



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 **V105R1104**  
 (Fecha) Date **06/10/2011**

## 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 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. AR041A08MAB830000M**  
 (Código) **4" Fig. 5341 F UT WCB, API TRIM No.8 830000**  
 Description **CAST STEEL SWING CHECK VALVE 150 CLASS**  
 Descripción **(VALVULA RETENCIÓN TIPO COLUMPIO DE ACERO FUNDIDO CLASE 150)**

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

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSD) (HIDROSTATICA)	450	N A	315	N A
PNEUMATIC (PSD) (NEUMATICA)			N A	N A

**MECHANICAL TESTS (PROP. MECANICAS)**

**CHEMICAL COMPOSITION (%)      COMPOSICIÓN QUIMICA (%)**

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD	BHN AVG
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V					
BODY CUERPO	WH32094	ASTM A-216/WCB	0.189	0.949	0.016	0.029	0.508	0.032	0.026	0.006	0.027	0.007	75.11	44.08	27	52	159
COVER TAPA	WH32042	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)										80.91	48.00	30	56	166
WEDGE DISCO	HD6991	ASTM A-217/CA15	Normalized to (Normalizado a) 930 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)										100.48	70.47	30	46	227
			Enfriado en aire. (Cooled in air.)														

FAC10-21 REV "3"

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD      CERTIFIED BY : QUALITY ASSURANCE

**Jessica Garcia**