



**WALWORTH**  
Since 1842

Industrial de Valvulas, S.A de C.V.  
Av. de La Industria Lote 16 Fracc. Industrial El Trebol  
Tepic, Jalisco, Estado de Mexico C.P. 54600

(Numero) Number **V07C8964**  
(Fecha) Date **09/11/2007**

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

### ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS:  
(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PRUBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES)

- VALVE INSPECTION AND TESTING
- METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- VALVES - FLANGED, THREADED AND WELDING ENDS
- PRESSURE TESTING OF STEEL VALVES
- PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- STEEL GATE VALVES, FLANGED AND WELDING ENDS
- FORGED FITTINGS, SOCKET - WELDING AND THREADED
- COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

**Part No. AC081A12MAB**  
(Codigo)  
**8" Fig. 5202 F 3HF WCB, API TRIM No.12 790000M**  
Description  
**CAST STEEL GATE VALVE**  
(VALVULA COMPUERTA DE ACERO FUNDIDO)  
MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMENTS \*TS AND LOW FLUCTIVE EMISSIONS CONTROL.  
(VALVULA SERVICIO NACE MR-01-75 \*Y CONTROL DE EMISIONES FUGITIVAS 50 PPM'S)

| PRESSURE TEST (PRUEBAS DE PRESION) | SHELL (CASCO) | BACK (SEAL) | SIDE (LADO) |     |
|------------------------------------|---------------|-------------|-------------|-----|
| HYDROSTATIC (PSI) (HIDROSTATICA)   | 450           | 450         | 315         | 315 |
| PNEUMATIC (PSI) (NEUMATICA)        |               |             | 80          | 80  |

### CHEMICAL COMPOSITION (%)

| ITEM (PARTS) (CODICIA) | HEAT No. (MATERIAL) | COMPOSICIÓN QUÍMICA (%)             |       |       |       |       |       |       |       |       |                  |                  | MECHANICAL TESTS (PROP. MECANICAS) |             |           |     |  |
|------------------------|---------------------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|------------------|------------------------------------|-------------|-----------|-----|--|
| C                      | Mn                  | P                                   | S     | Si    | Ni    | Cr    | Mo    | Cu    | V     | W     | TENS (KPSI CVN6) | YIELD (KPSI 1ST) | ELG (% 2ND)                        | RED (% 3RD) | BHN (AVG) |     |  |
| <b>BONNET</b> WH22418  | ASTM A-216/WCB      | 0.214                               | 0.870 | 0.025 | 0.010 | 0.531 | 0.024 | 0.056 | 0.033 | 0.044 | 0.001            | 77.72            | 42.92                              | 31          | 54        | 159 |  |
| <b>BONNET</b> WH22418  | ASTM A-216/WCB      | Normalized to (Normalized a) 920 °C |       |       |       |       |       |       |       |       |                  |                  |                                    |             |           |     |  |
| <b>BODY</b> WH22291    | ASTM A-216/WCB      | 0.197                               | 0.876 | 0.018 | 0.017 | 0.480 | 0.026 | 0.046 | 0.019 | 0.042 | 0.004            | 73.95            | 44.22                              | 26          | 48        | 167 |  |
| <b>BODY</b> WH22291    | ASTM A-216/WCB      | Normalized to (Normalized a) 930 °C |       |       |       |       |       |       |       |       |                  |                  |                                    |             |           |     |  |
| <b>WEDGE</b> WH20244   | ASTM A-216/WCB      | 0.210                               | 0.892 | 0.034 | 0.015 | 0.466 | 0.045 | 0.042 | 0.020 | 0.023 | 0.002            | 81.78            | 46.11                              | 34          | 54        | 157 |  |
| <b>WEDGE</b> WH20244   | ASTM A-216/WCB      | Normalized to (Normalized a) 920 °C |       |       |       |       |       |       |       |       |                  |                  |                                    |             |           |     |  |

CERTIFICADO POR: **Sandra Ruiz**  
ASEGURAMIENTO DE CALIDAD QUALITY ASSURANCE