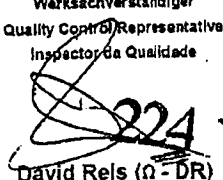


BOLLINGHAUS STEEL Bollinghaus Steel, SA DIN EN ISO 9001:2008 TÜV CERT No. 01 100 030458	Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade EN 10204:2004 / 3.1		No.: / Nr.: /Nr.: 0000096764				
	Unsere Innere Verweisung /Our Int. Ref/ N/ ref int 5600022367 000010		Datum / Date / Data 27.06.2014				
Normen / Standards / Normas							
grade 1.4404, acc to BS EN 10088-3:05, BS EN 10272:2008-01, NACE MR 0175, valid as Type 316, acc to ASTM A479/A479M-13, execution as per EN 10058:2003, but with size tolerances: width/thickness -0/+1.0 mm, surface condition as per EN 10163-2 class B							
Kunde / Customer / Cliente			Endgültiger Kunde / Final Customer / Cliente Final				
Bestell Nr./Order Nr./ Enc.Nr. 7511004448			Bestell Nr./ Order Nr./ Enc.Nr. 7511004448.1				
Prufgegenstand / Product / Produto		Gewicht / Weight / Peso		Bunde / Bundle / Atados			
AISI 316/L FLAT 52 X 39,7 MM		3.594 kg		04			
Werkstoff-Nr. / Material-no. / Qualidade 1.4404		Werkstoff-Normbezeichnung / Material standard grade / Norma do material X 2 CrNiMo 17-12-2					
Beschreibung / Description / Descrição							
Stainless steel flat bars, hot rolled, heat treated, pickled							
Schmelzen Nr. / Cast nr. / Fusão nr.		Chemische Analyse in % / Chemical composition in % / Análise química em %					
58140731		C: 0.022	Si: 0.540	Mn: 1.550			
EAF		Mo: 2.060	Co: 0.183	Cu: 0.370			
		P: 0.030	S: 0.024	Cr: 18.830			
		Ni: 10.100	N: 0.048	Ti: 0.004			
		W: -	V: -				
Proben Nr. / Test no. / Amostra no.		DIN EN 10045		ISO 6892-1			
		Kerbschlagarbeit / Impact Test / Resistência (Charpy V) [J]	Streckgrenze / Yield point / Tensão limite Rp 0.2 % [MPa]	Dehngrenze 1% point / Limite de extensão Rp 1,0% [MPa]	Zugfestigkeit / Tensile strength / Tensão de ruptura Rm [MPa]	Dehnung / Elongation / Alongamento A (A50-50mm) [%]	Einschnürung / Reduction of area / Coef. Estricção Z (A50-50mm) [%]
3038728.02.01		215	228	396	632	55.1	69.1
3038728.02.02		217	211	378	620	54.0	70.5
Visuelle Kontrolle / Visual inspection / Inspeção visual <input checked="" type="checkbox"/> OK		DIN EN 6506-1 Härte / Hardness / Dureza 173 [HB]		DIN 3651 - 2A Korrosionsbeständigkeit / IC Test / Corrosão intercrystalina <input checked="" type="checkbox"/> OK		Wärmebehandlung / Heat treatment / Tratamento térmico Solution annealing 1050 °C (Water quenched)	
EN 10058 Maßkontrolle / Dimensional inspection / Inspeção dimensional <input checked="" type="checkbox"/> OK		Korngröße / Grain size / Tamanho de grão -		Werkstoffverständiger / Quality Control/Representative / Inspector da Qualidade  David Rels (Ω-DR)			
Verwechslungsprüfung / Test of identity / Teste de identificação <input checked="" type="checkbox"/> OK		Makroskopische Untersuchung / Macrographic test <input checked="" type="checkbox"/> OK Material free from segregation defects.					
Bemerkungen / Remarks / Observações Country of origin: Portugal. No weld repair done. Material is free of mercury and radiation contamination. Certified acc. PED 97/23/EC-EN 764-5 and AD 2000 W0 Notified Body 0035 - TÜV Rheinland Industrie Service GmbH 01 202 928/Q-02 0040				Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht. We confirm that this material meets the specification according the mentioned standards. Confirmamos que este material respeita as especificações de acordo com as normas referidas.			
Bollinghaus Steel, SA							

129.A PP

F9738

1/2" NPT F/F/F FXD TEE 10K 316L

FLOW TECHNOLOGY LTD
 TEST CERTIFICATE
 VERIFIED TRUE
 COPY OF ORIGINAL