

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

Vendido a: **TUBERIA Y VALVULAS DEL NORTE, S.A. DE C.V.** Pedido del Cliente No: **841, 842, 843** Fecha/Date: **27 de Julio d**
 Sold to: **Customers Order No:** **841, 842, 843** **6896** **1 DE 1**
 Especificaciones y Grados / Standard or Specification and Steel Grade **Dimensiones y tolerancias / Dimension and tolerances**
 Seamless Fittings according to ASTM/ASME A/SA 234 WPC - NACE MR **ASME B 16.9 and ASME B 16.28 edition 2001**
01.75 ed. 02 - Conform to ASME II Ed. 2001

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION		PRUEBAS MECANICAS / MECHANICAL TEST										PRUEBA DE IMPACTO 0°C / IMPACT TEST 0		
ART. ITEM	COLADA HEAT CODE	CANTIDAD 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	PROM AVEJ		
1	SGS6	100	ELLS 3" X 45° SCH-STD.	344	488	35	125							
2	SHL6	200	ELLS 4" X 45° SCH-STD.	346	494	33	22							
3	THB6	60	ELLS 6" X 45° SCH-STD.	320	473	40	139							
4	SJS5	40	ELLS 2 1/2" X 90° S.R.	321	486	37	136							
5	TBN6	30	ELLS 8" X 45° SCH-STD.	347	468	30	143							
6	TET6	10	ELLS 8" X 45° SCH-STD.	318	493	42	107							
7	SXT5	20	ELLS 5" X 90° S.R.	337	494	34	135							
8	SVR5	20	ELLS 4" X 180° S.R.	316	471	37	138							
9	RR5	20	ELLS 3" Y 180° S.R.	321	471	37	134							
10	TZM5	48	ELLS 2 1/2" X 90° L.R.	352	487	40	121							
11	HY5	14	ELLS 2 1/2" X 90° L.R.	327	485	38	133							

ANALISIS QUIMICO / CHEMICAL ANALYSIS													
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	SGS6	30591	0.225	0.190	0.014	0.001	0.200	0.020	0.057	0.010	0.034	0.001	0.001
HF	SHL6	30968	0.321	0.180	0.012	0.001	0.300	0.040	0.058	0.020	0.025	0.001	0.001
HF	THB6	16729	0.335	0.190	0.019	0.001	0.280	0.060	0.063	0.024	0.030	0.000	0.000
HF	SJS5	22280	0.330	0.190	0.009	0.001	0.270	0.050	0.040	0.020	0.020	0.001	0.001
HF	TBN6	13824	0.346	0.190	0.008	0.003	0.240	0.050	0.047	0.037	0.030	0.000	0.000
HF	TET6	15606	0.295	0.160	0.011	0.001	0.270	0.040	0.097	0.029	0.040	0.000	0.000
HF	SXT5	26238	0.316	0.190	0.011	0.001	0.290	0.020	0.030	0.010	0.010	0.001	0.001
HF	SVR5	26122	0.309	0.180	0.009	0.001	0.300	0.010	0.030	0.010	0.010	0.001	0.001
HF	RR5	94051	0.311	0.170	0.005	0.002	0.260	0.040	0.079	0.027	0.060	0.000	0.000
HF	TZM5	96324	0.324	0.180	0.008	0.002	0.280	0.060	0.063	0.042	0.040	0.000	0.000
HF	HY5	95794	0.291	0.160	0.008	0.003	0.270	0.050	0.076	0.023	0.040	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 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 cents N°

199014 199018 04011166
 152463 03019905 04004659
 165682 165675 02007378
 03008241 02006778

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