



**VALVULAS WORCESTER DE MEXICO, S.A. DE C.V.
RHINO VALVES WORLDWIDE**



**ANALISIS QUIMICO Y PROPIEDADES MECANICAS
CHEMICAL COMPOSITION AND TENSILE PROPERTIES**

FACTURA / INVOICE: 74453	CLIENTE / CUSTOMER: FERRETERA ANAHUAC, S.A. DE C.V.
DESCRIPCION: 466-T 4" 150# C/TAPON ROSC	CANT./QTY: 7 CERTIFICADO No./CERTIFICATE: EE74453/98

ESTE CERTIFICADO CUBRE LOS SIGUIENTES NUMEROS DE RASTREABILIDAD

No. DE RASTREABILIDAD: 0B10562 A 0B10581

CARACTERISTICA CHARACTERISTIC	CUERPO BODY	TAPA PIPE END	VASTAGO STEM	ESFERA SPHERE
MATERIAL / MATERIAL	ASTM A351 CF8M	ASTM A351 CF8M	AISI 316	ASTM A351 CF8M
No. DE IDENTIFICACION IDENTIFY	1	2	3	4

IDENTIF	C%	Mn%	Si%	P%	S%	Cr%	Ni%	Mo%	Cu%	Sn%	N%	Pb%	Al%	V%
1	0.070	1.260	0.820	0.020	0.010	18.740	9.690	2.170	0.260	X	X	X	X	0.080
2	0.060	1.010	0.850	0.020	0.010	18.170	9.790	2.310	0.300	X	X	X	X	0.080
3	0.025	1.300	0.420	0.029	0.025	16.530	10.030	2.030	X	X	0.038	X	X	X
4	0.056	0.690	1.042	0.033	0.006	18.750	9.196	2.210	X	X	X	X	X	X

PROPIEDADES MECANICAS / PRUEBA FINAL

TENSILE PROPERTIES / FINAL TEST

IDEN	TENSILE STRENGTH	YIELD STRENGTH	ELONG. (%)	REDUCTION OF AREA (%)	HARDNESS
1	79.9 Ksi	37.4 Ksi	39	X	224 BHN
2	85.9 Ksi	42.6 Ksi	43	X	220 BHN
3	575 N/mm ²	315 N/mm ²	57	74	164 HB
4	72683 Psi	51428 Psi	52	X	163 HB

TIPO DE PRUEBA TYPE OF TEST	PSI	RESULTADO
PRUEBA HIDRAULICA DEL CUERPO HYDRAULIC TEST ON BODY	450	SIN FUGA NO LEAKAGE FOUND
PRUEBA HIDRAULICA EN ASIENTOS HYDRAULIC TEST ON SEATS	350	SIN FUGA NO LEAKAGE FOUND
PRUEBA NEUMATICA EN ASIENTOS PNEUMATIC TEST ON SEATS	80-50	SIN FUGA NO LEAKAGE FOUND

Valves tested in accordance with the pressures and duration of: ASME/ANSI B16.34-1988 part (7)

We hereby certify that the products listed above have been manufactured from materials to the specifications mentioned and that they have been tested according to the pressure tests shown

(ESTE CERTIFICADO AMPARA UNICAMENTE LAS COMPOSICIONES QUIMICAS Y PRUEBAS MECANICAS DE LOS MATERIALES ARRIBA MENCIONADOS)

ELABORADO/ELABORATED BY:

TEC. H. SERGIO LOPEZ PONCE
Asistente de Calidad

APROBO/APPROVED BY:

ING. JORGE MENDOZA LOPEZ
Gerente de Aseguramiento de Calidad

MAIZ No. 263, COL. VALLE DEL SUR, DELEGACION IZTAPALAPA.

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