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**CERTIFICADO DE CALIDAD
 INSPECTION CERTIFICATE**
 (DIN EN 10204:2004E - ISO 10474 3.1.B)

Numero: 24675
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Vendido a: PROVEEDORA DE MATERIALES ANKER, S.A.	Pedido del Cliente No: 5996 - 5960 - 6000	Lista de Empaque: 12728	Fecha/Date: 22 de Junio de 2011
Sold to: DE C.V.	Customers Order No:	Packing List:	
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234 WPB-07, NACE MR 01.75-2003 Conform to ASME II Ed. 2001 ASME SA-234, Grade WPB, NACE MR0103-2003	Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 - 2007 and ASME B 16.28 - 1994	Factura/Invoice: Bocas / Ends Biselado / Bevelled ends	

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION				PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C				
ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T51306	8	CODO 14 X 90° R.L. CED-STD	327	486	42	118					
2	T51305	12	CODO 14 X 90° R.L. CED-STD	322	486	42	120					
3	T51309	60	CODO 14 X 90° R.L. CED-STD	313	484	42	120					
4	T52308	240	TEE 4 CED-STD	311	486	42	120					
5	S46693	58	CODO 2 1/2 X 90° R.L. CED-STD	337	486	32	133					
6	S20808	32	RED. CONC. 3 X 2 1/2 CED-STD	279	425	30	120					
7	S31625	9	RED. CONC. 3 X 2 1/2 CED-STD	327	498	31	116					
8	S43766	250	RED. CONC. 4 X 3 CED-STD	341	501	40	124					
9	S22920	50	RED. CONC. 4 X 3 CED-STD	292	467	35	125					
10	T54815	10	TEE RED. 12 X 8 CED-STD	347	481	48	124					
11	S23663	17	RED. CONC. 2 1/2 X 1 1/2 CED-STD	359	555	50	117					

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	T51306	51306	0.300	0.170	0.660	0.012	0.001	0.260	0.040	0.051	0.022	0.030	0.000	0.000
HF	T51305	51305	0.300	0.170	0.660	0.011	0.001	0.260	0.050	0.060	0.028	0.030	0.000	0.000
HF	T51309	51309	0.300	0.170	0.670	0.013	0.001	0.280	0.050	0.051	0.017	0.030	0.000	0.000
HF	T52308	52308	0.310	0.180	0.690	0.012	0.001	0.280	0.040	0.063	0.023	0.030	0.000	0.000
HF	S46693	46693	0.320	0.180	0.720	0.013	0.001	0.270	0.050	0.038	0.020	0.025	0.001	0.001
CF	S20808	20808	0.330	0.190	0.820	0.014	0.001	0.280	0.010	0.024	0.010	0.015	0.001	0.001
CF	S31625	31625	0.320	0.180	0.750	0.009	0.001	0.300	0.040	0.049	0.010	0.034	0.001	0.000
CF	S43766	43766	0.350	0.200	0.820	0.011	0.001	0.290	0.030	0.062	0.020	0.023	0.002	0.001
CF	S22920	22920	0.310	0.180	0.730	0.011	0.002	0.290	0.030	0.033	0.010	0.001	0.001	0.002
HF	T54815	54815	0.310	0.180	0.670	0.007	0.001	0.290	0.060	0.054	0.020	0.030	0.000	0.000
CF	S23663	23663	0.340	0.200	0.720	0.011	0.002	0.290	0.040	0.076	0.020	0.033	0.001	0.002

Certificamos que los resultados de los Análisis Químicos y Pruebas Mecánicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tubería Sin Costura) conforme ASTM A106 Grado B con N°: 10041527 10041495 10041694 11006317 329515 368889 480592 311696 386722 11019822 395159

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 (Seamless Pipe) certs conform to ASTM A106 Grade B N°: 10041527 10041495 10041694 11006317 329515 368889 480592 311696 386722 11019822 395159

"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".

Notas:
 Formado en caliente a 520°C-650°C, enfriado al aire.
 Formado en frío normalizado a 940°C max.
 Tiempo de permanencia 10'.
 Inspección Dimensional: Satisfactoria.

Notas:
 Hot formed fittings in a range from 620°C to 980°C, cooled in still air.
 Cold formed normalized at 940°C max.
 Holding time 10'.
 Visual dimensional check: Satisfactory

Quality Manager/Jefe de Calidad:
 ING. WALDO GALLEGOS GALVAN

The Products described herein were produced in accordance with the above referenced specification and are identified with the "R" which is permanently marked on each fitting. The values of hardness for fittings NPS 2 1/2" and smaller ones obtain from the conversion of hardness Rockwell B to hardness Brinell HBW by means of table WILSON DESK CHART 60.

Los valores de dureza para conexiones de NPS de 2 1/2" y menores, se obtienen de la conversión de dureza Rockwell B a dureza Brinell HBW mediante la tabla WILSON DESK CHART 60.