



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 V07C36395  
 (Fecha) Date 29/01/2008

## 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 PRUBADO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES)

- |             |   |             |   |
|-------------|---|-------------|---|
| 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. **AC041A08MAB**  
 (Codigo)  
**4" Fig. 5202 F UT WCB, API TRIM No.8 830000K**  
 Description  
**CAST STEEL GATE VALVE**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO)**  
 VALVE WITH LOW EMISSION CONTROL  
 (VALVULA SUMINISTRADA CON CONTROL DE EMISIONES FUGITIVAS A 50 PPM'S MAX)

PRESSURE TEST (PRUBAS DE PRESION)	SHELL (CASCO)	BACK (SEAL)	SIDE (LADO)	
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	1	2
PNEUMATIC (PSID) (NEUMATICA)			80	80

### CHEMICAL COMPOSITION (%)

ITEM (PARTE)	HEAT No. (COLOADA)	MATERIAL (ASTM)	COMPOSICION QUIMICA (%)											TENS	YIELD	ELG	RED	BHN
			C	Mn	P	S	SI	NI	Cr	Mo	Cu	V	Cb	KSI CVN@	KSI 1ST	% 2ND	% 3RD	AVG
BONNET BONETE	WH23689	ASTM A-216/WCB	0.192	0.964	0.026	0.019	0.491	0.021	0.025	0.035	0.093	0.006		76.42	50.46	30	52	155
BODY CUERPO	WH23673	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C 0.214	0.958	0.029	0.007	Temper to (Temple a) 650 °C 0.495	0.023	0.046	0.049	0.043	0.003	Cooled in air (Cooled in air) (Enfri) 0.049	72.07	45.10	31	60	158
WEDGE DISCO	D5482	ASTM A-217/CA15	Normalized to (Normalizado a) 930 °C 0.130	0.780	0.017	0.016	Temper to (Temple a) 650 °C 0.950	0.410	12.070	0.030	0.049	0.001	Cooled in air (Cooled in air) (Enfri) Enfriado en aire (Enfriado en aire) (C)	100.63	70.76	25	44	274

### MECHANICAL TESTS (PRUBAS MECANICAS)