



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 V08R2044
 (Fecha) Date 05/02/2008

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
API 599
ANSI B16-10
ANSI B16-34
MSS-SP61 | - VALVE INSPECTION AND TESTING
- METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- VALVES - FLANGED, THREADED AND WELDING ENDS
- PRESSURE TESTING OF STEEL VALVES |
| API 6D
API 600
ANSI B16-11
API 602 | - PIPELINE VALVES - GATE, PLUG, BALL ANF CHECK
- STEEL GATE VALVES, FLANGED AND WELDING ENDS
- FORGED FITTINGS, SOCKET - WELDING AND THREADED
- COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS |

Part No. AR031A10MAA
3" Fig. 5341 F 316 WCB, API TRIM No. 10 7900000
Description
 CAST STEEL SWING CHECK VALVE
 (VALVULA RETENCION TIPO COLUMPIO DE ACERO FUNDIDO)
 MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMEN *TS AND LOW FUGITIVE EMISSIONS CONTROL.
 (VALVULA SERVICIO NACE MR-01-75 - *Y CONTROL DE EMISIONES FUGITIVAS 90 PPM'S)

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	N A	N A

CHEMICAL COMPOSITION (%)

ITEM (PARTES)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb
BODY (CUERPO)	WH16088	ASTM A-216/WCB	0.216	0.880	0.026	0.014	0.504	0.046	0.052	0.020	0.032	0.004	0.004
WEDGE (DISCO)	WH90095	ASTM A-351/CF8M	0.054	0.488	0.029	0.009	0.846	9.800	18.630	2.248	0.235	0.202	0.202
COVER (TAPA)	WH15575	ASTM A-216/WCB	0.204	0.867	0.035	0.019	0.505	0.045	0.043	0.018	0.033	0.003	0.003

MECHANICAL TESTS (PROP. MECANICAS)

TENS	YIELD	ELG	RED	BHN
KPSI (CVN@)	KPSI 1ST	%	%	AVG
73.23	42.63	30	44	152
76.99	40.31	30	0	163
78.44	45.24	35	49	154

Normalizado a) 930 °C
 Temper to (Temple a) 650 °C
 Normalizado a) 920 °C
 Cooled in air (Cooled in air) (Enfri)

CERTIFICADO POR: ASEGURAMIENTO DE CALIDAD
 CERTIFIED BY: QUALITY ASSURANCE
 Sandra Ruiz