

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

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Vendido a: PLESA ANAHUAC Y CIAS. S. A.  
Pedido del Cliente No: 100000646  
Lista de Empaque: 7144  
Fecha/Date: 24 de Noviembre de 2004

Specifications y Grados / Standard or Specification and Steel Grade  
Customers Order No: Dimensiones y tolerancias / Dimension and Tolerances  
ASME B 16.9 and ASME B 16.28 edition 2001  
Factura/Invoice: Bocas / Ends  
Biselado / Bevelled ends

ASME B 16.9 and ASME B 16.28 edition 2001

ART. ITEM	COLADA HEAT CODE	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST	PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C						
1	S29260	14	ELLS 5" X 90° L.R. SCH-STD.	ESF. CEDENCIA YIELD STRENGTH (Mpa) 286	DIMENSIONES SAMPLE DIM mm 1	Joules	2	Joules	3	Joules	PROMEDIO AVERAGE Joules
2	S30014	50	ELLS 5" X 45° SCH-STD.	286	2	Joules	3	Joules			
3	S30680	20	ELLS 4" X 90° S.R. SCH-STD.	317	3	Joules	4	Joules			
4	S32536	100	ELLS 3" X 90° L.R. SCH-XH.	321	4	Joules	5	Joules			
5	S60750	100	ELLS 4" X 90° L.R. SCH-XH.	327	5	Joules	6	Joules			
6	T16600	100	TEE 4" SCH-STD.	333	6	Joules	7	Joules			
7	T16806	7	TEE 12" SCH-STD.	310	7	Joules	8	Joules			
8	T17191	20	ELLS 12" X 45° SCH-STD.	358	8	Joules	9	Joules			
9	T17196	85	ELLS 6" X 90° L.R. SCH-XH.	316	9	Joules	10	Joules			
10	T17396	5	CONC. RED. 6" X 5" SCH-STD.	304	10	Joules	11	Joules			
11	T17465	25	CONC. RED. 8" X 6" SCH-STD.	320	11	Joules	12	Joules			

### ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P/MOTHER PIPE	%C	%E	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	S29260	29260	0.334	0.190	0.800	0.008	0.002	0.300	0.020	0.050	0.010	0.020	0.001	0.000
HF	S30014	30014	0.314	0.180	0.740	0.009	0.001	0.290	0.020	0.050	0.010	0.020	0.000	0.000
HF	S30680	30680	0.318	0.180	0.720	0.014	0.002	0.270	0.040	0.055	0.020	0.028	0.001	0.001
HF	S32536	32536	0.338	0.190	0.820	0.009	0.001	0.300	0.020	0.031	0.020	0.018	0.001	0.001
HF	S60750	60750	0.321	0.170	0.760	0.011	0.003	0.280	0.050	0.070	0.030	0.042	0.002	0.001
CF	T16600	16600	0.310	0.180	0.660	0.010	0.002	0.273	0.040	0.072	0.027	0.030	0.000	0.000
CF	T16806	16806	0.319	0.180	0.700	0.009	0.002	0.280	0.050	0.071	0.025	0.040	0.000	0.000
HF	T17191	17191	0.319	0.180	0.680	0.015	0.003	0.270	0.050	0.074	0.042	0.040	0.000	0.000
HF	T17196	17196	0.327	0.190	0.670	0.016	0.004	0.280	0.050	0.077	0.041	0.030	0.000	0.000
CF	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
CF	T17465	17465	0.355	0.190	0.800	0.012	0.002	0.260	0.050	0.082	0.062	0.030	0.000	0.000

### Notes:

Formado en caliente a 780°C-940°C, enfriado al  
Held formed fittings in a range from 780°C to 940°C, cooled in still air.

Hecho, Formado en frío normalizado a 840°C max.  
Cold formed normalized at 840°C max.

Tiempo de permanencia 10'.  
Holding time 10'.

Inspección Dimensional, Substancial.  
Visual dimensional/chemical, satisfactory

FORMADO EN CALIENTE/ HOT FORMED  
CF FORMADO EN FRIJO/ COLD FORMED

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante

Y/o el proveedor de Materia Prima con N°  
We certify that result of chemical analysis and mechanical test are true and correct

copy of the test certificate issued by the manufacturer and/or supplier  
material certs N°:

184192	184192	199014
207922	207939	04012893
04014056	04014440	04014012
04014088	04016685	

Este material cumple con los requerimientos especificados en la orden.  
The material of this certificate heat number mentioned above is in compliance with the requirements specified in the order.

Jefe de Aseguramiento de Calidad:  
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS