



**WALWORTH**  
Since 1842

Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepetzotlán, 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.): EC040ADE1MR21BY

No. Serie (Serial Number): 16C3164

Fecha (Date): September 1, 2016

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

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

No Pedido del Cliente (Customer PO Nr.): 24165

Partida (Customer Item): 5 Pedido Interno No (Walworth Sales Nr.): D000060560

Partida (Item): 5

Linea de producto (Product line):	<u>Cast Iron</u>	Extremos (Ends):	<u>FF</u>	Operación (Operation):	<u>Handwheel</u>
Tipo de válvula (Type of valve):	<u>Gate</u>	Cuerpo (Shell):	<u>GRAY IRON</u>	Otros (Other requirements):	
Diámetro (Nominal diameter):	<u>4</u>	Interiores (Trim):	<u>#E1 (BCE)</u>		
Presión clase (Pressure class):	<u>125</u>	Figura No (Figure Nr.):	<u>FIG W726</u>		

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

Parte (Component)	Material (Material)	Colada (Heat)	% P	% S	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BONETE (BONNET)	ASTM_A_126_GR_B	C53Z	0.029	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_126_GR_B	C53L	0.152	0.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_126_GR_B	C53J	0.037	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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)	C53Z	NO APLICA NOT APPLICABLE	0.0000	44.0800	0	0	0	0	0	0	0	0	0	0
CUERPO (BODY)	C53L	NO APLICA NOT APPLICABLE	0.0000	39.5200	0	0	0	0	0	0	0	0	0	
DISCO 1 (DISC 1)	C53J	NO APLICA NOT APPLICABLE	0.0000	43.9350	0	0	0	0	0	0	0	0	0	

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)	350	0.5 min	ACEPTADO (ACCEPTED)		
PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1)	200	0.5 min	ACEPTADO (ACCEPTED)		
PRUEBA HIDROSTATICA SELLO 2 (HIGH PRESSURE CLOSURE SIDE 2)	200	0.5 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 599 METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- API 591 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
- ANSI/NACE MR0175/ISO 15156-1 MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION
- NACE MR03 MATERIAL RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIIVE PETROLEUM ENVIRONMENT
- MSS-SP61 PRESSURE TESTING OF STEEL VALVES

Quality Assurance Department  
Yolanda Ponciano Montoya