

FH 5873

CLIENTE / Customer / Client

FORGINGS FLANGES & FITTINGS INC.  
6875 FULTON  
HOUSTON, TEXAS 77022  
USA

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

DIN EN 10204 / 3.1  
ISO 10474 / 3.1



N.º SGI 1922184

ULMA FORJA, S.COOP.

FECHA: 30/05/2007 N.º 114425

HOJA: Page: 1

PRODUCTO Article - Product

FLANGES

SU PEDIDO N.º Your Order No. 82599-033007/INDIAN.  
Votre Cde. N.º

DE of. - de 03/04/2007

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

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

NORMAS APLICABLES Requirements - Normes Applicables

ASME B16.5-96

MARCA DEL FABRICANTE Mark of factory  
Marque du fabricant



59939

MATERIAL CORRESPONDIENTE Material Correspondent - Qualité

ASTMA105N-05  
ASME SA105N-05

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

NACE MR-01-75/03

DEPARTAMENTO QUALITY ASSURANCE  
Section Department

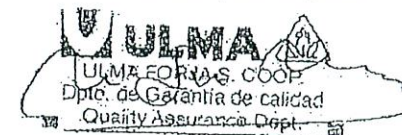
PARTIDA Item Poste	CANTIDAD Quantity Quantité	DESCRIPCION Description Description	OBSERVACIONES Remarks Observations (*)	COLADAN.º Heat No N.º Coulée	RESISTENCIA T.Strength Resist Rupt N/mm2	UNTELAST. Y.Strength Limite Elast. N/mm2	ALARGAM. Flongation Allongement Lo: 4 d %	ESTRICCION Red. Area Striction %	RESILENCIA Impact test Resilience		DUREZA Hardness Dureté HB
									Joules	°C	
75 0A06572	105	WN 2 1500LB S/XXS RTJ A105N			188A7	520	296	31,00	60,30		152
152 0A12430	72	WN 6 900LB S80 RF A105N	NE	210A7	514	315	33,00	61,70			150
153 0A12432	72	WN 6 900LB S80 RTJ A105N	NE	209A7	515	319	32,70	60,40			150
177 0A13350	24	WN 8 600LB S120 RF A105N	NE	182A7	518	320	32,60	59,00			150
178 0A13360	24	WN 8 600LB S180 RF A105N	NE	182A7	518	320	32,60	59,00			150
179 0A13362	2	WN 8 600LB S180 RTJ A105N	NE	182A7	518	320	32,60	59,00			150
180 0A13370	8	WN 8 600LB S/XXS RF A105N	NE	182A7	518	320	32,60	59,00			150
181 0A13372	7	WN 8 600LB S/XXS RTJ A105N	NE	182A7	518	320	32,60	59,00			150
191 0A14100	7	WN 10 150LB S20 RF A105N	NE	188R6	521	332	33,50	68,00			151
203 0A14342	40	WN 10 600LB S80 RTJ A105N	NE	218A7	514	318	33,00	62,00			148
276 0B132-0	36	SO 8 300LB RF A105N	NE	77A7	520	316	32,60	63,00			151
294 0B241-1	2	SO 24 150LB FF A105N	NE	223A7	519	322	33,00	62,80			150

COLADAN.º Heat No N.º Coulée	COMPOSICION QUIMICA - STEEL MARKER'S LADLE ANALYSIS - ANALYSE CHIMIQUE											
	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	Nb %	V %	Cu %	CEQ %
182A7	0.200	0.300	0.840	0.017	0.005	0.100	0.070	0.030	0.007	0.001	0.200	0.384
188A7	0.210	0.220	0.870	0.014	0.004	0.080	0.120	0.020	0.000	0.005	0.180	0.396
188R6	0.160	0.260	1.250	0.020	0.001	0.110	0.070	0.010	0.007	0.002	0.200	0.411
209A7	0.190	0.240	0.860	0.010	0.003	0.080	0.090	0.030	0.007	0.001	0.230	0.377
210A7	0.180	0.280	0.850	0.014	0.004	0.100	0.090	0.030	0.007	0.001	0.240	0.370
218A7	0.180	0.220	0.830	0.011	0.003	0.110	0.080	0.030	0.007	0.001	0.170	0.363
223A7	0.190	0.240	0.860	0.016	0.003	0.130	0.070	0.030	0.007	0.001	0.230	0.386
77A7	0.170	0.280	1.150	0.007	0.008	0.030	0.100	0.020	0.001	0.002	0.180	0.391

- 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: N\_NORMALIZED AT 300 C AND ALLOWED TO COOL IN STILL AIR  
Remarks Observations

11/2 # 1 821021 / 210