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<b>CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE</b> (DIN EN 10204:2004E - ISO 10474 3.1.B)		Numero: Number: <b>35535</b>	Pagina/Page: <b>1</b>
Vendido a: Sold to: <b>TUVANSA MONTERREY</b>	Pedido del Cliente No: Customers Order No: <b>11826</b>	Lista de Empaque: Packing List: <b>13104</b>	Fecha/Date: <b>8 de Marzo de 2012</b>
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless fittings according to ASTM A 234 WPB-07, NACE MR 0176-2003 Conform to ASME II Ed. 2001 ASME SA-234 Grade WPB, NACE MR0103-2003		Dimensiones y Tolerancias / Dimension and tolerances <b>ASME B 16.9 - 2007</b>	
		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
2	T56508	36	TEE 12 CED-STD	321	458	36	89					
2	T51345	7	TEE 4 CED-XS	327	501	32	100					
3	T53775	214	TEE 4 CED-XS	327	497	43	107					
4	T50206	16	TEE 4 CED-XS	318	491	42	109					
5	T55440	8	TEE 4 CED-XS	306	484	40	126					
6	S47799	894	CODG 2 R 90° R L CED-XS	319	489	30	142					
7	T56926	250	RED CONC. D R 8 CED-STD	313	497	43	101					
8	T52935	34	CODG 16 X 90° R L CED-STD	323	487	44	120					
9	T56685	74	CODG 16 X 90° R L CED-STD	498	597	33	103					
10	T51153	18	TEE 12 CED-XS	342	475	48	120					
11	T47436	3	TEE 12 CED-XS	140	489	49	122					

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	T55508	55508	0.320	0.190	0.650	0.012	0.002	0.280	0.030	0.050	0.017	0.030	0.005	0.000	0.000
HF	T51345	51345	0.330	0.180	0.790	0.012	0.002	0.290	0.060	0.070	0.016	0.030	0.000	0.000	0.000
HF	T53775	53775	0.330	0.180	0.750	0.011	0.002	0.280	0.060	0.058	0.029	0.030	0.011	0.000	0.000
HF	T50206	50206	0.320	0.190	0.690	0.015	0.001	0.280	0.060	0.074	0.034	0.040	0.000	0.000	0.000
HF	T55440	55440	0.310	0.190	0.690	0.008	0.001	0.290	0.040	0.059	0.014	0.030	0.000	0.000	0.000
HF	S47799	47799	0.310	0.180	0.760	0.009	0.001	0.280	0.030	0.035	0.020	0.018	0.001	0.001	0.001
CF	T56926	56926	0.310	0.170	0.850	0.012	0.001	0.290	0.060	0.067	0.021	0.030	0.000	0.000	0.000
HF	T52935	52935	0.310	0.180	0.680	0.006	0.001	0.270	0.060	0.066	0.017	0.040	0.000	0.000	0.000
HF	T56685	56685	0.360	0.170	0.670	0.010	0.002	0.280	0.040	0.045	0.026	0.030	0.000	0.000	0.000
HF	T51153	51153	0.310	0.190	0.650	0.009	0.002	0.270	0.050	0.058	0.031	0.040	0.000	0.000	0.000
HF	T47436	47436	0.220	0.150	0.660	0.012	0.005	0.290	0.060	0.067	0.023	0.040	0.000	0.000	0.000

Certificamos que los resultados de los Análisis Químicos y Pruebas Mecánicas son verdaderos e una copia ser de los certificados enviados por el fabricante y/o el proveedor.  
 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.  
 Este material cumple con los requerimientos especificados en la orden.  
 The material of this certificate test number mentioned above is in compliance with the requirements specified in the order.

Nota: Formado en caliente a 620°C-880°C, enfriado al aire. Formado en frío normalizado a 940°C max. Tiempo de permanencia 10". Inspección Dimensional: Satisfactoria. HF FORMADO EN CALIENTE/MFY FORMED	Nota: Hot formed fittings in a range from 620°C to 880°C, cooled at air rate. Cold formed normalized at 940°C max. Holding time 10". Visual dimensional check: Satisfactory. CF FORMADO EN FRIOCALDO FORMED	<b>Quality Manager / Jefe de Calidad:</b>  <b>ING. WALDO GALLEGOS GALVAN</b>	The Products described herein were produced in accordance with the above referenced specification and are identified with the "RF" which is permanently marked on each fitting. The values of hardness for fittings NPS 2 1/2" and smaller were obtained 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.
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