

CLIENTE / Customer / Client
TUBOS CONEX.Y TANQUES,S.A.C.V.
AV. VALLE DE LAS ALAMEDAS, 66-C
COL. SAN FRANCISCO CHILPAN
54940 TULITLAN-EDO. DE MEXICO

CERTIFICADO DE INSPECCION
Works Certificate - Certificat d'Usine

DIN 50049 / 3.1.B.
 EN 10204 / 3.1.B.

FECHA: 28/06/2004
 Date-Date:

N.º 94779
 No.-N.º

H.OJA: 1
 Page:



N.º: 922164

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BRIDAS

SU PEDIDO N.º
 Your Order No.
 Votre Cde. N.º

7988 (02.03.04)

DE of - de 03/03/2004

Certified acc. PED 97/23/EC
 by TÜV Rheinland
 N.º 01 202 E/Q 02 7443

40474



GARANTÍA CALIDAD

MARCA DEL FABRICANTE
 Mark of factory
 Marque du fabricant

DEPARTAMENTO
 Section
 Département

PROBETA test Bar

MEDIA AVERAGE MOYENNE

°C

DUREZA Hardness Dureté HB

PARTIDA Item Poste	CANTIDAD Quantity Quantité	DESCRIPCION Description Description	OBSERVACIONES Remarks Observations (*)	COLADA N.º Heat No - Coulee	RESISTENCIA T. Strength Resist Rupt N/mm2	LIMITE ELAST. Yield Point Limite elastique N/mm2	ALARGAM. Elongation Allongement Lo. 4d %	ESTRICCION Reduction A Striction %	RESILIENCIA Impact energy Resilience Joules	MEDIA AVERAGE MOYENNE	°C	DUREZA Hardness Dureté HB
1	100	BLIND 2 150LB RF A105N	NY	128A4	515	308	32,70	65,00				151
6	21	BLIND 14 150LB RF A105N	NE	82A4	506	296	31,80	63,00				150
12	216	SO 10 150LB RF A105N	NE	204A4	515	303	31,50	65,00				151
19	280	WN 3 150LB S40 RF A105N	NE	116A4	512	323	31,90	65,00				150
19	280	WN 3 150LB S40 RF A105N	NE	185A4	520	324	31,80	62,70				151
19	560	WN 3 150LB S40 RF A105N	NE	189A4	523	327	32,00	64,00				152
24	30	WN 16 150LB S/STD RF A105N	NE	75A4	521	325	31,60	64,00				151
29	20	WN 8 150LB S80 RF A105N	NE	121A4	515	327	32,70	65,00				149
31	9	WN 10 150LB S80 RF A105N	NE	104A4	523	325	30,70	63,00				152

COMPOSICION QUIMICA - STEEL MAKER'S LADLE ANALYSIS - ANALYSE CHIMIQUE

COLADA Heat Coulee No	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	Nb %	V %	Cu %	CEQ %
104A4	0.200	0.270	0.870	0.023	0.010	0.100	0.140	0.030	0.001	0.003	0.400	0.408
116A4	0.190	0.230	0.900	0.016	0.005	0.070	0.130	0.040	0.002	0.002	0.360	0.394
121A4	0.190	0.280	0.840	0.014	0.003	0.070	0.160	0.040	0.001	0.002	0.400	0.390
128A4	0.190	0.240	0.970	0.019	0.009	0.030	0.013	0.004	0.000	0.001	0.008	0.360
185A4	0.190	0.230	0.830	0.022	0.003	0.120	0.140	0.030	0.001	0.002	0.400	0.395
189A4	0.190	0.290	0.850	0.015	0.003	0.090	0.150	0.040	0.001	0.001	0.400	0.395
204A4	0.190	0.160	0.990	0.012	0.014	0.060	0.090	0.060	0.007	0.002	0.370	0.410
75A4	0.190	0.210	0.840	0.022	0.004	0.080	0.130	0.040	0.001	0.001	0.380	0.388
82A4	0.200	0.200	0.900	0.014	0.019	0.080	0.170	0.020	0.002	0.002	0.270	0.400

- Las dimensiones y la condicion superficial se hallaron satisfactorias
- Dimension and surface condition were found acceptable
- Les dimensions et etats de surface sont satisfaisants
- Los materiales citados cumplen las normas aplicables
- Manufacturing requirements are satisfied
- Les normes applicables sont respectees



(*) OBSERVACIONES: N NORMALIZADO A 900 C Y ENFRIADO EN AIRE EN CALMA

Remarks
 Observations