



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepotzotlán, Estado de México, México C.P. 54610

**CERTIFICATE OF MATERIALS & TEST REPORT (CMTR)**  
**(CERTIFICADO DE CALIDAD DE MATERIALES Y REPORTE DE PRUEBAS CMTR)**  
 ACCORDING TO EN 10204 TYPE 3.1

No. código interno (Product Code Nr.): **AC080GA08MA2A1BG** No. Serie (Serial Number): **V128C2516**  
 Fecha (Date): **May 19, 2016** No. De Tag (Tag Number): \_\_\_\_\_  
 Clientes (Customer): \_\_\_\_\_ No Pedido del Cliente (Customer PO Nr.): \_\_\_\_\_  
 Partida (Customer Item): \_\_\_\_\_ Pedido Interno No (Walworth Sales Nr.): \_\_\_\_\_ Partida (Item): \_\_\_\_\_

Linea de producto (Product line):	CAST STEEL	Extremos (Ends):	RAISED FACE (RF TYPE "A")	Operación (Operation):	HANDWHEEL
Tipo de válvula (Type of valve):	GATE OS & Y	Cuerpo (Shell):	WCB	Otros (Other requirements):	
Diámetro (Nominal diameter):	8	Interiores (Trim):	#08 (UT)		
Presión clase (Pressure class):	300	Figura No (Figure Nr.):	FIG 5206		

**COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)**

Parte (Component)	Material (Material)	Colada (Heat)	% C	% Mn	% P	% S	% Si	% Ni	% Cr	% Mo	% Cu	% V	%	%	%	%	%	%
BONETE (BONNET)	ASTM_A_216_GR_WCB	H3773	0.194	0.966	0.030	0.028	0.447	0.031	0.082	0.019	0.031	0.001	0.000	0.000	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_216_GR_WCB	H2835	0.160	0.680	0.020	0.019	0.450	0.050	0.060	0.070	0.060	0.010	0.000	0.000	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_216_GR_WCB	H4818	0.241	0.657	0.024	0.025	0.410	0.044	0.073	0.018	0.072	0.001	0.000	0.000	0.000	0.000	0.000	0.000

**PROPIEDADES MECANICAS (MECHANICAL TESTING)**

Parte (Component)	Colada (Heat)	Condición de TT Normalizado & revenido Heat Treatment condition (Normalized & tempered)	Cedencia (Yield strength) (Kpsi)	Tensión (Tensile strength) (Kpsi)	Alar. En 2" (Elong. In 2") (% min)	Reduccion de area (Reduction of area) (% min)	Dureza (Hardness) (Bhn)		Prueba impacto (Impact Test) (Joules)				
							1st	2nd	1st	2nd	3rd	AVG	
BONETE (BONNET)	H3773	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	44.0800	75.9800	28	43	155	0	0	0	0	0	0
CUERPO (BODY)	H2835	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	40.3100	76.5600	33	45	162	0	0	0	0	0	0
DISCO 1 (DISC 1)	H4818	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	45.6750	71.9200	41	56	160	0	0	0	0	0	0

**PRUEBAS DE PRESIÓN DE ACUERDO CON API 598 (PRESSURE TEST IN ACCORDANCE WITH API 598)**

TIPO DE PRUEBA (Type of test)	PRESION (Pressure) (Psi)	TIEMPO (Duration) (min)	RESULTADO (Result)	TIPO DE PRUEBA (Type of test)	RESULTADO (Result)
HIDROSTATICA DE CASCO (HYDROSTATIC SHELL)	1125	2 min	ACEPTADO (ACCEPTED)		
HIDROSTATICA DE CASQUILLO (HYDROSTATIC BACK SEAT)	1125	2 min	ACEPTADO (ACCEPTED)		
PRUEBA NEUMATICA SELLO 1 (LOW PRESSURE CLOSURE SIDE 1)	80	2 min	ACEPTADO (ACCEPTED)		
PRUEBA NEUMATICA SELLO 2 (LOW PRESSURE CLOSURE SIDE 2)	80	2 min	ACEPTADO (ACCEPTED)		



Certificamos que este producto ha sido diseñado, fabricado y probado de acuerdo con nuestro sistema de administración de calidad y con los requisitos establecidos en una o más de las siguientes normas en su última edición. (We hereby certify this product has been designed, manufactured and tested according to our quality management system and requirements stated in one or more of the following standards on their latest edition).

DESIGN IN ACCORDANCE WITH API 601 (CAST STEEL GATE (OS & YOKE))  
 API 598 METAL PLUG VALVES - FLANGED, THREADED AND WELDING  
 API 591 PROCESS VALVE QUALIFICATION PROCEDURE  
 API 523 STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS  
 API 624 TYPE TESTING OF RISING STEM VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS  
 ANSI B16.10 FACE TO FACE AND END TO END DIMENSIONS OF VALVES  
 ANSI B16.11 FORGED FITTINGS, SOCKET-WELDING AND THREADED  
 AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) B31.3 PROCESS PIPING  
 ASME SECTION VIII DIVISION 1 MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION  
 NACE MR0103 MATERIAL RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIVE PETROLEUM ENVIRONMENT  
 MSS-SP61 PRESSURE TESTING OF STEEL VALVES

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