



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  
 (Fecha) Date

V07R711  
 13/11/2008

## 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 PROBADO 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. **AR101A12MAA8300000**

(Código)

Description **10" Fig. 5341 F 3HF WCB, API TRIM No.12 830000**

Description **VALVULA RETENCIÓN TIPO COLUMPIO DE ACERO FUNDIDO (CAST STEEL SWING CHECK VALVE)**

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	N A	315	N A
PNEUMATIC (PSI) (NEUMATICA)			N A	N A

### MECHANICAL TESTS (PROP. MECANICAS)

### CHEMICAL COMPOSITION (%) COMPOSICIÓN QUIMICA (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										TENS	YIELD	ELG	RED	BHN	
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG
BODY CUERPO	WH62793	ASTM A-216/WCB	0.181	0.994	0.028	0.023	0.499	0.026	0.053	0.007	0.031	0.004		85.62	43.64	32	47	158
BONNET BONETE	WH18327	ASTM A-216/WCB	Normalized to (Normalizado a) 930 °C				Temper to (Temple a) 650 °C		Cooled in air. (Enfriado en aire.)									
			0.205	0.902	0.020	0.011	0.366	0.035	0.082	0.019	0.013	0.002		82.07	53.22	33	57	157
WEDGE DISCO	1A1143	ASTM A-216/WCB	Normalized to (Normalizado a) 920 °C				Temper to (Temple a) 650 °C		Cooled in air. (Enfriado en aire.)									
			0.215	0.635	0.040	0.013	0.600	0.070	0.102	0.012	0.090	0.005		79.29	41.30	31	41	162
			Normalized to (Normalizado a) 950 °C				Temper to (Temple a) 650 °C		Cooled in air. (Enfriado en aire.)									

FACIO-21 REV "3"

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE

Yolanda Ponciano