



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.): **EE020ADE1MR21BY**

No. Serie (Serial Number): **16C5868**

Fecha (Date): **September 29, 2016**

No. De Tag (Tag Number):

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

No Pedido del Cliente (Customer PO Nr.): **24310**

Partida (Customer Item): **12**

Pedido Interno No (Walworth Sales Nr.): **D000060612**

Partida (Item): **13**

Linea de producto (Product line):	Cast Iron
Tipos de válvula (Type of valve):	Stem Gate Fixed
Díametro (Nominal diameter):	2
Presión clase (Pressure class):	125

Extremos (Ends):	FF
Cuerpo (Shell):	GRAY IRON
Interiores (Trim):	#E1 (BCE)
Figura No (Figure Nr.):	FIG WT19

Operación (Operation): Handwheel  
Otros (Other requirements):

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

Parte (Component)	Material (Material)	Colada (Heat)	% P	% S	%	%	%	%	%	%	%	%	%	%	%	%	%
BONETE (BONNET)	ASTM_A_126_GR_B	C5YE	0.049	0.056	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	C63N	0.052	0.056	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	C59R	0.059	0.058	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)	C5YE	NO APLICA	0.0000	44.3700	0	0	0	0	0	0
CUERPO (BODY)	C63N	NOT APPLICABLE	0.0000	39.1500	0	0	0	0	0	0
DISCO 1 (DISC 1)	C59R	NOT APPLICABLE	0.0000	38.8600	0	0	0	0	0	0

**PRUEBAS DE PRESION DE ACUERDO CON MSS SP 70 (PRESSURE TEST IN ACCORDANCE WITH MSS SP 70)**

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 SELLO1 (HIGH PRESSURE CLOSURE SIDE 1)	200	0.5 min	ACEPTADO (ACCEPTED)		
PRUEBA HIDROSTATICA SELLO2 (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 PRESSURE VALVE QUALIFICATION PROCEDURE  
API 594 VALVE QUALIFICATION 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 FLANGED END CONNECTIONS FOR VALVES  
ANSI/AISC M35750-15186-1 MATERIALS FOR USE IN DESIGNATING ENVIRONMENTS IN OIL AND GAS PRODUCTION  
MSS-SP61 PRESSURE RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIVE PETROLEUM ENVIRONMENT  
MSS-SP81 PRESSURE TESTING OF STEEL VALVES

*[Signature]*

Quality Assurance Department  
Yolanda Ponciano Montoya  
FAC-24 Rev. Original.