | | | |
| Our order N° Werks - Nr N° de Referencia | | 660376 | | Heat Schmelze Colada | | 457036 | | Your order N° Bestell - Nr Pedido N° | | | | OL8447 | | | | | |
| Steel Grade Werkstoff Calidad | | | | | | 316-S-11 AV | | | | | | According to Entsprechend Corresponde | | BS 970:PART 3:1991. | | | |
| Shape and Size - Gegenstad Perfil y dimensión HEXAGON 27 mm | | | Tolerance - Toleranz Tolerancia h 11 /DIN 176 | | | Bundles Bunde Bultos | | 2 | | Bars Stäbe Barras | | 75 | | Weight Gewicht Peso | | 1168 Kg | |
| Requirements - Anforderungen - Exigencias | | | | | | | | | | | | | | | | | |
| EN 10.088-3.2014. EN 10.272-2016. ASTM A 182/A 182M-16. ASTM A 479 / A 479M-17. ASTM A 276/A 276M-17. ASME SA 479 / SA 479M-15 SAE AMS 5653H-12. NACE MR-0175/ISO 15156-3 2015. NACE MR-0103/ISO 17945-2015. NORSOK M-630 and MDS S01. | | | | | | 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 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 / Kersbschlag / Resiliencia ISO V Jules | | | | | | | | |
| RD. 10,00 mm. | | Min. | 325 | 375 | 550 | 20 | | | | | | | | | | | |
| | | Max. | | | | | | | | | | | | | | | |
| Temperature °C 20 | Spec. N° Probe Nr. Pro N°. | 1 | 404 | 486 | 595 | 43 | 46 | 72 | 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 | | | | | | | | |
| | 0,013 | 0,55 | 1,63 | 0,033 | 0,028 | 17,20 | 2,07 | 11,10 | 0,55 | 0,0170 | 0,38 | | | | | | |
| 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 | | | 5-6 ASTM E-112-13 | | | | | |
| O.K. | | | O.K. | | | O.K. | | | | | | | | | | | |
| Remarks - Bemerkungen - Observaciones | | | | | | | | | | | | | | | | | |
| IC test acc./IK prüfung nach ASTM A 262 E.15. OK Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK | | | | | | | | | | | | | | | | | |
| F14001 M24 x 1.5 Metric Male x Male Adaptor 10K (16s) | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 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. | | | | | | | | | | | | | | | | | |