



Larrondo LOIU (VIZCAYA) España
 P.O. Box 1.323/48080 Bilbao
 Tel 34-(4) 4 71 13 00
 Fax:34-(4) 4 53 16 36

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

ACEROS INOXIDABLES

OLARRA

OLARRA U.K. LTD.
 FOREST PARK - CLEOBURY MÓRTIMER
 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°	195680	Date - Datum - Fecha	06 - 06 - 2014
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Our order N° Werks - Nr N° de Referencia	548583	Heat Schmelze Colada	374074	Your order N° Bestell - Nr Pedido N°	OL6404
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Steel Grade Werkstoff Calidad	316-S-11 AV	According to Entsprechend Corresponde	BS 970:PART 3:1991.
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Shape and Size - Gegenstand Perfil y dimensión	HEXAGON 27,94 mm	Tolerance - Toleranz Tolerancia	h 11 / DIN 176	Bundles Bunde Bultos	4	Bars Stäbe Barras	145	Weight Gewicht Peso	2405 Kg
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Requirements - Anforderungen - Exigencias
 Anhang I Absatz 4.3 Certificate/Zertifikat Nr. 348/2008/MUC

EN 10.088-3.2005.
 EN 10.272-2007.
 ASTM A 182 / A 182M-13a.
 ASTM A 479 / A 479M-13b.
 ASTM A 276-13a.
 ASME SA 479 / SA 479M-13
 NACE MR-0175-2003/ISO 15156-3 2009.
 SAE AMS 5653H-12.
 316S31AV-1.4404-1.4401-Type 316-Type 316L.
 PED 97/23/EC, Annex I, Paraq. 4.3/DGR 97/23/EG

Melting process / Erschmelzungsart / Proceso de Fusión	E.A.F. / A.O.D.	Heat treatment / Wärmebehandlung / Tratamiento térmico	1060C 4H/Std WATER/WASSER/AGUA
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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 / Kerschlag / Resiliencia ISO V Jules	
RD. 10,00 mm.	Min.	325	375	550	20				
	Max.								
Temperature °C 20	Spec. N° Probe Nr. Pro N°	1	367	407	566	44	47	72	166

	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		
	0.023	0.48	1.75	0.035	0.028	17.00	2.03	11.10	0.36	0.0235	0.15

Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional	O.K.	Radioactivity inspection Radioaktivitätskontrolle Control Radioactividad	O.K.	Antimony test Spektroskopische Untersuchung Antimonio	O.K.	Grain Size Korngröße Tamaño de grano
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Remarks - Bemerkungen - Observaciones

IC test acc./IK prüfung nach ASTM A 262 E.02. OK
 Crack control/Rissgeprüft acc. EN 10277-1 class 2. OK

FLOW TECHNOLOGY LTD
TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINAL

F9731
 1 1/16" JIC Swivel Female x 1/4" BSP P Male 15K

EDV / EDP
 Acc. EN 10.204
 Alfredo Molina
 Certification
 Mng.
 Works Inspector
 Der Werkssachverständiger
 Inspector de fábrica