

CLIENTE / Customer / Client  
**PLESA ANAHUAC Y CIA S. S.A.C.V.**  
 AV. VALLE DE LAS ALAMEDAS, 66-0  
 COL. SAN FRANCISCO CHILPAN  
 54940 TULTITLAN-EDO. DE MEXICO

**CERTIFICADO DE INSPECCION**  
 Works Certificate - Certificat d'Usine

DIN 50049 / 3.1 B  
 EN 10204 / 3.1 B

FECHA: 16/02/2005  
 N°: 99069

HOUJA: Page: 1

N°: 922164



ULMA FORJA, S.COOP.

PRODUCTO **BRIDAS**  
 Article - Produit  
 SU PEDIDO N°: 300000019 (20.12.04)  
 Your Order No. Votre Cde. N°

DE of - de 21/12/2004

Certified acc. PED 9723/EC  
 by TÜV Rheinland  
 N° 01 202 EQ 02 7443

Bº Zubillaga, 3 - Apdo. 14  
 20560 ONATI (Gipuzkoa) SPAIN  
 Tel.: 34 - 943 780552  
 Tel.: 34 - 943 781808  
 E-mail: forja@forging.ulma.es

NORMAS APLICABLES **ASME B16.5-96**  
 Requirements - Normes Applicables

MATERIAL CORRESPONDIENTE **ASTMA105N-02**  
 Material Correspondent - Qualité **ASME SA105N**

MODO DE FUSION (\*) **NACE MR-01-75/03**  
 Steel Making - Elaboration de l'acier

E = Elec. Y = Oxígeno básico

MARCA DEL FABRICANTE  
 Mark of factory  
 Marque du fabricant



DEPARTAMENTO **GARANTIA CALIDAD**  
 Section

44682

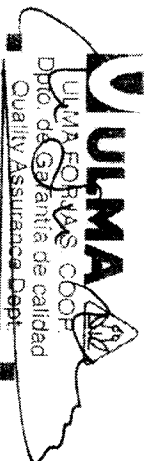
PARTE Item Poste	CANTIDAD Quantity	DESCRIPCION Description	COLADAN° Heat No N°Coulée	RESISTENCIA T. Strength Resist Rupt N/mm2	LIMITE ELAST. Yield Point Limite Elast. N/mm2	ALARGAM. Elongation Lo. 4 d %	ESTRICCION Reduction A Striction %	RESILIENCIA Impact test Resilience Joules	MEDIA Average Moynne	°C	DUREZA Hardness Dureté HB
11	10	SO 16 300LB RF A105N	43588	512	318	32.30	66.00				158
12	5	SO 18 300LB RF A105N	510220	512	314	32.00	66.00				153
13	10	SO 20 300LB RF A105N	44622	534	297	31.00	60.00				158
14	216	SO 3 300LB RF A105N	436A4	518	324	32.30	66.00				150
16	30	SO 2 600LB RF A105N	148A4	516	312	33.00	66.80				151
17	3	SO 8 600LB RF A105N	118A4	518	327	31.60	64.00				150
18	36	WN 10 150LB S40 RF A105N	280A4	524	317	32.00	66.20				152
19	36	WN 10 150LB S/XS RF A105N	411A4	515	320	31.60	64.00				150

**COMPOSICION QUIMICA - STEEL MARKERS - ANALYSE CHIMIQUE**

COLADA N° Heat No N°Coulée	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	Nb %	V %	Cu %	CEQ %
118A4	0.190	0.220	0.850	0.013	0.003	0.080	0.160	0.040	0.001	0.001	0.380	0.392
148A4	0.200	0.220	1.130	0.020	0.004	0.030	0.008	0.005	0.001	0.002	0.008	0.397
280A4	0.200	0.220	0.850	0.015	0.004	0.110	0.170	0.050	0.007	0.002	0.400	0.412
411A4	0.180	0.270	0.900	0.017	0.003	0.090	0.150	0.040	0.007	0.001	0.280	0.385
43588	0.190	0.240	0.810	0.016	0.006	0.270	0.090	0.010	0.002	0.005	0.300	0.408
436A4	0.180	0.300	0.840	0.022	0.002	0.200	0.240	0.080	0.008	0.007	0.400	0.420
44622	0.200	0.240	0.840	0.010	0.013	0.220	0.140	0.070	0.001	0.005	0.230	0.424
510220	0.210	0.220	0.850	0.007	0.002	0.190	0.090	0.030	0.002	0.005	0.180	0.415

- 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 sont satisféd
- Les normes applicables sont respectées

EL INSPECTOR  
 Works Inspector - L'inspecteur



(\*) OBSERVACIONES: N\_NORMALIZADO A 900 C Y ENFRIADO EN AIRE EN CALMA  
 Remarks  
 Observations