

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

Pedido del Cliente No: 1705 - 1718 - 1653 - 1705  
 Customers Order No: Dimensiones y tolerancias / Dimension and tolerances

Numero: 16462  
 Number: 1 DE 1  
 Pagina/Page:  
 Lista de Empaque: 8406  
 Packing List: Bocas / Ends  
 Biselado / Bevelled ends

Fecha/Date: 3 de Agosto de 2006

Vendido a: PIESA ANAHUAC  
 Sold to:  
 Especificaciones y Grados / Standard or Specification and Steel Grade  
 Seamless Fittings according to ASTM A 234-97, A234-02 / ASME ANSA 234 WRP -  
 NACE MR 01.75-2003 - Conform to ASME II Ed. 2001

ASME B 16.9 and ASME B 16.28 edition 2001

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. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
12	S60750	20	ELIS 4" X 4.5" SCH-XH	480	503	30	126				
13	S32536	40	ELIS 3" X 90° S.R. SCH-STD	327	488	50	131				
14	SC5	10	RED. TEE 4" X 2" SCH-STD	319	461	38	156				
15	S45459	30	ELIS 6" X 90° S.R. SCH-STD	300	483	30	141				
16	T27434	30	CONC. RED. 10" X 6" SCH-STD	303	475	42	119				
17	S24693	11	ELIS 2" X 4.5" SCH-XH	317	450	38	130				
18	R55	9	ELIS 2" X 4.5" SCH-XH	337	493	39	128				
19	S32202	4	ELIS 4" X 90° S.R. SCH-XH	309	487	38	144				
20	SAK6	11	ELIS 4" X 90° S.R. SCH-XH	303	485	38	141				
21	S21484	5	ELIS 4" X 90° S.R. SCH-XH	319	480	41	98				
22	CPS	4	ELIS 4" X 90° S.R. SCH-XH	341	472	42	124				

**ANALISIS QUIMICO / CHEMICAL ANALYSIS**

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C	%E	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	S60750		0.321	0.170	0.760	0.011	0.003	0.280	0.050	0.070	0.030	0.042	0.002	0.000
HF	S32536		0.338	0.190	0.820	0.009	0.001	0.300	0.020	0.031	0.020	0.018	0.001	0.000
CF	SC5		0.321	0.180	0.650	0.008	0.002	0.230	0.070	0.120	0.030	0.060	0.001	0.000
HF	S45459		0.326	0.180	0.760	0.010	0.001	0.340	0.050	0.032	0.030	0.022	0.001	0.000
CF	T27434		0.300	0.160	0.670	0.009	0.002	0.260	0.060	0.076	0.026	0.040	0.000	0.000
HF	S24693		0.323	0.120	1.020	0.009	0.013	0.250	0.080	0.065	0.050	0.039	0.001	0.000
HF	R55		0.333	0.190	0.740	0.007	0.001	0.290	0.040	0.030	0.040	0.020	0.001	0.000
HF	S32202		0.329	0.190	0.300	0.010	0.001	0.300	0.400	0.044	0.020	0.021	0.001	0.000
HF	SAK6		0.318	0.180	0.760	0.009	0.002	0.290	0.030	0.030	0.010	0.020	0.001	0.000
HF	S21484		0.324	0.190	0.720	0.011	0.001	0.300	0.030	0.060	0.010	0.020	0.001	0.000
HF	CPS		0.305	0.170	0.670	0.007	0.003	0.270	0.050	0.066	0.029	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 al proveedor de Materia Prima conforme ASTM A 106/Grade B 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 certs conform to ASTM A106 Grade B N°  
 207939 207922 42230 318410 6007139 5010164 161655  
 207960 165674 150430 2006511

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.

Formado en caliente a 780°C-840°C, enfriado al aire.  
 Hot formed fittings in a range from 780°C to 840°C, cooled in air.  
 Formado en frío normalizado a 840°C max.  
 Cold formed normalized at 840°C max.  
 Tiempo de permanencia 10'.  
 Holding time 10'.  
 Inspección Dimensional: Satisfactoria.  
 Visual dimension check: Satisfactory.  
 HE FORMADO EN CALIENTE/HOT FORMED CF FORMADO EN FRIJO/COLD FORMED

Jefe de Aseguramiento de Calidad:  
 Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008