



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

(Numero) Number V09C23580  
 (Fecha) Date 18/11/2009

## 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. AC031A08MAA83MW000**  
 (Código) **3" Fig. 5202 F UT WCB, API TRIM No.8 83MW000**  
**Description** **CAST STEEL GATE VALVE 150 PSI**  
**Descripción** **(VALVULA COMPUERTA DE ACERO FUNDIDO 150 PSI)**

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)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	NA	NA
PNEUMATIC (PSI) (NEUMATICA)			80	80

**MECHANICAL TESTS (PROP. MECANICAS)**

CHEMICAL COMPOSITION (%)												COMPOSICIÓN QUIMICA (%)					TENS	YIELD	ELG	RED	BHN
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ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG
			<b>BODY</b> CUERPO	XS411	ASTM A-216/WCB	0.220	0.750	0.025	0.024	0.490	0.061	0.120	0.021				76.99	48.43
<b>BONNET</b> BONETE	WH20515	ASTM A-216/WCB	Normalized to (Normalizado a) 920 °C				Temper to (Temple a) 650 °C		Cooled in air.(Cooled in air. (Enfr)					75.98	48.87	36	57	163
<b>WEDGE</b> DISCO	WH81139	ASTM A-217/CA15	0.124	0.725	0.037	0.017	0.556	0.086	13.510	0.026	0.010	0.001		98.89	74.39	25	45	287
			Normalized to (Normalizado a) 930 °C				Temper to (Temple a) 650 °C		Cooled in air.(Cooled in air. (Enfr)		Enfriado en aire.(Enfriado en aire. (C)							

FAC10-21 REV "3"

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD  
 CERTIFIED BY : QUALITY ASSURANCE

**JESSICA GARCIA**