



**HAWORTH**  
 Since 1942

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

V09C14807  
 17/11/2009

## 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.** AC022A08MAA8300000  
 (Código)  
**Description** 2 1/2" Fig. 5206 F UT WCB, API TRIM No.8 8300000  
 Descripción CAST STEEL GATE VALVE 300 PSI  
 (VALVULA COMPUERTA DE ACERO FUNDIDO 300 PSI)

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	NA	NA
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TESTS (PROP. MECANICAS)

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

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD	BHN AVG		
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V						Cb	
BODY CUERPO	WH17353	ASTMA-216/WCB	0.212	0.900	0.024	0.011	0.519	0.054	0.050	0.025	0.016	0.006	86.28	47.56	33	49	156		
BONNET BONETE	WH18161	ASTMA-216/WCB	Normalized to (Normalizado a) 930 °C		0.218	0.910	0.020	0.016	0.456	0.045	0.059	0.019	0.022	0.004	80.62	47.27	32	51	157
WEDGE DISCO	1A1565	ASTMA-216/WCB	Normalized to (Normalizado a) 930 °C		0.180	0.780	0.010	0.010	0.460	0.070	0.110	0.010	0.130	0.020	72.52	41.84	32	42	160
			Normalized to (Normalizado a) 850 °C						Temper to (Temple a) 650 °C										

FAC10-21 REV "3"

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY :  
 QUALITY ASSURANCE

**JESSICA GARCIA**