

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

Vendido a: <b>TIVANSA MONTERRREY</b> Sold to: <b>TIVANSA MONTERRREY</b>	Pedido del Cliente No: <b>6245 6246 6247</b>	Numero: <b>15341</b>	Pagina/ Page: <b>1 DE 1</b>
Especificaciones y Grados / Standard or Specification and Steel Grade <b>ASME B 16.8 and ASME B 16.20 edition 2001</b>	Dimensiones y tolerancias / Dimension and tolerances <b>ASME B 16.8 and ASME B 16.20 edition 2001</b>	Lista de Empaque: <b>Bocas / Ends</b>	Fecha/Due: <b>23 de Diciembre de 2005</b>
Normas Fittings according to ASTM A 334-97, A334-02 / ASME A54 234 WPR <b>NACE MR 01 75 2003 - Conform to ASME II Ed. 2001</b>	Customer's Order No. <b>6245 6246 6247</b>	Factura/Invoice: <b>Biselado / Beveled ends</b>	

ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST			PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C				
				ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
1	T17578	3	RED. TEE 10 X 4 SCH-40	339	488	46	144				
2	T22323	15	RED. TEE 10 X 3 SCH-STD	292	453	37	109				
3	T19786	5	RED. TEE 12 X 6 SCH-STD	313	475	46	122				
4	T24282	14	RED. TEE 6 X 3 SCH-STD	303	480	33	106				
5	T25509	46	RED. TEE 6 X 3 SCH-STD	330	473	42	105				
6	T24282	20	RED. TEE 6 X 4 SCH-STD	303	460	33	106				
7	T13125	5	RED. TEE 6 X 4 SCH-40	338	500	42	139				
8	T22147	15	RED. TEE 6 X 4 SCH-40	333	498	42	125				
9	T21932	3	RED. TEE 8 X 3 SCH-40	312	463	37	104				
10	T21932	10	RED. TEE 8 X 4 SCH-STD	312	463	37	104				
11	T25222	8	RED. TEE 8 X 4 SCH-40	336	489	43	106				

PROCESO PROCESS	COLADA HEAT CODE	COLD/HEAT M.P. MATHER P.W.	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb	
CF	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
CF	T22323	22323	0.315	0.180	0.670	0.011	0.002	0.260	0.050	0.062	0.035	0.030	0.000	
CF	T19786	19786	0.328	0.190	0.690	0.010	0.001	0.328	0.050	0.062	0.035	0.030	0.000	
CF	T24282	24282	0.301	0.170	0.660	0.006	0.001	0.280	0.050	0.060	0.027	0.030	0.000	
CF	T25509	25509	0.316	0.180	0.670	0.010	0.002	0.280	0.040	0.088	0.038	0.040	0.000	
CF	T24282	24282	0.301	0.170	0.660	0.006	0.001	0.280	0.050	0.066	0.027	0.030	0.000	
CF	T13125	11125	0.348	0.190	0.710	0.017	0.002	0.310	0.080	0.079	0.034	0.050	0.000	
CF	T22147	22147	0.340	0.190	0.760	0.016	0.001	0.270	0.070	0.062	0.050	0.030	0.000	
CF	T21932	21932	0.310	0.180	0.660	0.008	0.002	0.260	0.030	0.065	0.039	0.030	0.000	
CF	T21932	21932	0.310	0.180	0.660	0.008	0.002	0.260	0.030	0.065	0.039	0.030	0.000	
CF	T25222	25222	0.307	0.170	0.680	0.008	0.001	0.280	0.050	0.089	0.025	0.040	0.000	

Notas:  
 Certificados en caliente a 700°C a 900°C, verificados a 100°C.  
 Heat treated in air at 700°C to 900°C, verified at 100°C.  
 Nota: Certificado en frío para normativas a 300°C max.  
 Cold treated in air at 300°C max.  
 Tiempo de entrega: 12 días.  
 Delivery time: 12 days.  
 Solicitar Demuestra: Solicitar muestra.  
 Request sample: Request sample.  
 Valor de entrega: \$100,000.00.  
 Delivery value: \$100,000.00.  
 Jefe de Aseguramiento de Calidad:  
 Quality Assurance Coordinator:  
**ING. JOSE MARTINEZ MACIAS**