



MUSSARI S.r.l.

Trafileria tubi inox di alta precisione
Via Repubblica 11/B - Tel 031/390677 - 031/492476
Fax 031/390010

22075 LURATE CACCIVIO/COMO (ITALY)
web-site: www.mussari.com

TEST CERTIFICATE ACCORDING TO

EN 10204 / 3.1
ABNAHMEPRUFZEUGNIS
CERTIFICAT D'ESSAIS
CERTIFICATO DI COLLAUDO

N. 1788 - 2017

DATE - Datum/Data

28 giugno 2017

CUSTOMER - Besteller/Cliet/Cliente:

M E R I N O X B.V. - Kleine Beer, 18 - 2952 AS ALBLASSERDAM (HOLLAND)

Comm. Nr. 1881/16 - 1685/17

DELIVERY BILL - Lieferschein/Bulletin de Livraison/Bolla di consegna
1456

CUSTOMER ORDER N° - Bestellung/Commande Client/Ordine Cliente

2017118

MECHANICAL TEST

Mechanische Prüfungen/Essai Mécaniques/Caratteristiche meccaniche

SPECIFICATIONS Anforderungen/Specifications/Normative:
ASTM A 213/269** MSR-HP Tubes

| STEEL GRADE Werkstoff/Nuance Materiale | DIMENSIONS Abmessungen Dimensions/Dimensionsi | QUANTITY | | LGTH mm | YIELD POINT | | TENSILE STRENGTH | | ELONGATION | | HARDNESS Haerte Dureté Durezza HRB | TECHNOLOGICAL TEST Technologische Prüfung Examen Technologique Prove tecnologiche |
|--|---|--------------------------------------|--------------------|--------------------|--------------------|-------------------------|-------------------|-------------------------------|-------------------------------|-----------------------------|--|---|
| | | MT | PC. | | pz. | Menge/Quantité/Quantità | req. | result | req. | result | | |
| TP 316 - 316L | 3/8" x 0.125" 9.53 x 3.10 | 600,00 | 100 | 6000 | ≥ 689 | 751,6 | ≥ 758 | 904,4 | ≥ 18% | 20,0 | 102,2 | FLARING TEST: Erweiterungsversuch/Élargissement/Allargamento = |
| | | | | | | | | | | | | |
| STEEL GRADE Werkstoff/Nuance Materiale | DIMENSIONS Abmessungen Dimensions/Dimensionsi | HEAT N° Schmelze Coulée/Colata | %C MAX 0.035 | %Mn MAX 2.00 | %SI MAX 0.75 | %P MAX 0.045 | %S MAX 0.03 | %NI MIN 10.00 MAX 14.00 | %CT MIN 16.00 MAX 18.00 | %Mo MIN 2.00 MAX 3.00 | %TI | REMARKS Bemerkungen/Notes/Note |
| TP 316 - 316L | 3/8" x 0.125" 9.53 x 3.10 | A02045 | 0,020 | 1,240 | 0,480 | 0,040 | 0,0030 | 11,250 | 17,100 | 2,070 | | smis tubes cold drawn HARD pickled nathloses rohr kalt gezogen HART gebeizt - Tubes sans soudure étréris à froid Ecrui, décapés - Tubi senza saldatura trafilati a freddo CRUDI decapati ** ONLY FOR CHEMICAL ANALYSIS Suitable for 60.000 Psi/4.140 Bar HEAT TREATMENT : Wärmebehandlung/Tratament. Termique/trattamento termico N.A. PMI TEST on each tube: Verwechslungsprüfung/Essai P.M.I./Prova anti mescolanze = Intergranular corrosion test acc. To A262/pract. E Korrosionsfördernde Rückstände/Essai résiduels corrosifs/Prova residui corrosivi = PRODUCT ANALYSIS: During 5 sec : 100% hydrostatic pressure tested at Wasserdruckversuch/Essai Hydraulique/Prova idraulica 100% eddy current test acc.to A1016-NFA 49872-SEP 1914-ASTM A450/E426-EN 10893-1-EN 10893-2-EN10246-2 :GOOD Eddy current/Courant de Foucault/Eddy Current Visual and Dimensional control : Besichtigung und Ausmessung/Contrôle Visuel et Dimensionnel/Controllo Visivo e Dimensionale MARKING-Kennzeichnung/Marquage/Marcatura OK Straightness control Geradheit Kontrolle/Contrôle de rectitude/Controllo rettilineità = |

FLOW TECHNOLOGY LTD
TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINAL

INSPECTION DEPARTEMENT SIGNATURE
Director - Dem Verwachter/Controllen
Vize-Controllenleiter
Vize-Controllenleiter
MUSSARI S.r.l.



MSR - AISI 316-316L - ASTM A213/269 MSR-HP Tubes Heat Nr..... - Tubes Size 3/8"x0.125" O.D....x....mm I.D. C.D. Tube Suit. For. 60.000Psi
We certify that the material described has been manufactured acc. With above standards and specifications and satisfies the order's requirements.
Wir besaegen, dass die gelieferte Ware den Bestellvorschriften entspricht/Nous attestons que les produits livrés sont conformes aux références de la commande/Noi attestiamo che il materiale spedito e' conforme ai requisiti dell'ordine

F13876 - 3/8" HIGH PRESSURE NIPPLE 3" LONG 60K 316L