



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

(Numero) Number V07C36577  
 (Fecha) Date 25/11/2008

# QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)  
**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 LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICION.)

- API 598 - VALVE INSPECTION AND TESTING
- API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS
- MSS-SP61 - PRESSURE TESTING OF STEEL VALVES
- API 6D - PIPELINE VALVES - GATE, PLUG, BALL ANF CHECK
- API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

**Part No. AC041A08MAB**  
 (Codigo)  
**4" Fig. 5202 F UT WCB, API TRIM No.8 830000K**  
 Descripción  
**CAST STEEL GATE VALVE**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO)**

VALVE WITH LOW EMISSION CONTROL (VALVULA SUMINISTRADA CON CONTROL DE EMISIONES FUGITIVAS A 50 PPM'S MAX)

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

## MECHANICAL TESTS (PROP. MECANICAS)

| ITEM (PARTE) | HEAT No. (COLADA) | MATERIAL (ASTM) | CHEMICAL COMPOSITION (%)                |       |       |       |       |       |        |       |       |       | MECHANICAL TESTS (PROP. MECANICAS) |       |       |     |     |
|--------------|-------------------|-----------------|---|-------|-------|-------|-------|-------|--------|-------|-------|-------|------------------------------------|-------|-------|-----|-----|
|              |                   |                 | C                                       | Mn    | P     | S     | Si    | Ni    | Cr     | Mo    | Cu    | V     | Cb                                 | TENS  | YIELD | ELG | RED |
| BONNET       | WH25887           | ASTM A-216/WCB  | 0.211                                   | 0.883 | 0.027 | 0.020 | 0.407 | 0.006 | 0.051  | 0.007 | 0.005 | 0.002 | 73.08                              | 43.64 | 26    | 51  | 157 |
| BONETE       |                   |                 | Normalized to (Normalized a) 920 °C     |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
| BODY         | WH24114           | ASTM A-216/WCB  | 0.205                                   | 0.892 | 0.032 | 0.021 | 0.481 | 0.044 | 0.059  | 0.021 | 0.016 | 0.004 | 83.08                              | 40.60 | 30    | 56  | 154 |
| CUERPO       |                   |                 | Normalized to (Normalized a) 930 °C     |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
| WEDGE        | D4786             | ASTM A-217/CA15 | 0.100                                   | 0.890 | 0.032 | 0.016 | 0.870 | 0.830 | 12.470 | 0.022 | 0.036 | 0.001 | 97.88                              | 70.76 | 26    | 45  | 275 |
| DISCO        |                   |                 | Normalized a (Normalized to) 970 °C     |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
|              |                   |                 | Temper to (Temple a) 650 °C             |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
|              |                   |                 | Temper to (Temple a) 650 °C             |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
|              |                   |                 | Temple a (Temple to) 630 °C             |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |
|              |                   |                 | Enfriado en aire (Enfriado en aire. (C) |       |       |       |       |       |        |       |       |       |                                    |       |       |     |     |

## COMPOSICIÓN QUIMICA (%)

**JESSICA GARCIA**

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD  
 CERTIFIED BY: QUALITY ASSURANCE