



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepozotlán, 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): **16C5877**

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
Tipo de válvula (Type of valve):	Stem Gate Fixed
Díámetro (Nominal diameter):	2
Presión clase (Pressure class):	125

Extremos (Ends):	FF
Cuerpo (Shell):	GRAY IRON
Interiores (Trim):	#E1 (BCE)
Figura No (Figure Nr.):	FIG W719

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
CUERPO (BODY)	ASTM_A_126_GR_B	C641	0.410	0.075	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

PROPIEDADES MECANICAS (MECHANICAL TESTING)

Parte (Component)	Colada (Heat)	Condición de TT Normalizado & revenido (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	3rd	1st	2nd	3rd	AVG
BONETE (BONNET)	C5YE	NO APLICA	0.0000	44.3700	0	0	0	0	0	0	0	0	0
CUERPO (BODY)	C641	NOT APPLICABLE	0.0000	32.5200	0	0	0	0	0	0	0	0	0
DISCO 1 (DISC 1)	C59R	NO APLICA	0.0000	38.8600	0	0	0	0	0	0	0	0	0

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

TIPO DE PRUEBA (Type of test)	TIEMPO (Duration) (min)	TIPO DE PRUEBA (Type of test)	RESULTADO (Result)
HIDROSTATICA DE CASCO (HYDROSTATIC SHELL)	350	0.5 min	ACCEPTADO (ACCEPTED)
PRUEBA HIDROSTATICA SELLO1 (HIGH PRESSURE CLOSURE SIDE 1)	200	0.5 min	ACCEPTADO (ACCEPTED)
PRUEBA HIDROSTATICA SELLO2 (HIGH PRESSURE CLOSURE SIDE 2)	200	0.5 min	ACCEPTADO (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 589 METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- API 591 PROCESS VALVE QUALIFICATION PROCEDURE
- API 594 VALVE QUALIFICATION PROCEDURE - BOLLING 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 B16.34 FLANGED END CONNECTIONS FOR VALVES CONTAINING ENVIRONMENTAL OIL AND GAS PRODUCTION
- ANSI B16.35 FLANGED END CONNECTIONS FOR VALVES CONTAINING ENVIRONMENTAL OIL AND GAS PRODUCTION
- NACE MR0103 MATERIAL RESISTANT TO SULFIDE STRESS CRACKING IN CORROSSIVE PETROLEUM ENVIRONMENT
- MSS-SP91 PRESSURE TESTING OF STEEL VALVES

[Signature]

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