



WALWORTH

Industrial de Válvulas, S.A. de C.V.

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

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

No. código interno (Product Code Nr.): **AG020GA08MA2A1X+**

No. Serie (Serial Number): **V13EG00951**

Fecha (Date): **September 22, 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):

Línea de producto (Product line):

Extremos (Ends):

Tipo de válvula (Type of valve):

Cuerpo (Shell):

Diámetro (Nominal diameter):

Interiores (Trim):

Presión clase (Pressure class):

Figura No (Figure Nr.):

RF Series A

WCB

#06 (UT)

FIG 5281

Operación (Operation): Handwheel

Otros (Other requirements):

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_218_GR_WCB	HC2966	0.210	0.840	0.031	0.016	0.450	0.037	0.100	0.018	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_218_GR_WCB	HC2966	0.210	0.840	0.031	0.016	0.450	0.037	0.100	0.018	0.026	0.003	0.000	0.000	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_217_GR_CA15	D2954	0.110	0.750	0.018	0.017	0.670	0.360	12.350	0.021	0.040	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)	HC2966	(910-940) °C, NORMALIZADO (RECOCCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	45.6750	75.4000	29	46	153	0	0	0	0	0	0
CUERPO (BODY)	HC2966	(910-940) °C, NORMALIZADO (RECOCCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	45.6750	75.4000	29	46	153	0	0	0	0	0	0
DISCO 1 (DISC 1)	D2954	(910-940) °C, NORMALIZADO (RECOCCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	69.3100	100.0500	27	47	276	0	0	0	0	0	0

PRUEBAS DE PRESION 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	1 min	ACEPTADO (ACCEPTED)		
HIDROSTATICA DE CASQUILLO (HYDROSTATIC BACK SEAT)	1125	1 min	ACEPTADO (ACCEPTED)		
PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE SIDE 1)	815	1 min	ACEPTADO (ACCEPTED)		
PRUEBA NEUMATICA SELLO 1 (LOW PRESSURE SIDE 1)	80	1 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).

API 598 PRESSURE TESTING OF FLANGES, THROTTLES AND WELDING
API 603 PRESSURE TESTING OF STEEL VALVES
API 603 STEEL GLOBE VALVES-FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS
API 603 TYPE TESTING OF FISING STEEL VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUITIVE EMISSIONS
ANSI B16.1 FORGED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.3 WELDED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.4 FORGED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.5 WELDED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.6 WELDED FITTINGS, SOCKET, WELDING AND THREADED
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ANSI B16.98 WELDED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.99 WELDED FITTINGS, SOCKET, WELDING AND THREADED
ANSI B16.100 WELDED FITTINGS, SOCKET, WELDING AND THREADED

Quality Assurance Department
Yolanda Ponceano Montoya
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