



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 V07C32219  
 (Fecha) Date 11/12/2007

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

- VALVE INSPECTION AND TESTING
- METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- VALVES - FLANGED, THREADED AND WELDING ENDS
- PRESSURE TESTING OF STEEL VALVES
- PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- STEEL GATE VALVES, FLANGED AND WELDING ENDS
- FORGED FITTINGS, SOCKET - WELDING AND THREADED
- COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC041A08MAA**  
 (Codigo)  
**4" Fig. 5202 F UT WCB, API TRIM No.8 83000000**  
 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)

TEST	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
<b>PRESSURE TEST (PRUEBAS DE PRESION)</b>				
<b>HYDROSTATIC (PSI) (HIDROSTATICA)</b>	450	450	N/A	N/A
<b>PNEUMATIC (PSID) (PNEUMATICA)</b>			80	80

### MECHANICAL TESTS (PROB. MECANICAS)

### CHEMICAL COMPOSITION (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	COMPOSICIÓN QUÍMICA (%)															
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	W	TENS (KPSI CVN@)	YIELD (KPSI IST)	ELG (%) 2ND	RED (%) 3RD	BHN AVG
<b>BONNET</b>	WH19873	ASTM A-216/WCB	0.203	0.862	0.020	0.015	0.535	0.043	0.038	0.022	0.021	0.004		76.85	46.84	32	49	161
<b>BONNET</b>	WH20873	ASTM A-216/WCB	Normalized to (Normalized a) 930 °C	0.192	0.913	0.022	0.013	0.400	0.040	0.020	0.013	0.003	Cooled in air (Cooled in air. (Enfr)	76.27	45.53	34	58	157
<b>WEDGE</b>	D2817	ASTM A-217/CA15	Normalized to (Normalized a) 920 °C	0.130	0.800	0.015	0.014	0.940	0.340	12.750	0.020	0.044	0.002	99.33	70.76	25	46	272
<b>DISCO</b>			Normalized a (Normalized to) 970 °C					Temple a (Temper to) 630 °C					Enfriado en aire (Enfriado en aire. (C)					

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE