

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.: 0000102586											
	Unsere innere Verweisung /Our Int. Ref/ N/ ref int 5600024878 000040		Datum / Date / Data 26.02.2015											
Normen / Standards / Normas														
W.Nr. 1.4401/1.4404 acc. to BS EN 10088-3:2014, BS EN 10272:2008-01, AISI 316/316L, acc. to ASTM A479/A479M-14, A182/A182M-14b, A320/A320M-14, A276-13a, but with size tolerances of -0 / +1 mm, "Improved Machinability", I.C.C. Tested to ASTM A262-14 Practice E, NACE MR0175, NACE MR0103, DIN 17440, ASME SA182/SA 182M, SA276, SA479/SA479M, EN 10058:2003, EN 10163-2 class B, Sulphur Content 0.020% - 0.030%, Max. Hardness 180 HB Heat treatment soaking time 3h														
Kunde / Customer / Cliente Offshore Stainless Supplies Ltd. Toll Point, Lichfield Road WS8 6JZ West Midlands		Endgültiger Kunde / Final Customer / Cliente Final Offshore Stainless Supplies Ltd. Toll Point, Lichfield Road WS8 6JZ Brownhills												
Bestell Nr./Order Nr./ Enc.Nr. 009261		Bestell Nr./ Order Nr./ Enc.Nr. 009261.12												
Produktgruppe / Product Group / Grupo Produto AISI 316/L FLAT 52,5 X 33 MM		Gewicht / Weight / Peso 1.023 kg	Bunde / Bundle / Atados 01											
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, annealed, pickled, straightened.														
Schmelzen Nr. Cast nr. / Fusão nr.	Chemische Analyse in % / Chemical composition in % / Análise química em %													
56142010	C:	0.019	Si:	0.530	Mn:	1.530	P:	0.036	S:	0.025	Cr:	16.980	Ni:	10.090
EAF	Mo:	2.060	Co:	0.341	Cu:	0.460	N:	0.056	Ti:	0.004	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 extensão	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 {A5/4D}	Z							
	[J]		[MPa]	[MPa]	[MPa]	[%]	[%]							
3043168.03.01	215		325	359	629	62.3	72.0							
Visuelle Kontrolle Visual inspection Inspeção visual	<input checked="" type="checkbox"/> Ok	DIN EN 6506-1 Härte Hardness Dureza ~180 [HB]		DIN EN ISO 3651 - 2A Korrosionsbeständigkeit IC Test Corrosão Intercristalina <input checked="" type="checkbox"/> Ok		Wärmebehandlung Heat treatment Tratamento térmico Solution annealing 1050 °C (Water quenched)								
DIN EN 10058 Maßkontrolle Dimensional inspection Inspeção dimensional	<input checked="" type="checkbox"/> Ok	Korngröße Grain size Tamanho de grão		Werksachverständiger Quality Control Representative Inspector da Qualidade										
Verwechslungsprüfung Test of identity Teste de identificação	<input checked="" type="checkbox"/> Ok	Makroskopische Untersuchung Macrographic test Material free from segregation defects.		<input checked="" type="checkbox"/> Ok										
David Reis (Q - DR)	Bollinghaus Steel, SA													
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 01 202 926/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			<div style="border: 2px solid red; padding: 5px; color: red; font-weight: bold;"> FLOW TECHNOLOGY LTD TEST CERTIFICATE VERIFIED TRUE COPY OF ORIGINAL </div>									