



MUSSARI S.r.l.
 Trafiliera tubi inox di alta precisione
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 22075 LURATE CACCIATO/COMO (ITALY)
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EN 10204 / 3.1
 ABNAHMEPRÜFZEUGNIS
 CERTIFICAT DESSAIS
 CERTIFICATO DI COLLAUDO

N. 1580 - 2014
 DATE / Datum / Data: 7 maggio 2014
 DELIVERY BILL - Lieberschein/Buletin de Livraison/Bolla di consegna
 1186

CUSTOMER ORDER N° - Bestellung/Commande Client/Ordine Cliente: 2014056

STEEL GRADE Materiale/Innuance	DIMENSIONS Abmessungen/Dimensioni	QUANTITY Menge/Quantità/Quantità	YIELD POINT Stärke/Resistenza Limite di snervamento		TENSILE STRENGTH Zugfestigkeit Resistenza a trazione Limite di rottura		ELONGATION % Deformazione Allungamento		HARDNESS Härte Durezza		TECHNOLOGICAL TEST Technologische Prüfung Esami Tecnologici Prove tecnologiche
			RP0.2% req.	N/mm² result	% SI req.	N/mm² result	% LO2 req.	result	req.	result	
TP 316 - 316L	14.28 x 3.175 9/16"x0.312"	1942.90	≥ 517	996.6 986.8	≥ 724	1188.3 1176.7	≥ 22%	22.0 22.0	≥ 95, 98.0	HRB	FLARING TEST: Erschließung/Esame/Allungamento
											FLANGE TEST: Kempenversuch/Boldege/Boldege
											FLATTENING TEST: Abflachungversuch/Abflachversuch/Schlämmen
											BENDING REVERSE TEST: Paliersuch/Pflege/Pflege
											RING FLATTENING TEST: Ring Falversuch/Falversuch/Prova di Schiacciamento
											DRIFT EXPANDING TEST: Aufweitungsvorversuch/Messung/Analog
											REMARKS Bemerkungen/Note/Note
											smis tubes cold drawn HARD pickled tubi senza saldatura trattati a freddo (CRUDI) decapati Ectis decapés - Tubi senza saldatura trattati a freddo (CRUDI) decapati
											ACC. TO BUTECH Spec : Part. 20-312-316
											Suitable for 20,000 Psi
											HEAT TREATMENT: Wärmebehandlung/Treatment/Termico/Terminco
											PMI TEST on each tube: Vermessungspüfung/Esai P.M.I./Prova alla mescolanza
											INTERGRANULAR CORROSION TEST acc. To ASTM A262/Pract. E Korrosionsbestimmende Ruchstufen/Esai/ residues control/Prova residui corrosivi

100% hydrostatic pressure tested at 90,000 PSI During 30 sec : GOOD

100% eddy current test acc. to A1016-NFA 49872-SEP 1914-ASTM A450/E426-EN 10893-1-EN 10893-2-EN10246-2 : GOOD

Visual and Dimensional control : OK

MSR ASTM A213/269 TP 316-316L Heat Nr. Tubes Size 9/16" x 0.312" O.D. mm W.T. C.D. Tubes Suit. For 20,000 Psi Heat Nr.

Signature: *[Handwritten Signature]* Date: 23.3.15

INSPECTION DEPARTMENT SIGNATURE
[Handwritten Signature]
 MUSSARI S.r.l.

FLOW TECHNOLOGY LTD
 TEST CERTIFICATE
 VERIFIED TRUE
 COPY OF ORIGINAL