


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

C 230507

ACEROS INOXIDABLES
OLARRA

CANADIAN SPECIALTY METALS
 81 STEINWAY BLVD.
 ETOBICOKE-ONTARIO M9W 6H6 - CANADA

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° 375208 | | Date - Datum - Fecha 16 - 01 - 2019 | | | | | | | |
| Our order N° Werks - Nr N° de Referencia 676350 | Heat Schmelze Colada 471201 | Your order N° Bestell - Nr Pedido N° PO44379-ED | | | | | | | | | |
| Steel Grade Werkstoff Calidad AISI-316-L MECAMAX | | According to Entsprechend Corresponde ASTM A 479 / A 479M-17. | | | | | | | | | |
| Shape and Size - Gegenstand Perfil y dimensión ROUND 2"1/8 | Tolerance - Toleranz Tolerancia ASTM A 484 /TB.7 | Bundles Bunde 2 Bultos | Bars Stäbe Barras | Weight Gewicht Peso 2275 Lbs | | | | | | | |
| Requirements - Anforderungen - Exigencias | | | | | | | | | | | |
| ASME SA 479 / SA 479M-15 ASTM A 276/A 276M-17. ASTM A 182/A 182M-16. ASME SA 182 / SA 182M-15 ASTM A 193/A 193M-16.B8M CLASS.1. ASME SA 193/SA 193M-15 B8M CLASS.1. SAE AMS 5648L-11. SAE AMS 5653H-12. NACE MR-0175/ISO 15156-3 2015. AMS QQS 763D-15 COND.A. | | | EN 10.088-3.2014. EN 10.272-2016. Type 316-Type 316L-1.4401-1.4404. 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-Turned/Drehen/Torneado-Polished/Poliert/Pulido- | | | | | | | | | | | |
| Test results - Ergebnis der Prüfungen - Resultados de los ensayos | | | | | | | | | | | |
| Dimension of Specimen Abmessungen des Probestabes Medida de las probetas RD. 12,50 mm. | Rp0,2% KSI 25 | Rp 1% KSI 54 | Rm KSI 87 | A %L 5D 40 | A %L 4D 50 | Z % 72 | Hardness Härte HBw 170 | Impact test / Kerschschlag / Resiliencia ISO V ft. lb | | | |
| Temperature °C 20 | Spec. N° Probe Nr. Pro N° 1 | 47 | 54 | 87 | 52 | 72 | 170 | | | | |
| | C | Si | Mn | P | S | Cr | Mo | Ni | Cu | N | Co |
| Min. | | | | | | 16,00 | 2,00 | 10,00 | | | |
| Max. | 0,030 | 1,00 | 2,00 | 0,045 | 0,030 | 18,00 | 3,00 | 14,00 | | 0,1000 | |
| | 0,024 | 0,39 | 1,64 | 0,031 | 0,028 | 16,80 | 2,06 | 10,08 | 0,39 | 0,0370 | 0,19 |
| Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional O.K. | | Radioactivity inspection Radioaktivitätskontrolle Control de Radioactividad O.K. | | Antimixing test Spektroskop Verwechslungspr Antimezcla O.K. | | Grain Size Korngröße Tamaño de grano | | | | | |
| Remarks - Bemerkungen - Observaciones | | | | | | | | | | | |
| Free From Mercury contamination/Quecksilberfreiheit. No weld repair. 100% US test/US prüfung. OK Chemical composition according to MIL-S-7720A. | | | | | | | | | | 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: 30-04-2019 09:02

ANS