

**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.): **AC060BA08MA2A1BG**

 No. Serie (Serial Number): **V148C6431**

 Fecha (Date): **April 20, 2016**

No. De Tag (Tag Number): \_\_\_\_\_

 Clientes (Customer): **PLESA ANAHUAC Y CIAS, S.A DE C.V.**

 No Pedido del Cliente (Customer PO Nr.): **23389**

 Partida (Customer Item): **4** Pedido Interno No (Walworth Sales Nr.): **D000060238**

 Partida (Item): **4**

Linea de producto (Product line):	<b>CAST STEEL</b>	Extremos (Ends):	<b>RAISED FACE (RF TYPE "A")</b>	Operación (Operation):	<b>HANDWHEEL</b>
Tipo de válvula (Type of valve):	<b>GATE OS &amp; Y</b>	Cuerpo (Shell):	<b>WCB</b>	Otros (Other requirements):	
Diámetro (Nominal diameter):	<b>6</b>	Interiores (Trim):	<b>#08 (UT)</b>		
Presión clase (Pressure class):	<b>150</b>	Figura No (Figure Nr.):	<b>FIG 5202</b>		

**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	K5322	0.210	0.790	0.021	0.009	0.470	0.020	0.120	0.010	0.030	0.006	0.000	0.000	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_216_GR_WCB	K5287	0.220	0.860	0.024	0.008	0.450	0.018	0.140	0.010	0.021	0.006	0.000	0.000	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_216_GR_WCB	K6360	0.197	0.884	0.020	0.029	0.416	0.030	0.042	0.009	0.047	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)	K5322	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE	46.4000	73.9500	31	53	154	0	0	0	0	0	0
CUERPO (BODY)	K5287	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE	45.6750	73.9500	31	54	151	0	0	0	0	0	0
DISCO 1 (DISC 1)	K6360	(910-940) °C, NORMALIZADO ( RECOCIDO ) 650 °C ENFRIAMIENTO CON AIRE	45.3900	83.9600	31	42	170	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)	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).

DESIGN IN ACCORDANCE WITH MSS SP 70 (IRON GATE (CSA Y))  
 API 609 METAL PLUG VALVES- FLANGED, THREADED AND WELDING  
 API 581 PROCESS VALVE QUALIFICATION PROCEDURE  
 API 623 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  
 ANNUNCIANCE MR0175950 15156-1 MATERIALS FOR USE IN H<sub>2</sub>S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION  
 NACE MR0103 MATERIALS RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIIVE PETROLEUM ENVIRONMENT  
 MSS-SP61 PRESSURE TESTING OF STEEL VALVES



 Quality Assurance Department  
 Jessica Garcia Pérez

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