 Böttinghaus Portugal Aços Especiais, SA DIN EN ISO 90012000 TÜV CERT No. 01 100 030458	Abnahmeprüfzeugnis / Mill Test Certificate / Certif. de Qualidade EN 10204:2004 / 3.1	No.: / Nr.: / Nr.: 0000061443
	Unsere innere Verweisung / Our Int. Ref / N/ ref int 5600009732 000020	Datum / Date / Data 10.10.2008

Normen / Standards / Normas

1.4404 acc. to BS EN 10088-3:2005 "Improved Machinability"
I.C.C. Tested to ASTM A262 Practice E

Kunde / Customer / Cliente	Endgültiger Kunde / Final Customer / Cliente Final
Bestell Nr. / Order Nr. / Enc. Nr. 9187	Bestell Nr. / Order Nr. / Enc. Nr. 9187.02

Prüfgegenstand / Product / Produto AISI 316L FLAT 53 x 40 mm	Gewicht / Weight / Peso 3,104 kg	Bunde / Bundle / Atados 03
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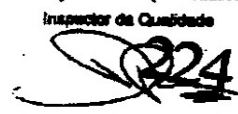
Werkstoff-Nr. Material-no. Qualidade 1.4404	Werkstoff-Normbezeichnung / Material standard grade / Norma do material X 2 CrNiMo 17-12-2
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Beschreibung / Description / Descrição

Stainless steel flat bars, hot rolled, annealed, pickled, straightened.

Bohrennr. Nr. Cast nr. / Fusão nr. 428674	Chemische Analyse in % / Chemical composition in % / Análise química em %													
	C:	0.014	Si:	0.620	Mn:	1.370	P:	0.027	S:	0.017	Cr:	16.830	Ni:	11.140
EAF	Mo:	2.010	Co:	0.140	Cu:	0.500	N:	0.030	Ti:	0.125	W:		V:	

Proben Nr. Test no. Amostra no.	DIN EN 10045			DIN EN 10002		
	Kerbschlagarbeit Impact Test Resistência [Charpy V]	Streckgrenze Yield point Tensão limite Rp 0.2 %	Dehngrenze 1% point Limite de estensão Rp 1,0%	Zugfestigkeit Tensile strength Tensão de rotura Rm	Dehnung Elongation Alongamento A (A50-50mm)	Einschnürung Reduction of area Coef. Estricção Z (A50-50mm)
	[J]	[MPa]	[MPa]	[MPa]	[%]	[%]
3016195.01.01	254	335	369	626	52.1	72.1
3016195.01.02	253	334	367	627	52.2	72.2

Visuelle Kontrolle Visual inspection Inspeção visual	<input checked="" type="checkbox"/> Ok	DIN EN 6508-1 Härte Hardness Dureza 153 [HB]	DIN 3851 - 2A Korrosionsbeständigkeit IC Test Corrosão Intertrastina	<input checked="" type="checkbox"/> Ok	Wärmebehandlung Heat treatment Tratamento térmico Annealed Quenched 1050 °C
EN 10058 Maßkontrolle Dimensional inspection Inspeção dimensional	<input checked="" type="checkbox"/> Ok	Korngröße Grain size Tamanho de grão	Wertesicherständer Quality Control Representative Inspector de Qualidade  José Santos	<input checked="" type="checkbox"/> Ok	
Verwechslungsprüfung Test of identity Teste de identificação	<input checked="" type="checkbox"/> Ok	Mikroskopische Untersuchung Macrographic test Material free from segregation defects.		<input checked="" type="checkbox"/> Ok	

Bemerkungen / Remarks / Observações

Country of origin: Portugal

Certified acc. PED 97/23/EC-EN 764-5 and AD 2000 W0
Notified Body 0034 - TÜV Saarland e.V. ZN 71 202 / 007

Böttinghaus Portugal - Aços Especiais, SA
 Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht.
 We confirm that this material meets the specification according the mentioned according the mentioned standards.
 Confirmamos que este material respeita as especificações de acordo com as normas referidas.