

**CERTIFICADO DE CALIDAD  
INSPECTION CERTIFICATE**

( DIN EN 10204 3.1.B - ISO 10474 3.1.B)

Vendido a: <b>PLESA ANAHUAC</b>	Pedido del Cliente No: <b>100001278</b>	Fecha/Date: <b>30 de Mayo de 2005</b>
Ident.:	Numero: Number: <b>14220</b>	Pagina/Page: <b>1 DE 1</b>
Lista de Empaque: Packing List:	<b>7544</b>	
Factura/Invoice: <b>Bocas / Ends Biselado / Bevelled ends</b>		

Dimensiones y tolerancias / Dimension and tolerances

**ASME B 16.9 and ASME B 16.28 edition 2001**


DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION		PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C						
ART. ITEM	COLADA HEAT CODE	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T21775	69	ELLS 4 X 45 SCH-STD	353	489	40	122					
2	S33415	30	ELLS 4 X 90 S.R. SCH-STD	347	500	51	126					
3	S35369	20	ELLS 5 X 45 SCH-STD	325	484	50	119					
4	T21586	30	ELLS 6 X 45 SCH-STD	327	500	40	125					
5	T18952	94	ELLS 6 X 90 L.R. SCH-STD	330	488	41	126					
6	T18954	6	ELLS 6 X 90 L.R. SCH-STD	313	472	41	104					
7	TKQ6	10	ELLS 8 X 90 L.R. SCH-XH	304	483	42	144					
8	S35830	25	CONC. RED. 3 X 2 1/2 SCH-STD	349	496	50	139					

**ANALISIS QUIMICO / CHEMICAL ANALYSIS**

PROCESO PROCESS	COLADA HEAT CODE	COLADA HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%SI	%CR	%CU	%MO	%NI	%V	%NB
HF	T21775	21775	0.301	0.170	0.660	0.009	0.033	0.300	0.050	0.069	0.024	0.030	0.000	0.000
HF	S33415	33415	0.339	0.180	0.830	0.014	0.001	0.300	0.050	0.065	0.020	0.033	0.001	0.001
HF	S35369	35369	0.294	0.160	0.750	0.011	0.001	0.310	0.020	0.033	0.010	0.015	0.001	0.001
HF	T21586	21586	0.304	0.180	0.650	0.007	0.003	0.270	0.005	0.079	0.036	0.030	0.000	0.000
HF	T18952	18952	0.311	0.170	0.660	0.011	0.001	0.290	0.050	0.081	0.059	0.050	0.000	0.000
HF	T18954	18954	0.311	0.170	0.680	0.008	0.003	0.280	0.050	0.080	0.049	0.040	0.000	0.000
HF	TKQ6	17397	0.311	0.180	0.680	0.019	0.004	0.290	0.040	0.063	0.020	0.020	0.000	0.000
CF	S35830	35830	0.313	0.170	0.760	0.012	0.001	0.290	0.040	0.045	0.020	0.020	0.001	0.001

**Notas:**  
 Formado en caliente a 780°C-840°C, enfriado al aire.  
 Formed in the hot normalized at 840°C min.  
 Tiempo de permanencia 10'.  
 Inspección Dimensional/ Spectacular  
 CF FORMADO EN CALIENTE/NOT FORMED

**Note:**  
 Hot formed forged in a range from 780°C to 840°C, cooled in still air.  
 Cold formed normalized at 840°C min.  
 Holding time 10'.  
 Visual dimensional check/ Spectacular  
 CF FORMADO EN FRIO/COLD FORMED

  
**ING. JOSE MARTINEZ MACIAS**  
 Jefe de Aseguramiento de Calidad:  
 Quality Assurance Coordinator

CC-008