

CLIENTE / Customer / Client

PLESA ANAHUAC Y CIAS, S.A.C.V.  
AV. VALLE DE LAS ALAMEDAS, 66-O  
COL. SAN FRANCISCO CHILPAN  
54940 TULTITLAN-EDO. DE MEXICO

# CERTIFICADO DE INSPECCION

## Works Certificate - Certificat d'Usine

DIN EN 10204 / 3.1  
ISO 10474 / 3.1



FECHA: 31/08/2007  
Date: 31/08/2007

ULMA FORJA, S.COOP.

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PRODUCTO  
Article - Produit

BRIDAS  
ASME B16.5-96

NORMAS APLICABLES  
Requirements - Normes Applicables

ASTMA105N-05  
ASTM SA105N-05

MODO DE FUSION (\*)  
Steel Making - Elaboration de l'acier  
E = Elec. Y = Oxígeno básico

MATERIAL CORRESPONDIENTE  
Material Correspondent - Qualité

NACE MR-01-75/03

SU PEDIDO N.°  
Your Order No.  
O.C. 3051 (21.06.07)

DE  
of. - de

21/08/2007

Certified acc. PED 97/23/EC  
by TÜV Rheinland  
N.° 01 202 EQ 02 7443

MARCA DEL FABRICANTE  
Mark of factory  
Marque du fabricant



DEPARTAMENTO GARANTIA CALIDAD  
Section Department

61519

PARTIDA Item Poste	CANTIDAD Quantity Quantité	DESCRIPCION Description Description	OBSERVACIONES Remarks Observations (*)	COLADA N.° Heat No N.°Coulée	RESISTENCIA T.Strength Resist Rupt N/mm2	LIMITE ELAST. Y.Strength Limite Elast. N/mm2	ALARGAM. Elongation Allongement Lc. 4 d %	ESTRICCION Red. Area Striction %	RESILIENCIA Impact test Resilience Joules	MEDIA Average Moyenne		DUREZA Hardness Dureté HB
										°C		
33	2	WN 14 150LB STD/30 RF A105N	NE	248A7 ✓	516	320	33,00	62,50				149
33	3	WN 14 150LB STD/30 RF A105N	NE	263R7 ✓	520	328	33,00	67,30				152
35	10	WN 12 150LB S40 RF A105N	NE	300A7 ✓	516	318	32,00	61,30				148
36	5	WN 16 150LB XS/40 RF A105N	NE	95A7 ✓	516	319	32,70	62,00				149
37	5	WN 20 150LB S40 RF A105N	NE	278A7 ✓	517	316	33,00	62,70				149
38	4	WN 12 600LB S40 RF A105N	NE	312A7 ✓	518	316	30,40	59,00				149
41	2	WN 16 600LB S80 RF A105N	NE	158874 ✓	527	370	29,00	70,00				165
44	3	WN 20 600LB S40 RF A105N	NE	168880 ✓	523	370	30,00	68,00				166
45	1	WN 20 600LB S80 RF A105N	NE	159172 ✓	526	375	30,00	68,00				162

### COMPOSICION QUIMICA - STEEL MARKER'S LADLE ANALYSIS - ANALYSE CHIMIQUE

COLADA N.° Heat No N.°Coulée	C %	SI %	Mn %	P %	S %	Cr %	Ni %	Mo %	Nb %	V %	Cu %	CEQ %
158674	0.160	0.220	1.140	0.007	0.001	0.080	0.080	0.020	0.010	0.020	0.200	0.393
159172	0.180	0.250	1.180	0.008	0.001	0.060	0.060	0.010	0.004	0.002	0.130	0.404
168680	0.160	0.240	1.160	0.009	0.008	0.080	0.080	0.010	0.002	0.008	0.150	0.388
248A7	0.190	0.220	0.890	0.008	0.003	0.040	0.080	0.020	0.007	0.001	0.190	0.369
263R7	0.180	0.210	1.180	0.013	0.001	0.060	0.060	0.020	0.007	0.001	0.230	0.416
278A7	0.190	0.240	0.840	0.012	0.006	0.070	0.060	0.020	0.007	0.003	0.200	0.366
300A7	0.180	0.200	0.870	0.009	0.003	0.040	0.060	0.010	0.007	0.001	0.170	0.351
312A7	0.190	0.240	0.850	0.013	0.002	0.060	0.060	0.030	0.007	0.002	0.170	0.369
95A7	0.200	0.210	0.870	0.011	0.001	0.070	0.080	0.020	0.007	0.001	0.230	0.384

- Las dimensiones y la condición superficial se hallaron satisfactorias  
- Dimension and surface condition were found acceptable  
- Les dimensions et états de surface sont satisfaisants

- Los materiales citados cumplen las normas aplicables  
- Manufacturing requirements are satisfied  
- Les normes applicables sont respectées

EL INSPECTOR  
Works Inspector - L'Inspecteur



(\*) OBSERVACIONES:  
Remarks  
Observations