



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 V08C10698  
 (Fecha) Date 01/02/2008

## 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 AND 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. **AC031A08MAA**  
 (Codigo) **3" Fig. 5202 F UT WCB, API TRIM No.8 8300000**  
 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)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N/A
PNEUMATIC (PSI) (NEUMATICA)			80

### CHEMICAL COMPOSITION (%)

### COMPOSICIÓN QUÍMICA (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS KPSI CVN/6	YIELD KPSI IST	ELC %	RED %	BHN AVG
BONNET BONETE	WH16200	ASTM A-216/WCB	0.195	0.980	0.029	0.011	0.428	0.042	0.055	0.018	0.018	0.005		78.01	47.70	35	53	160
BODY CUERPO	WH20838	ASTM A-216/WCB	Normalized to (Normalized a) 920 °C 0.188	0.983	0.034	0.023	Temper to (Temple a) 650 °C 0.482	0.044	0.042	0.017	0.019	0.005		80.77	51.48	30	53	154
WEDGE DISCO	WH18482	ASTM A-217/CA15	Normalized to (Normalized a) 930 °C 0.105	0.562	0.027	0.017	Temper to (Temple a) 650 °C 0.446	0.080	13.450	0.040	0.020	0.020		99.91	68.30	23	41	284
			Normalized a (Normalized to) 970 °C															

### MECHANICAL TESTS (PROP. MECANICAS)

CERTIFICADO POR:  
 ASEGURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE  
  
 Sandra Ruiz