



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 **V08R2884**
 (Fecha) Date **11/08/2008**

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 EDICIÓN.)

- 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. **AR031A12MAA**

(Codigo) **3" Fig. 5341 F 3HF WCB, API TRIM No.12 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 (PSD) (HIDROSTATICA)	450	N A	315
PNEUMATIC (PSD) (NEUMATICA)			N A

MECHANICAL TESTS (PROP. MECANICAS)

CHEMICAL COMPOSITION (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD	BHN AVG
BODY	WH23393	ASTM A-216 WCB	0.193	0.939	0.033	0.012	0.435	0.005	0.014	0.008	0.024	0.001		72.06	43.35	29	46	150
CUERPO			Normalized to (Normalizado a) 930 °C															
WEDGE	HD3250	ASTM A-216 WCB	0.190	0.910	0.016	0.018	0.530	0.078	0.121	0.039	0.041	0.004		74.39	47.85	26	48	172
DISCO			Normalized to (Normalizado a) 920 °C															
COVER	WH12494	ASTM A-216 WCB	0.213	0.914	0.031	0.021	0.489	0.041	0.031	0.020	0.014	0.004		71.49	42.49	30	52	153
TAPA			Normalized to (Normalizado a) 930 °C															
			Temper to (Temple a) 650 °C															
			Temper to (Temple a) 650 °C															
			Cooled in air; (Cooled in air; (Enfr)															
			Cooled in air; (Cooled in air; (Enfr)															

FAC10-21 REV "3"

CERTIFICADO POR:
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:
 QUALITY ASSURANCE

JESSICA GARCIA