



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 V07R6944  
 (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 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. **AR011A08MAA**

(Codigo) **2" Fig. 5341 F UT WCB, API TRIM No.8 8300000**

Description **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 (SEAT)	SIDE (LADO)
HYDROSTATIC (PSI) (HIDROSTATICA)	450	N A	315 N A
PNEUMATIC (PSI) (PNEUMATICA)			N A N A

### CHEMICAL COMPOSITION (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	W	TENS KPSI CMMb	YIELD KPSI IST	ELG %	RED %	BHN AVG
BODY CUERPO	WH1142	ASTM A-216/WCB	0.190	0.897	0.021	0.025	0.500	0.010	0.040	0.030	0.070	0.001	0.000	75.54	45.24	28	48	162
WEDGE DISCO	HD3098	ASTM A-217/CA15	0.100	0.790	0.024	0.018	0.920	0.140	12.390	0.017	0.027	0.003	0.000	100.48	69.02	28	43	271
COVER TAPA	WH19153	ASTM A-216/WCB	0.189	0.986	0.019	0.010	Temple a (Temper to) 630 °C 0.402	0.044	0.084	0.014	0.026	0.001		73.23	44.23	30	47	158
			Normalized to (Normalizado a) 930 °C															
			Cooled in air: (Cooled in air: (Enfr)															

### MECHANICAL TESTS (PROP. MECANICAS)

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE

  
 Sandra Ruiz