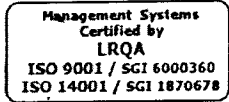


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ACEROS INOXIDABLES

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Trade Mark - Zeichen des Lieferwerkes
 Anagrama del suministrador

Works Inspector Stamp - Werksachverständiger
 Sello del Inspector 3

| | | | | | |
|---|--------------|---|--------|--|----------------|
| Certificate type - APZ Nach Certificado tipo | EN 10204/3.1 | Certificate n° - Prüf-Nr Certificado n° | 276462 | Date - Datum - Fecha | 09 - 06 - 2016 |
| Our order N° Werks - Nr N° de Referencia | 602745 | Heat Schmelze Colada | 411926 | Your order N° Bestell - Nr Pedido N° | OL7279 |
| 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 24 mm | Tolerance - Toleranz Tolerancia h 11 /DIN 176 | Bundles Bunde Bultos | 2 | Bars Stäbe Barras | 64 | Weight Gewicht Peso | 776 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 276-15. 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 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 E.A.F. / A.O.D. | Heat treatment / Wärmebehandlung / Tratamiento térmico 1060C 4H/Std WATER/WASSER/AGUA |
|--|--|

Solution annealed/Abgeschreckt/Hipertemple-Cold drawn/Gezogen/Estrado-

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 7.5D | Z % | Hardness Härte HBw | Impact test / Kersbschlag / Resiliencia ISO V Jules |
|--|------------------------|-----------------------|--------------------|------------|--------------|--------|--------------------------|--|
| | | | | | | | | |
| RD. 10,00 mm. | 325 | 375 | 550 | 20 | | | | |
| Temperature °C 20 | 435 | 524 | 639 | 40 | 43 | 72 | 207 | |
| Spec. N° Probe Nr. Pro N° | 1 | | | | | | | |

| | 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 | | |
| | 0,022 | 0,45 | 1,74 | 0,039 | 0,024 | 17,25 | 2,03 | 11,00 | 0,42 | 0,0245 | 0,17 |

| | | | |
|--|---|--|---|
| 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 | | EDV / EDP Acc. EN 10.204 Marian Tejedo Quality Mng. Works Inspector Der Werksachverständige Inspector de fábrica |
| IC test acc./IK prüfung nach ASTM A 262 E.14. OK Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK F11914 1/2" NPT X 7/8" JIC MALE X MALE ADAPTOR 10K 316L | | |