

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

Vendido a:	TUBOS MONTERREY	Pedido del Cliente No:	J-140	Lista de Empaque:	7864	Fecha/Date:	18 de Noviembre de 2005
Sold to:		Customers Order No:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234-97, A234-02 / ASME A5A 234 WPB -	Dimensiones y tolerancias / Dimension and tolerances		Factura/Invoice:	Bocals / Ends		
	NACE MR 01.75-2003 - Conform to ASME II Ed. 2001	ASME B 16.9 and ASME B 16.28 edition 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	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	S37672	116	ELLS 4 X 90 L.R. SCH-STD	340	497	35	123				
2	S37919	684	ELLS 4 X 90 L.R. SCH-STD	351	492	40	113				
3	S35969	100	ELLS 4 X 90 L.R. SCH-XH	329	476	39	137				
4	S35062 *	45	ELLS 5 X 90 L.R. SCH-STD	327	486	43	106				
5	S35369	5	ELLS 5 X 90 L.R. SCH-STD	325	484	50	119				
6	T22409	14	ELLS 5 X 90 L.R. SCH-XH	256	462	44	120				
7	T22635	6	ELLS 5 X 90 L.R. SCH-XH	308	492	44	119				
8	T24359	60	ELLS 6 X 90 L.R. SCH-XH	319	475	42	116				

PROCESO HEAT CODE	COLADA HEAT CODE	M.P. MOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	S37672	37672	0.307	0.170	0.750	0.011	0.001	0.290	0.030	0.004	0.020	0.020	0.001	0.001
HF	S37919	37919	0.324	0.180	0.730	0.014	0.001	0.310	0.050	0.063	0.020	0.066	0.001	0.001
HF	S35969	35969	0.323	0.190	0.720	0.009	0.001	0.290	0.030	0.025	0.020	0.014	0.001	0.000
HF	S35062	35062	0.332	0.190	0.760	0.010	0.003	0.290	0.030	0.026	0.030	0.016	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	T22409	22409	0.299	0.170	0.670	0.007	0.000	0.270	0.040	0.054	0.018	0.030	0.000	0.000
HF	T22635	22635	0.309	0.170	0.680	0.009	0.000	0.270	0.050	0.069	0.044	0.030	0.000	0.000
HF	T24359	24359	0.297	0.160	0.680	0.008	0.000	0.280	0.050	0.063	0.039	0.030	0.000	0.000

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 conforme ASTM A106Gradable 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 Raw material certis conform to ASTM A106 Grade B N°.

255068 257852 238315
 238320 238320 05010781
 05012740 05021168

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.

Notes:
 Formado en caliente a 780°C-840°C, enfriado al aire; Formado en frío normalizado a 840°C max.
 Hot formed fittings in a range from 780°C to 840°C, cooled in still air.
 Cold formed normalized at 840°C max.

Timeo de permanencia 10'.
 Holding time 10'.
 Inspección Dimensional Satisfactoria.
 Visual dimensioncheck Satisfactory

CF: FORMADO EN CALIENTE/FORMED
 CF: FORMADO EN FRIO/COLD FORMED

Jefe de Aseguramiento de Calidad:
 Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008

