

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

(Numero) Number  
 (Fecha) Date

V08C1777  
 05/06/2008

## 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 EDICION.)

- 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. **AC032A08MAB**

(Codigo) **3" Fig. 5206 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)

TEST TYPE	TEST VALUE	TEST VALUE	TEST VALUE	TEST VALUE
PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
HYDROSTATIC (PSI)	1125	1125	1	2
PNEUMATIC (PSI)			80	80

### CHEMICAL COMPOSITION (%)

ITEM (PARTES)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb
BONNET	WH28321	ASTM A-216/WCB	0.198	0.874	0.029	0.014	0.432	0.047	0.039	0.017	0.010	0.006	
BONNET	WH27219	ASTM A-216/WCB	0.201	0.933	0.033	0.018	0.438	0.012	0.030	0.005	0.010	0.001	
WEDGE	D8301	ASTM A-217/CA15	0.100	1.000	0.017	0.010	0.850	0.280	12.170	0.018	0.042	0.002	

### MECHANICAL TESTS (PROP. MECANICAS)

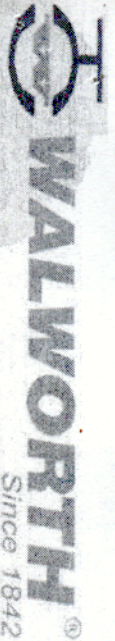
TENS	YIELD	ELG	RED	BHN
KPSI (CNS/6)	KPSI (ST)	% (2ND)	% (3RD)	AVG
76,85	43,94	27	48	151
75,69	42,63	26	46	169
99,18	69,74	25	47	269

FACIO-21 REV "3"

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE

Sandra Ruiz



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

(Numero) Number V08C17772  
 (Fecha) Date 05/06/2008

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)  
**ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO**

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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)	1125	1125	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### CHEMICAL COMPOSITION (%)

ITEM (PARTES)	HEAT No. (COLDADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS (KPSI CVN/2)	YIELD (KPSI 1ST)	ELG (%) 2ND	RED (%) 3RD	BHN AVG
BONNET	WH288660	ASTM A-216/WCB	0.201	0.956	0.026	0.019	0.463	0.033	0.044	0.046	0.030	0.002		87.29	53.80	27	58	157
BONETE			Normalized to (Normalizado a) 930 °C															
BODY	WH28550	ASTM A-216/WCB	0.209	0.968	0.031	0.023	0.496	0.044	0.040	0.019	0.015	0.002		75.98	47.27	30	43	151
CUERPO			Normalized to (Normalizado a) 930 °C															
WEDGE	D8522	ASTM A-217/CA15	0.110	0.750	0.024	0.013	0.890	0.880	12.660	0.011	0.065	0.001		98.89	71.05	26	43	273
DISCO			Normalized a (Normalizado to) 970 °C															
			Temple a (Temper to) 630 °C															

### MECHANICAL TESTS (PROP. MECANICAS)

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD

CERTIFIED BY: QUALITY ASSURANCE

Sandra Ruiz