



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 V07G4403
 (Fecha) Date 26/11/2007

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 PRABADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES.)

- 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 600 - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- ANSI B16-11 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- API 602 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AG031A08MAA**

Description **3" Fig. 5275 F UT WCB, API TRIM No.8 8300000**

CAST STEEL GLOBE VALVE
 (VALVULA GLOBO DE ACERO FUNDIDO)
 VALVE WITH LOW EMISSION CONTROL
 (VALVULA SUMINISTRADA CON CONTROL DE EMISIONES FUGITIVAS A 50 PPM'S MAX)

| TEST | REQUIREMENT | ACTUAL | STATUS |
|------------------------------------|---------------|--------|--------|
| PRESSURE TEST (PRUEBAS DE PRESION) | SHELL (CASCO) | 450 | 450 |
| HYDROSTATIC (PSD) (HIDROSTATICA) | BACK (SEAT) | 450 | 315 |
| PNEUMATIC (PSD) (NEUMATICA) | SIDE (LADO) | 80 | 80 |
| | | | N A |

CHEMICAL COMPOSITION (%)

| ITEM (PARTS) | HEAT No. (CODIGO) | MATERIAL (ASTM) | C | Mn | P | S | SI | Ni | Cr | Mo | Cu | V | W | TENS KPSI (CVN@) | YIELD KPSI (IST) | ELG % (2ND) | RED % (3RD) | BHN (AVG) |
|--------------|-------------------|-------------------|---------------------------------------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|------------------|------------------|-------------|-------------|-----------|
| BONNET | WH10009 | ASTM A-216/WCB | 0.202 | 0.994 | 0.031 | 0.023 | 0.455 | 0.011 | 0.048 | 0.006 | 0.032 | 0.005 | 0.000 | 42.92 | 73.08 | 26 | 50 | 160 |
| BONNET | WH15444 | ASTM A-216/WCB | 0.197 | 0.953 | 0.027 | 0.015 | 0.442 | 0.023 | 0.062 | 0.043 | 0.016 | 0.002 | | 78.59 | 47.27 | 35 | 52 | 157 |
| CUERPO | | | Normalized to (Normalizado a) 930 °C | | | | | | | | | | | | | | | |
| WEDGE DISCO | 1309-06 | ASTM A-276 GR 410 | 0.140 | 0.770 | 0.022 | 0.009 | 0.570 | 0.430 | 12.320 | 0.000 | 0.190 | 0.000 | | 101.38 | 58.89 | 24 | 57 | 200 |
| | | | Temper to (Temple a) 650 °C | | | | | | | | | | | | | | | |
| | | | Cooled in air (Cooled in air) (Enfri) | | | | | | | | | | | | | | | |
| | | | Cooled in air (Cooled in air) (Enfri) | | | | | | | | | | | | | | | |

MECHANICAL TESTS (PROP. MECANICAS)

FACI0-21 REV "2"

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD

CERTIFIED BY: QUALITY ASSURANCE