



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

(Numero) Number V07C28314  
 (Fecha) Date 27/09/2007

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

- 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 ANF 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.** AC041A09MAA  
 (Codigo)  
**Description** 4" Fig. 5202 F A WCB, API TRIM No. 9 8300000  
 (Descripción)  
 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 (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE 1	(LADO) 2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### 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/6	YIELD KPSI 1ST	ELG %	RED %	BHN AVG
BONNET	WH16503	ASTM A-216/WCB	0.214	0.951	0.025	0.015	0.515	0.046	0.052	0.020	0.022	0.006		82.79	47.56	30	48	159
BONNET	WH16503	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C															
BONNET	WH16503	ASTM A-216/WCB	0.198	0.960	0.028	0.013	0.508	0.045	0.041	0.015	0.012	0.003		86.71	46.98	30	59	151
BONNET	WH16503	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C															
BONNET	WH16503	ASTM A-216/WCB	0.201	0.883	0.039	0.022	0.526	0.048	0.032	0.027	0.040	0.010	0.000	74.96	45.82	26	48	157
BONNET	WH16503	ASTM A-216/WCB	Cooled in air; (Cooled in air; (Enfr)															
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### MECHANICAL TESTS (PROP. MECANICAS)

FACIO-21 REV "2"

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE