



**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**
(DIN EN 10204 3.1.B - ISO 10474 3.1.B)

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Vendido a:	PIESA ANAHUAC	Pedido del Cliente No.:	100000399.558	Lista de Empaque:	7079	Fecha/Date:	13 de Octubre de 2004
Sold to:		Customers Order No.:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade				Dimensiones y tolerancias / Dimension and tolerances			
Seamless Fittings according to ASTM/ASME ASA 234 WPB - NACE MR				ASME B 16.9 and ASME B 16.28 edition 2001			
01.75 ed. 02 - Conform to ASME II Ed. 2001				Biselado / Bevelled ends			

ART. ITEM	COLADA HEAT CODE	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C			
				ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
1	JES	4	ELIS 14" X 90° S. R. SCH-STD.	303	482	42	133				
2	PSS	4	ELIS 14" X 90° S. R. SCH-STD.	259	454	45	143				
3	S31740	38	ELIS 4" X 90° L. R. SCH-STD.	318	492	50	147				
4	S31766	397	ELIS 4" X 90° L. R. SCH-STD.	356	516	50	135				
5	S32237	21	ELIS 4" X 90° L. R. SCH-STD.	339	509	50	140				
6	T17396	20	CONC. RED. 6" X 4" SCH-STD.	320	486	40	141				
7	T17678	40	CONC. RED. 12" X 8" SCH-STD.	339	488	46	144				
8	T17792	3	ELIS 10" X 90° L. R. SCH-STD.	323	481	39	139				
9	T17793	37	ELIS 10" X 90° L. R. SCH-STD.	301	483	30	115				
10	T18072	60	ELIS 8" X 90° L. R. SCH-STD.	327	475	43	137				
11	T18073	120	ELIS 8" X 90° L. R. SCH-STD.	313	483	42	139				

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS												
			%C.E.	%C	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%Ni	%V	%Nb	
HF	JES	83791	0.308	0.160	0.660	0.012	0.001	0.230	0.080	0.100	0.060	0.050	0.002	0.003	
HF	PSS	70796	0.290	0.150	0.700	0.009	0.001	0.290	0.030	0.070	0.050	0.030	0.004	0.002	
HF	S31740	31740	0.328	0.190	0.760	0.015	0.002	0.290	0.020	0.048	0.010	0.027	0.001	0.001	
HF	S31766	31766	0.327	0.180	0.780	0.012	0.001	0.280	0.040	0.047	0.020	0.022	0.001	0.001	
HF	S32237	32237	0.341	0.190	0.810	0.010	0.001	0.300	0.030	0.056	0.020	0.021	0.002	0.001	
CFE	T17396	17396	0.332	0.190	0.730	0.018	0.003	0.270	0.050	0.054	0.024	0.030	0.000	0.000	207936
CFE	T17678	17678	0.303	0.170	0.680	0.015	0.002	0.280	0.040	0.062	0.030	0.030	0.000	0.000	04016876
HF	T17792	17792	0.325	0.180	0.700	0.014	0.002	0.280	0.050	0.073	0.057	0.030	0.000	0.000	04020937
HF	T17793	15954	0.323	0.180	0.690	0.009	0.003	0.280	0.050	0.086	0.045	0.050	0.000	0.000	
HF	T18072	18072	0.308	0.170	0.660	0.012	0.003	0.260	0.060	0.069	0.046	0.030	0.000	0.000	
HF	T18073	18073	0.314	0.180	0.650	0.012	0.003	0.250	0.050	0.068	0.047	0.020	0.000	0.000	

Notas:
Formado en caliente a 780°C-940°C, enfriado al aire; Formado en frío normalizado a 940°C max. Tiempo de permeancia 10'.
Hot formed fittings in a range from 780°C to 940°C, cooled in still air. Cold formed normalized at 940°C max. Holding time 10'.
Visual dimensional check: Satisfactory. Visual dimensional check: Satisfactory.

CF: FORMADO EN FRIO/COLD FORMED

HF: FORMADO EN CALIENTE/HOT FORMED

Jefe de Aseguramiento de Calidad:
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008