

BOLLINGHAUS
STEELBollinghaus 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.:

0000135486

Unsere Innere Verweisung /Our Int. Ref/ N/ ref int

5600037851 000030

Datum / Date / Data

16.11.2017

Spezifikation / Standards / Normas

1.4401/1.4404 acc. to EN 10088-3:2014 (Condition 1D), EN 10272:2016-10, 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 10058:2003, 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 / ClienteOffshore 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. 010904

Bestell Nr./ Order Nr./ Enc.Nr. 010904.9

Produktgruppe / Product Group / Grupo Produto

AISI 316/L FLAT 52,15 X 32,75 MM

Gewicht / Weight / Peso

3.006 kg

Bunde / Bundle / Atados

03

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, straightened and pickled,

FLOW TECHNOLOGY LTD
TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINALSchmelzen Nr.
Cast nr. / Fusão nr.**Chemische Analyse in % / Chemical composition in % / Análise química em %**

56171606

C

0.019

Si

0.470

Mn

1.520

P

0.028

S

0.026

Cr

16.630

Ni

10.080

EAF+AOD

Mo

2.030

Co

0.279

Cu

0.450

N

0.052

Ti

0.002

Al

0.005

-

-

Proben Nr.
Test no.
Amostra no.**ISO 148-1**Kerbschlagarbeit
Impact Test
Resiliência

{Charpy V}

[J]

Streckgrenze
Yield point
Tensão limite

Rp 0,2 %

[MPa]

Dehngrenze
1% point
Limite de extensão

Rp 1,0%

[MPa]

DIN EN ISO 6892-1Zugfestigkeit
Tensile strength
Tensão de rotura

Rm

[MPa]

Dehnung
Elongation
Alongamento

A5

[%]

Einschnürung
Reduction of area
Coef. Estricção

4D

[%]

Z

[%]

[%]

3066347.03.01

-

324

363

631

56.2

59.8

71.4

3066347.03.02

-

316

354

626

57.1

60.9

72.3

Visuelle Kontrolle
Visual inspection
Inspeção visual

Ok

DIN EN ISO 6506-1Härte
Hardness
Dureza

160

[HB]

DIN EN ISO 3651 - 2A

Korrosionsbeständigkeit

IC Test

Corrosão Intercristalina

Ok

Wärmebehandlung
Heat treatment
Tratamento térmico

Solution annealing 1050 °C

(Water quenched)

DIN EN 10058Maßkontrolle
Dimensional inspection
Inspeção dimensional

Ok

Korngröße
Grain size
Tamanho de grão

-

Abnahmebeauftragter

Authorized inspection Representative

Inspector da Qualidade

396

Vasco Ferreira (Ω - VF)

Verwechslungsprüfung
Test of identity
Teste de identificação

Ok

Makroskopische Untersuchung
Macrographic testMaterial free from
segregation defects.

Ok

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 2014/68/EU and AD 2000 W0
Notified Body 0035 - TÜV Rheinland Industrie Service GmbH
01 202 926/Q-02 0040Hiermit 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.