



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

(Numero) Number
 (Fecha) Date

V087B0379
 12/11/2009

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 EDICIÓN.)

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

Part No. **CB1601A2AABTHQZ00B**
 (Código)
 Description **16" Fig. 8122 F A105, THQZ00B**
 Descripción **STEEL BALL VALVE 150 PSI**
(VALVULA ESFERA DE ACERO 150 PSI)

(VALVULA SERVICIO NACE MR0175/ISO 15156 ED 2003
 PRUEBA DE FUEGO API 6FA, API 607

) (PINTURA AMBIENTE MARINO, PRUEBA CON AIRE
 INC. C3 DEL APENDICE C DEL API-SPEC-6D
)

| PRESSURE TEST (PRUEBAS DE PRESION) | SHELL (CASCO) | BACK (SEAT) | SIDE (LADO) | |
|---------------------------------------|------------------|----------------|----------------|-----|
| | | | 1 | 2 |
| HYDROSTATIC (PSI) (HIDROSTATICA) | 430 | | 315 | 315 |
| PNEUMATIC (PSI) (NEUMATICA) | | | 80 | 80 |

MECHANICAL TESTS (PROP. MECANICAS)

CHEMICAL COMPOSITION (%) COMPOSICIÓN QUIMICA (%)

| ITEM (PARTE) | HEAT No. (COLADA) | MATERIAL (ASTM) | CHEMICAL COMPOSITION (%) | | | | | | | | | | TENS | YIELD | ELG | RED | BHN |
|------------------|----------------------|--------------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------------|----------|----------|
| | | | C | Mn | P | S | Si | Ni | Cr | Mo | Cu | V | Cb | KPSI CVN@ | KPSI 1ST | % 2ND | % 3RD |
| BALL BOLA | D184 | ASTM A-105N | 0.190 | 0.890 | 0.014 | 0.007 | 0.280 | 0.060 | 0.140 | 0.010 | 0.190 | 0.007 | 76.70 | 53.36 | 31 | 67 | 150 |
| BODY CUERPO | 8E887 | ASTM A-105N | 0.210 | 0.850 | 0.018 | 0.005 | 0.250 | 0.070 | 0.100 | 0.030 | 0.140 | 0.003 | 75.98 | 48.14 | 30 | 69 | 150 |
| END1 EXTREMO1 | 8E600 | ASTM A-105N | 0.180 | 0.850 | 0.013 | 0.013 | 0.240 | 0.070 | 0.140 | 0.030 | 0.140 | 0.003 | 72.79 | 50.03 | 33 | 74 | 150 |
| END2 EXTREMO2 | 8E600 | ASTM A-105N | 0.180 | 0.850 | 0.013 | 0.013 | 0.240 | 0.070 | 0.140 | 0.030 | 0.140 | 0.003 | 72.79 | 50.03 | 33 | 74 | 150 |

JESSICA GARCIA

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD
 CERTIFIED BY: QUALITY ASSURANCE