



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 V10R4566  
 (Fecha) Date 26/02/2010

## 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. AR031A12MAA7900000**  
 (Código) **3" Fig. 5341 F 3HF WCB, API TRIM No.12 7900000**  
**Description** **CAST STEEL SWING CHECK VALVE 150 CLASS**  
 Descripción **(VALVULA RETENCIÓN TIPO COLUMPIO DE ACERO FUNDIDO CLASE 150)**

MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMEN \*TS AND LOW FUGITIVE EMISSIONS CONTROL  
 (VALVULA SERVICIO NACE MR-01-75 \*Y CONTROL DE EMISIONES FUGITIVAS 50 PPM'S)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	N A	315	N A
PNEUMATIC (PSI) (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	WH31610	ASTM A-216/WCB	0.213	0.900	0.029	0.013	0.485	0.041	0.060	0.016	0.036	0.001	74.53	45.97	29	52	148
COVER TAPA	41041108	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C			Temper to (Temple a) 650 °C			Cooled in air.(Cooled in air. (Enfr)			79.00	50.00	35	62	149	
WEDGE DISCO	HD3250	ASTM A-216/WCB	0.180	0.890	0.020	0.007	0.550	0.260	0.080	0.010	0.190	0.000	74.39	47.85	26	48	172
			Normalized to (Normalizado a) 955 °C			Temper to (Temple a) 650 °C			Cooled in air.(Cooled in air. (Enfr)								
			0.190	0.910	0.016	0.018	0.530	0.078	0.121	0.039	0.041	0.004					
			Normalized to (Normalizado a) 920 °C			Temper to (Temple a) 650 °C			Cooled in air.(Cooled in air. (Enfr)								

PLEASE ANAHUAC Y CIA. S.A. DE C.V.  
**CONTROL DE CALIDAD**

FECHA 01 Mar 2010  
 FIRMA E. RUIZ

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD  
 CERTIFIED BY: QUALITY ASSURANCE

**JESSICA GARCIA**

FACI0-21 REV "3"