



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



CERTIFICADO DE CALIDAD/QUALITY CERTIFICATE
EN 10 204 3.1 B

| Factura / Invoice: | Cantidad / Quantity: | Certificado / Certificate: | Fecha / Date: |
|---------------------------------------|----------------------|----------------------------|---------------|
| 125395 | 10.00 | EE125395/26 | 20/Jul/07 |
| Descripción / Description: | | | |
| 444-T 3" 150# C/TAPON ROSC. | | | |
| Cliente / Customer: | | | |
| 7 PLESA ANAHUAC Y CIAS., S.A. DE C.V. | | | |

Numeros de Trazabilidad / Traceability Number:

07F18998,07F18986,07F18890,07F18999,07F18985,07F18997,07F18891
07F18994,07F18893,07F18990

Válvulas Worcester de México, S.A. de C.V., certifica que el material indicado cumple con nuestras especificaciones como se describe en nuestros catálogos, hojas de especificación, dibujos y en otra literatura. Los productos, partes, materiales indicados aquí han sido comprados, fabricados, inspeccionados y probados de acuerdo con estas especificaciones, a nuestro sistema de calidad ISO 9001, NACE MR-01-75 y ASME/ANSI B16.34-1998 inciso (7).

Válvulas Worcester de México, S.A. de C.V., hereby certifies that the material supplied is in accordance with our specifications as describe in our catalog, specification sheets, drawings, and other literature. The products, parts and materials identified herein have been purchased, manufactured, inspected and tested in accordance with these specifications, our ISO 9001 quality assurance program, NACE MR-01-75 and ASME/ANSI B16.34-1998 part (7).

Elaboro / Elaborated by:

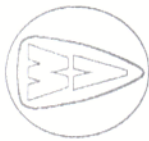
Mario Hernandez Garcia.
Auditor de Embarque

Aprobo / Aproved by:

Ing. Saturnino Padilla Becerra.
Gerente de Aseguramiento de Calidad
Quality Ass. Manager.

Maíz No. 263, Colonia Valle del Sur, Delegación Iztapalapa, México D.F. C.P. 09819

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CERTIFICADO DE CALIDAD / QUALITY CERTIFICATE

CERTIFICADO / CERTIFICATE: EE125395/26

| COMPONENTES | MATERIAL | No. COLADA |
|-----------------|----------------|------------|
| COMPONENTES | MATERIAL | No. HEAT |
| CUERPO / BODY | ASTM A216 WCB | |
| TAPA / PIPE END | ASTM A216 WCB | |
| VASTAGO / STEM | 12L14 | |
| ESFERA / SPHERE | ASTM A351 CF8M | |
| | HG582F | |
| | HG7383 | |
| | 410718 | |
| | G0539 | |

| COLADA | ANALISIS QUIMICO / CHEMICAL ANALYSIS | | | | | | | | | | | PROPIEDADES MECANICAS / MECHANICAL PROPERTIES | | | | | | | | | | | | | |
|--------|--------------------------------------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-----|---|----|-----|-------|-----|--------------------------|------------------|--------------------|----------------|--------------|--------------|-------------------|-------------------|--------|
| | C% | Mn% | Si% | P% | S% | Cr% | Mo% | Ni% | Cu% | V% | Fe% | Al% | N% | Zn% | Pb% | Sn% | RESISTENCIA A LA TENSION | TENSILE STRENGTH | LIMITE DE CEDENCIA | YIELD STRENGTH | % ELONGACION | % ELONGACION | REDUCCION DE AREA | REDUCCION DE AREA | DUREZA |
| HG582F | 0.200 | 0.910 | 0.400 | 0.025 | 0.023 | 0.105 | 0.033 | 0.002 | 0.064 | 0.001 | X | X | X | X | X | X | 520 Mpa | 320 Mpa | 30 | 30 | 54 | 54 | 148 HB | | |
| HG7383 | 0.210 | 0.970 | 0.420 | 0.019 | 0.012 | 0.127 | 0.061 | 0.077 | 0.054 | 0.005 | X | X | X | X | X | X | 530 Mpa | 330 Mpa | 24 | 24 | 42 | 42 | 153 HB | | |
| 410718 | 0.080 | 1.090 | 0.004 | 0.056 | 0.280 | X | X | X | X | X | X | X | X | X | 0.300 | X | X | X | X | X | X | X | X | X | X |
| G0539 | 0.047 | 0.697 | 0.585 | 0.032 | 0.007 | 18.205 | 2.159 | 9.707 | X | X | X | X | X | X | X | X | 525 Mpa | 212 Mpa | 42 | 42 | X | X | X | X | X |

| TIPO DE PRUEBA | PSI | RESULTADO |
|------------------------------|-------|-----------------------|
| TYPE OF TEST | PSI | RESULT |
| PRUEBA HIDRAULICA DEL CUERPO | 450 | SIN FUGA |
| HYDRAULIC TEST ON BODY | 450 | "OK" NO LEAKAGE FOUND |
| PRUEBA HIDRAULICA EN ASIENOS | 350 | SIN FUGA |
| HYDRAULIC TEST ON SEATS | 350 | "OK" NO LEAKAGE FOUND |
| PRUEBA NEUMATICA EN ASIENOS | 50-80 | SIN FUGA |
| NEUMATIC TEST ON SEATS | 50-80 | "OK" NO LEAKAGE FOUND |