



F12616
1/4" NPT F/F 90° Elbow 15K

 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.: 0000126560												
	Unsere innere Verweisung / Our int. Ref/ N/ ref int 5600034301 000010		Datum / Date / Data 17.03.2017												
Normen / Standards / Normas															
1.4401/1.4404 acc. to EN 10088-3:2014 (Condition 1D), EN 10272:2018-10, TYPE 316/UNS S31600 and TYPE 316L/UNS S31603 acc. to ASTM A182/A182M-16a, ASTM A276/A276M-16a, ASTM A479/A479M-16a, ASTM A262-15 Pract. E, ASME SA182/SA182M, ASME SA276, ASME SA479/SA479M, NACE MR0175-2015, EN 10059:2003, with size tolerances -0/+1 mm, in conformity to PED 2014/68/EU, Material delivered acc. to specifications 1 and 2. Hardness max. 180 HB; Sulphur content 0.02-0.03 %															
Kunde / Customer / Cliente Offshore Stainless Supplies Ltd. Toll Point, Lichfield Road WS8 6JZ Walsalls		Endgültiger Kunde / Final Customer / Cliente Final Offshore Stainless Supplies Ltd. Toll Point, Lichfield Road WS8 6JZ Brownhills													
Bestell Nr./Order Nr./ Enc.Nr. 010579		Bestell Nr./ Order Nr./ Enc.Nr. 010579.01													
Produktgruppe / Product Group / Grupo Produto AISI 316L SQ 39.75 mm		Gewicht / Weight / Peso 7.151 kg		Bunde / Bundle / Atados 06											
Werkstoff-Nr. Material-no. Qualidade 1.4404		Werkstoff-Normbezeichnung / Material standard grade / Norma do material X 2 CrNiMo 17-12-2													
Beschreibung / Description / Descrição															
itainless steel square bars, hot rolled, annealed, pickled, straightened.															
Schmelzen Nr. Cast nr. / Fusão nr.		Chemische Analyse in % / Chemical composition in % / Análise química em %													
56162088		C	0.018	Si	0.500	Mn	1.480	P	0.038	S	0.026	Cr	16.740	Ni	10.090
EAF+AOD		Mo	2.060	Co	0.226	Cu	0.420	N	0.053	Ti	0.002	Al	0.004	-	-
Proben Nr. Test no. Amostra no.		ISO 148-1			DIN EN ISO 6892-1										
		Kerbschlagarbeit Impact Test Resiliência (Charpy V)		Streckgrenze Yield point Tensão limite Rp 0,2 %		Dehngrenze 1% point Limite de extensão Rp 1,0%		Zugfestigkeit Tensile strength Tensão de rotura Rm		Dehnung Elongation Alongamento A5 4D		Einschnürung Reduction of area Coef. Estricção Z			
		[J]		[MPa]		[MPa]		[MPa]		[%]		[%]			
		3060290.02.01		227		312		385		622		65.3 68.3		77.5	
		3060290.02.02		225		320		392		632		64.1 67.2		76.2	
3060290.02.03		222		324		400		635		64.0 67.0		75.9			
3060290.02.04		219		329		401		641		62.9 65.1		74.5			
Visuelle Kontrolle Visual inspection Inspeção visual		<input checked="" type="checkbox"/> Ok		DIN EN ISO 6506-1 Härte Hardness Dureza 156 -[HB]		DIN EN ISO 3651 - 2A Korrosionsbeständigkeit IC Test Corrosão Intermetálica		<input checked="" type="checkbox"/> Ok		Wärmebehandlung Heat treatment Tratamento térmico Solution annealing 1050 °C (Water quenched)					
DIN EN 10059 Maßkontrolle Dimensional inspection Inspeção dimensional		<input checked="" type="checkbox"/> Ok		Korngröße Grain size Tamanho de grão		Werksachverständiger Quality Control Representative Inspector da Qualidade  Nuno Silva (N - NS)									
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									
Bemerkungen / Remarks / Observações Country of origin: Portugal. No weld repair done. Material is free of mercury and radiation contamination. Certified acc. PED 2014/68/EU and AD 2000 W0 Notified Body 0035 - TÜV Rheinland Industrie Service GmbH 01 202 826/Q-02 0040					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.										