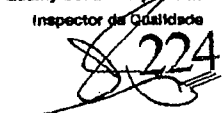

	Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade		No.: / Nr.: / Nr.:					
	EN 10204:2004 / 3.1		0000085381					
Böllinghaus Portugal Aços Especiais, SA DIN EN ISO 9001:2008 TÜV CERT No. 01 100 030458	Unsere Innere Verweisung /Our Int. Ref/ N/ ref int		Datum / Date / Data					
	5600017332 000010		14.12.2012					
Normen / Standards / Normas								
1.4401/1.4404 acc. to BS EN 10088-3:2005 "Improved Machinability" I.C.C. Tested to ASTM A262-10 Practice E, valid in dual certified as AISI 316/316L acc. to ASTM 276-10, ASTM A479/A479M-11, NACE MR 0175, NACE MR 0103.								
Kunde / Customer / Cliente			Endgültiger Kunde / Final Customer / Cliente Final					
Hi-Tech Special Steels Limited Rotherham Road S25 3RF Sheffield			Hi-Tech Special Steels Limited Rotherham Road S25 3RF Sheffield					
Bestell Nr./Order Nr./ Enc.Nr. 004234			Bestell Nr./ Order Nr./ Enc.Nr. 004234.04					
Prüfgegenstand / Product / Produto		Gewicht / Weight / Peso		Bunde / Bundles / Atados				
AISI 316L FLAT 40 x 27 mm		3,419 kg		03				
Werkstoff-Nr. / Material-no. / Qualidade		Werkstoff-Normbezeichnung / Material standard grade / Norma do material						
1.4404		X 2 CrNiMo 17-12-2						
Beschreibung / Description / Descrição								
Stainless steel flat bars, hot rolled, annealed, pickled, straightened.								
Schmelzen Nr. / Cast nr. / Fused no.		Chemische Analyse in % / Chemical composition in % / Análise química em %						
561638		C: 0.019	Si: 0.540	Mn: 1.460	P: 0.035	S: 0.028	Cr: 16.920	Ni: 10.090
EAF		Mo: 2.040	Co: 0.272	Cu: 0.460	N: 0.058	Ti: 0.002	W:	V:
Proben Nr. / Test no. / Amostra no.	DIN EN 10045		ISO 6892-1					
	Kerbschlagarbeit Impact Test Resiliência		Streckgrenze Yield point Tensão limite	Dehngrenze 1% point Limite de	Zugfestigkeit Tensile strength Tensão de rotura	Dehnung Elongation Alongamento	Einschnürung Reduction of area Coef. Estricção	
	(Charpy V)		Rp 0,2 %	Rp 1,0%	Rm	A (A50-50mm)	Z (A50-50mm)	
	[J]		[MPa]	[MPa]	[MPa]	[%]	[%]	
3030585.01.01	226	291	325	632	64.9	79.4		
3030585.01.02	224	296	331	638	64.6	78.8		
Visuelle Kontrolle / Visual inspection / Inspeção visual		DIN EN 6506-1		DIN 3851 - 2A		Wärmebehandlung / Heat treatment / Tratamento térmico		
<input checked="" type="checkbox"/> OK		Härte Hardness Dureza		Korrosionsbeständigkeit IC Test Corrosão Intermetálica		Solution annealing 1050 °C (Water quenched)		
EN 10058		153		<input checked="" type="checkbox"/> OK				
Maßkontrolle Dimensional inspection Inspeção dimensional		[HB]		Werkstoffverständiger Quality Control Representative Inspector de Qualidade				
<input checked="" type="checkbox"/> OK		Korngröße Grain size Tamanho de grão		 David Reis				
Verwechslungsprüfung Test of Identity Teste de identificação		Mikroskopische Untersuchung Micrographic test						
<input checked="" type="checkbox"/> OK		Material free from segregation defects.						
Bemerkungen / Remarks / Observações				Böllinghaus Portugal - Aços Especiais, SA				
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 01 202 926/Q-02 0040 I29.A PP				Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht. We confirm that this material meets the specification according to the mentioned standards. Confirmamos que este material respeita as especificações de acordo com as normas referidas.				

FLOW TECHNOLOGY LTD
 TEST CERTIFICATE
 VERIFIED TRUE
 COPY OF ORIGINAL


 15/12/12