



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

(Numero) Number
 (Fecha) Date

V08C21591
 03/09/2008

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 PRABADO 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 AND 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. AC031A08MAA8300000

(Codigo) 3" Fig. 5202 F UT WCB, API TRIM No.8 8300000

Description 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) (PNEUMATICA) | | | 80 80 |

CHEMICAL COMPOSITION (%)

| ITEM (PARTES) | HEAT No. (COLDADA) | MATERIAL (ASTM) | C | Mn | P | S | Si | Ni | Cr | Mo | Cu | V | Cb | TENS KPSI CVN/ft | YIELD KPSI 1ST | ELG % | RED % | BHN AVG |
|------------------|-----------------------|--------------------|--|-------|-------|-------|-------|-------|--------|-------|-------|-------|----|------------------------|----------------------|----------|----------|------------|
| BONNET | WH20941 | ASTM A-216/WCB | 0.212 | 0.918 | 0.018 | 0.011 | 0.453 | 0.041 | 0.102 | 0.026 | 0.012 | 0.005 | | 79.89 | 52.20 | 32 | 59 | 160 |
| BONNET | | | Normalized to (Normalizado a) 930 °C | | | | | | | | | | | | | | | |
| BODY | WH27935 | ASTM A-216/WCB | 0.217 | 0.980 | 0.024 | 0.019 | 0.464 | 0.008 | 0.032 | 0.006 | 0.026 | 0.006 | | 73.66 | 42.20 | 27 | 47 | 165 |
| BODY | | | Normalized to (Normalizado a) 930 °C | | | | | | | | | | | | | | | |
| WEDGE DISCO | D3892 | ASTM A-217/CA15 | 0.100 | 0.740 | 0.020 | 0.025 | 0.870 | 0.540 | 12.130 | 0.025 | 0.038 | 0.002 | | 98.89 | 70.18 | 24 | 46 | 270 |
| | | | Normalized to (Normalizado to) 970 °C | | | | | | | | | | | | | | | |
| | | | Temple a (Temper to) 630 °C | | | | | | | | | | | | | | | |
| | | | Enfriado en aire. (Enfriado en aire. (C) | | | | | | | | | | | | | | | |

MECHANICAL TESTS (PROP. MECANICAS)

JESSICA GARCIA