



**MUSSARI S.r.l.**

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

22075 LURATE CACCI/OT/COMO (ITALY)  
web site: www.mussari.com

TEST CERTIFICATE ACCORDING TO

EN 10204 / 3.1

ABNAHMEPRUFZEUGNIS

CERTIFICATO DI DESSAIS

CERTIFICATO DI COLLAUDO

Comm. Int. Nr. 321/4

DELIVERY BILL - Lieferschein/Bulletin de Livraison/Bolita de consegna

475

N. 713 - 2014

DATE - Datum/Data

20 febbraio 2014

CUSTOMER - Besteller/Klient/Cliente :

CUSTOMER ORDER N° - Bestellung/Commande Client/Ordine Cliente  
2013251

MECHANICAL TEST  
Mechanische Prüfungen/Essais Mécaniques/Caratteristiche meccaniche

SPECIFICATIONS Anforderungen/Spécifications/Requisiti  
ASTM A213/269 - HP Tubes - Butech Spec. 2000

STEEL GRADE	DIMENSIONS	QUANTITY	YIELD POINT		TENSILE STRENGTH		ELONGATION		HARDNESS	
			MPa	ksi	MPa	ksi	%	MPa	HRB	
Werkstoff/Nuance Materiale	Abmessungen Dimensioni/Dimensioni	Menge/Quantità/Quantità	Req.	result	req.	result	req.	result	req.	result
			MPa	ksi	MPa	ksi	%	MPa	HRB	
TP 316 - 316L	1/4" x 0.110"	1025,42	≥ 517	823,6	≥ 724	983,7	≥ 22%	22,0	≥ 95	97,0
				842,8		987,4		23,0		98,0

FLOW TECHNOLOGY LTD  
TEST CERTIFICATE  
VERIFIED TRUE  
COPY OF ORIGINAL

STEEL GRADE Werkstoff/Nuance Materiale	DIMENSIONS Abmessungen Dimensioni/Dimensioni	HEAT N° Schmelz- Coulée/Colla	%C MAX	%Mn MAX	%Si MAX	%P MAX	%S MAX	%Ni MIN 10,00 MAX 14,00	%Cr MIN 16,00 MAX 18,00	%Mo MIN 3,00 MAX 3,00	%Ti	REMARKS Bemerkungen/Notes/Note
TP 316 - 316L	1/4" x 0.110"	13-173	0,023	0,810	0,450	0,037	0,004	10,280	16,228	2,060		True Copy, of Orig.

RAW MATERIAL MTC N° Certificato origine materiale Nr.	PRODUCT ANALYSIS	Dated	Signature	Date
KSIST-316/316L/65/1013		31/10/2014	<i>[Signature]</i>	23/3/14

100% hydrostatic pressure tested at	90.000 PSI	During 30 sec :	GOOD
Wasserdruckversuch/Essai Hydraulique/Prova idraulica			
100% eddy current test acc to A1016-NFA 49872-SEP 1974-ASTM A450/E426-EN 10993-1-EN 10993-2-EN10246-1 : GOOD			
Eddy current/Courant de Foucault/Eddy Current			
Visual and Dimensional control :	OK	Straightness control	=
Beichtigung und Ausmessung/Contrôle Visuel et Dimensionnel		Geradheit/Kontrollier/Contrôle de rectitude/Controlo retlinearia	
MARKING: Kennzeichnung/Marquage/Marcatura			
MSR ASTM A213/269 TP 316-316L HP Tubes Sulf. For 20.000 Psi Size 1/4" x 0.110" C.D. Heat N°.... Butech Spec. 2000			

We certify that the material described has been manufactured acc. With above standards and specifications and satisfies the order's requirements.  
Wir bestätigen 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 fornito è conforme ai requisiti dell'ordine

INSPECTION DEPARTMENT SIGNATURE  
Unters. Des Werksamverständigen  
Visa de l'inspecteur  
Visto controlador de Calidad  
**MUSSARI S.r.l.**