



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepoztlolán, 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.): **AC030BA08MA2A1XG**

No. Serie (Serial Number): **V11KC0201**

Fecha (Date): **August 23, 2016**

No. De Tag (Tag Number):

Clientes (Customer):

No Pedido del Cliente (Customer PO Nr.):

Partida (Customer Item):

Pedido Interno No (Waiworth Sales Nr.):

Partida (Item):

Línea de producto (Product line): **Cast Steel**

RF Series A

Extremos (Ends):

Operación (Operation): **Handwheel**

Tipo de válvula (Type of valve): **Gate**

Cuerpo (Shell):

Otros (Other requirements):

Diámetro (Nominal diameter): **3**

Interiores (Trim):

#08 (UT)

Presión clase (Pressure class): **150**

Figura No (Figure Nr.):

FIG 5202

**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	H1204	0.201	0.831	0.023	0.021	0.395	0.045	0.056	0.008	0.062	0.001	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_216_GR_WCB	H1866	0.207	0.863	0.019	0.021	0.390	0.034	0.061	0.008	0.064	0.001	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_216_GR_WCB	1410	0.198	0.824	0.021	0.016	0.392	0.043	0.052	0.003	0.042	0.001	0.000	0.000	0.000	0.000

**PROPIEDADES MECANICAS (MECHANICAL TESTING)**

Parte (Component)	Colada (Heat)	Condición de TT Normalizado y 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)	H1204	(910-940) °C, NORMALIZADO (RECOCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	47.1250	76.1250	31	42	165	0	0	0	0	0
CUERPO (BODY)	H1866	(910-940) °C, NORMALIZADO (RECOCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	44.8050	81.6350	39	59	157	0	0	0	0	0
DISCO 1 (DISC 1)	1410	(910-940) °C, NORMALIZADO (RECOCIDO) 650 °C ENFRIAMIENTO CON AIRE AIR COOL	47.1250	76.1250	31	42	156	0	0	0	0	0

**TIPO DE PRUEBA (Type of test)**

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)	450	1 min	ACEPTADO (ACCEPTED)		
HIDROSTATICA DE CASQUILLO (HYDROSTATIC BACK SEAT)	450	1 min	ACEPTADO (ACCEPTED)		
PRUEBA NEUMATICA SELLO 1 (LOW PRESSURE CLOSURE SIDE 1)	80	1 min	ACEPTADO (ACCEPTED)		
PRUEBA NEUMATICA SELLO 2 (LOW PRESSURE CLOSURE SIDE 2)	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 699 METAL PLUG VALVES - RANGED, THREADED AND WELDING
- API 603 PROCESS VALVE QUALIFICATION PROCEDURE
- API 605 VALVE TESTING PROCEDURE
- 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 B16-34 FLANGE AND FLANGE CONNECTIONS
- ANSI B16-37 FLANGE AND FLANGE CONNECTIONS
- ANSI B16-48 FLANGE AND FLANGE CONNECTIONS
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- ANSI B16-199 FLANGE AND FLANGE CONNECTIONS
- ANSI B16-200 FLANGE AND FLANGE CONNECTIONS

Quality Assurance Department  
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