



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

(Numero) Number V07R1475
 (Fecha) Date 25/10/2007

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 6D | - PIPELINE VALVES - GATE, PLUG, BALL ANF 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. **ARI21A09MAA**

(Codigo) **12" Fig. 5341 F A WCB, API TRIM No. 9 8300000**

Descripción **CAST STEEL SWING CHECK VALVE
 (VALVULA RETENCION TIPO COLUMPIO 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 (SEAL) | SIDE (LADO) |
| HYDROSTATIC (PSI) (HIDROSTATICA) | 450 | N A | 315 |
| PNEUMATIC (PSI) (NEUMATICA) | | N A | N A |

MECHANICAL TESTS (PROP. MECANICAS)

CHEMICAL COMPOSITION (%)

COMPOSICION QUIMICA (%)

| ITEM (PARTE) | HEAT No. (COLADA) | MATERIAL (ASTM) | C | Mn | P | S | Si | Ni | Cr | Mo | Cu | V | W | TENS KPSI CVN# | YIELD KPSI 1ST | ELG % | RED % | BHN AVG |
|-----------------------|-------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|----------------------|----------------------|----------|----------|------------|
| BODY CUERPO | WH61817 | ASTM A-216/WCB | 0.204 | 0.812 | 0.026 | 0.022 | 0.494 | 0.049 | 0.040 | 0.023 | 0.029 | 0.008 | | 74.38 | 43.50 | 27 | 50 | 152 |
| WEDGE DISCO | 1B831 | ASTM A-216/WCB | 0.250 | 0.689 | 0.020 | 0.008 | 0.600 | 0.198 | 0.318 | 0.014 | 0.198 | 0.006 | | 79.53 | 40.17 | 29 | 42 | 162 |
| COVER TAPA | WH61637 | ASTM A-216/WCB | 0.205 | 0.883 | 0.023 | 0.021 | 0.420 | 0.030 | 0.036 | 0.010 | 0.030 | 0.001 | | 74.24 | 45.09 | 27 | 49 | 164 |

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