



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: |
|---------------------------------------|----------------------|----------------------------|---------------|
| 114131                                | 100.00               | EE114131/124               | 17/Feb/06     |
| Descripción / Description:            |                      |                            |               |
| 4211-T 1/2" S.E. NPT                  |                      |                            |               |
| Cliente / Customer:                   |                      |                            |               |
| 7 PLESA ANAHUAC Y CIAS., S.A. DE C.V. |                      |                            |               |

| Numeros de Rastreabilidad / Traceability Number:   |
|--|
| 06A00846 A 06A00855,06A00206 A 06A00215,06A00676 A 06A00685<br>06A00656 A 06A00665,06A00466 A 06A00475,06A00386 A 06A00395<br>06A00196 A 06A00205,06A00946 A 06A00955,06A00726 A 06A00735<br>06A00966 A 06A00975 |

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, 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, and ASME/ANSI B16.34-1998 part (7,

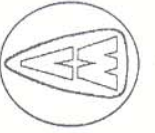
Elaboro / Elaborated by:   
Jose Luis Perez C.  
Metrologista

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 / CERTIFICATE:

EE114131/124

| No. | COMPONENTES<br>COMPONENTS | MATERIAL           |
|-----|---------------------------|--------------------|
| 1   | CUERPO / BODY             | ASTM B124 C377000  |
| 2   | TAPA / PIPE END           | UNS C36000         |
| 3   | VASTAGO / STEM            | AISI 316           |
| 4   | ESFERA / SPHERE           | UNI EN 12184CW614N |

| No. | C%    | Mn%   | Si%   | P%    | S%    | Cr%    | Mo%   | Ni%   | Cu%    | V% | Fe%   | Al%   | N% | Zn%    | Pb%   | Sn%   | PROPIEDADES MECANICAS / MECHANICAL PROPERTIES |  |                                      |                              |                                     |                    |
|-----|-------|-------|-------|-------|-------|--------|-------|-------|--------|----|-------|-------|----|--------|-------|-------|---|--|--------------------------------------|------------------------------|-------------------------------------|--------------------|
|     |       |       |       |       |       |        |       |       |        |    |       |       |    |        |       |       | ANALISIS QUIMICO / CHEMICAL ANALYSIS          | RESISTENCIA A LA TENSION<br>TENSILE STRENGTH | LIMITE DE CEDENCIA<br>YIELD STRENGTH | % ELONGACION<br>% ELONGATION | REDUCCION DE AREA<br>REDUCTION AREA | DUREZA<br>HARDNESS |
| 1   | X     | 0.004 | 0.003 | X     | X     | 0.004  | X     | X     | 58.990 | X  | 0.099 | 0.006 | X  | 38.480 | 2.190 | 0.034 | X   | X  | X                                    | X                            | 60 RB                               |                    |
| 2   | X     | X     | X     | X     | X     | X      | X     | X     | 60.280 | X  | 0.150 | X     | X  | X      | 3.370 | X     | X   | X  | 10                                   | X                            | 60 RB                               |                    |
| 3   | 0.106 | 0.720 | 0.500 | 0.017 | 0.203 | 12.190 | 0.085 | X     | X      | X  | X     | X     | X  | X      | X     | X     | X   | 640 N/mm <sup>2</sup>                        | 574 N/mm <sup>2</sup>                | 20                           | 54                                  | 196 HB             |
| 4   | X     | X     | X     | X     | X     | X      | X     | 0.300 | 57-59  | X  | 0.300 | 0.050 | X  | RESTO  | 3.500 | 0.300 | X   | X  | X                                    | X                            | X                                   |                    |

| TIPO DE PRUEBA<br>TYPE OF TEST                           | PSI   | RESULTADO<br>RESULT                |
|--|-------|------------------------------------|
| PRUEBA HIDRAULICA DEL CUERPO<br>HYDRAULIC TEST ON BODY   | 900   | * OK* NO LEAKAGE FOUND<br>SIN FUGA |
| PRUEBA HIDRAULICA EN ASIENTOS<br>HYDRAULIC TEST ON SEATS | 700   | * OK* NO LEAKAGE FOUND<br>SIN FUGA |
| PRUEBA NEUMATICA EN ASIENTOS<br>NEUMATIC TEST ON SEATS   | 50-80 | * OK* NO LEAKAGE FOUND<br>SIN FUGA |