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

EN 10204 / 3.1

ABNAHMEPRUFZEUGNIS

CERTIFICAT D'ESSAIS

CERTIFICATO Di COLLAUDO

N. 3888 - 2014

DATE - Datum/Data

11 dicembre 2014

Comm. Nr. 2986/14*

DELIVERY BILL - Lieferschein/Bulletin de Livraison/Bolla di consegna 2833

CUSTOMER ORDER N° - Bestellung/Commande Client/Ordine Cliente: 2014194

SPECIFICATIONS Anforderugen/Specifiations/Normative: ASTM A 213/269 - smls Hard Acc. To Butech Spec.

MECHANICAL TEST

Mechanische Prufungen/Essai Mecaniques/Caratteristiche meccaniche

STEEL GRADE Werkstoff/Nuance Materiale	DIMENSIONS Abmessungen Dimensions/Dimensioni	QUANTITY Menge/Quantité/Quantità MT Mt	 PC. pz.	 LGTH mm	YIELD POINT Streck-Dehngrenze Limite d'élasticité Limite di snervamento RP0.2% N/mm² req.	 result	TENSILE STRENGHT Zugfestigkeit Résistance à traction Limite di Rottura N/mm² req.	 result	ELONGATION Bruchdehnung Allongament Allungamento % LO2" req.	 result	HARDNESS Haerte Dureté Durezza HRB req.	 result
TP 316 - 316L	O.D.3/8" x 0.203" ID O.D. 9.50 x 2.18 W.T.	1398,94			≥ 517	820,0 794,6	≥ 724	963,0 960,0	≥ 22%	22,0 23,0	≥ 95	98,0 99,0

RP1.0%N/mm2: req. / result

TECHNOLOGICAL TEST

Technologische Prufung / Examen Technologique / Prove tecnologiche

FLARING TEST: Erweiteunversuch/Evasement/Allargamento	=
FLANGE TEST: Krempeversuch/Bordage/Bordatura	=
FLATTENING TEST: Abflashungversuch/Aplatissement/Schiacciamento	=
BENDING REV.TEST: Faltversuch/Pliange/Piegamento	=
RING FLATTENING TEST: Ring Faltversuch/Ecrasement anneau/Prova di Schiacciamento	=
DRIFT EXPANDING TEST : Aulweitversuch/Mandrin.ann./Mandrinatura Anello	=

STEEL GRADE Werkstoff/Nuance Materiale	DIMENSIONS Abmessungen Dimensions/Dimensioni	HEAT N° Schmelze Coulée/Colata	%C MAX 0.035	%Mn MAX 02:00	%Si MAX 0.75	%P MAX 0.045	%S MAX 00:03	%Ni MIN 10.00 MAX 14.00	%Cr MIN 16.00 MAX 18.00	%Mo MIN 2.00 MAX 3.00	%Ti
TP 316 - 316L	O.D.3/8" x 0.203" ID O.D. 9.50 x 2.18 W.T.	J1310-1580	0,019	0,840	0,330	0,038	0,001	10,050	16,750	2,060	

PRODUCT ANALYSIS:

F11439 3/8" MEDIUM PRESSURE NIPPLE 3" LONG 20K 316L

PRODUCT ANALYSIS:

REMARKS

Bemerkungen/Notes/Note

smls tubes cold drawn HARD pickled

nahtloses rohr kalt gezogen HART gebeizt - Tubes sans soudure étirés à froid

Ecrui décapés - Tubi senza saldatura trafilati a freddo CRUDI decapati

Suitable for 20.000 Psi

HEAT TREATMENT : Warmebehandlung/Traitement Termique/trattamento termico	N.A.
PMI TEST on each tube: Verwechlungsprufing/Essai P.M.I./Prova anti mescolanze	=
Intergranular corrosion test acc. To A262/pract. E Korrosionsfordernde Ruckstanden/Essai residues corrosif/Prova residui corrosivi	=

100% hydrostatic pressure tested at 90.000 Psi *During 5 sec :* GOOD

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 : Besichtugung und Ausmessung/Controle Visuel et Dimensionel/Controllo Visivo e Dimensionale	OK	*Straightness control* Geradheit Kontrolle/Contrôle de rectitude/Controllo rettilineità	=

MARKING-Kennzeichnung/Marquage/Marcatura

MSR ASTM A 213/269 AISI 316-316L Heat Nr.... SMLS HARD Tubes Size 3/8"x0.086"(ID=0.203") O.D....x....mm W.T. (5.15mm I.D.) C.D. tubes Sult. For 20.000 PSI

We certify that the material described has been manifactured acc. With above standards and specifications and satisfies the order's requirements.

Wir bestaegen, dass die gelieferte Ware den Bestellevorschriften entspricht/Nous attestons que les produits livres sont conformes aux réferences de la commande/Noi attestiamo che il materiale spedito e' conforme ai requisiti dell'ordine

INSPECTION DEPARTMENT SIGNATURE

Unters. Des Werssachverhandlngen

Visa de l'ispecteur

Visa controllo di qualità