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Management Systems
Certified by
LRQA
ISO 9001 / SGI 6000360
ISO 14001 / SGI 1870678

ACEROS INOXIDABLES

OLARRA

OLARRA U.K. LTD.
FOREST PARK - CLEOBURY MORTIMER
NR KIDDERMINSTER - DY 149BD - 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° | 219248 | Date - Datum - Fecha | 26 - 01 - 2015 |
|---|--------------|--|--------|----------------------|----------------|

| | | | | | |
|--|--------|----------------------------|--------|--|--------|
| Our order N° Werks - Nr N° de Referencia | 554789 | Heat Schmelze Colada | 381186 | Your order N° Bestell - Nr Pedido N° | OL6555 |
|--|--------|----------------------------|--------|--|--------|

| | | | |
|-------------------------------------|-------------|---|---------------------|
| Steel Grade Werkstoff Calidad | 316-S-11 AV | According to Entsprechend Corresponde | BS 970:PART 3:1991. |
|-------------------------------------|-------------|---|---------------------|

| | | | | | | |
|---|---|----------------------------|---|-------------------------|---------------------------|---------|
| Shape and Size - Gegenstand Perfil y dimensión HEXAGON 15,88 mm | Tolerance - Toleranz Tolerancia h 11 /DIN 176 | Bundles Bunde Bultos | 2 | Bars Stäbe Barras | Weight Gewicht Peso | 1040 Kg |
|---|---|----------------------------|---|-------------------------|---------------------------|---------|

Requirements - Anforderungen - Exigencias

| | |
|---|---|
| EN 10.088-3.2005. EN 10.272-2007. ASTM A 182 / A 182M-14a. ASTM A 479 / A 479M-14. ASTM A 276-13a. ASME SA 479 / SA 479M-13 SAE AMS 5653H-12. NACE MR-0175-2003/ISO 15156-3 2009. 316S31AV-1.4404-1.4401-Type 316-Type 316L. PED 97/23/EC, Annex I, Parag.4.3/DGR 97/23/EG | 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/Nipertemple-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 / Kernschlag / Resiliencia ISO V Jules | |
|--|---------------------------------|-----------------------|--------------------|------------|------------|--------|--------------------------|---|-----|
| RD. 10,00 mm. | Min. | 315 | 425 | 600 | 15 | | | | |
| | Max. | | | | | | | | |
| Temperature °C 20 | Spec. N° Probe Nr. Pro N° | 1 | 579 | 660 | 697 | 38 | 41 | 67 | 207 |

| | 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 | | |
| | 0,024 | 0,38 | 1,81 | 0,032 | 0,029 | 17,00 | 2,01 | 11,00 | 0,44 | 0,0225 | 0,16 |

| | | | | | | |
|--|------|---|------|--|------|--|
| Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional | O.K. | Radioactivity inspection Radioaktivitätskontrolle Control de Radioactividad | O.K. | Antimixing test Spektralk Verwechslungspr Antimezcla | O.K. | Grain Size Korngröße Tamaño de grano |
|--|------|---|------|--|------|--|

Remarks - Bemerkungen - Observaciones

IC test acc./IK prüfung nach ASTM A 262 E.13. OK
Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK

F11840
9/16" X 7/16" JIC SWIV FEM/MALE 10K 316L

EDV / EDP
Acc. EN 10.204
Alfredo Molina
Certification
Mng.

Works Inspector
Der Werkssachverständige
Inspector de fábrica