



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.): **ER060ADE1MRN1BN** No. Serie (Serial Number): **16R2075**  
 Fecha (Date): **June 10, 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): **17** Pedido Interno No (Walworth Sales Nr.): **D000060238** Partida (Item): **17**

Linea de producto (Product line):	CAST IRON	Extremos (Ends):	FLAT FACE (FF)	Operación (Operation):	N/A
Tipo de válvula (Type of valve):	IRON SWING CHECK	Cuerpo (Shell):	GRAY IRON	Otros (Other requirements):	
Diámetro (Nominal diameter):	6	Interiores (Trim):	#E1 (BCE)		
Presión clase (Pressure class):	125	Figura No (Figure Nr.):	FIG W928		

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

Parte (Component)	Material (Material)	Colada (Heat)	% P	% S	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
CUERPO (BODY)	ASTM_A_126_GR_B	31025	0.390	0.085	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	31016	0.084	0.080	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
TAPA 1 (COVER 1)	ASTM_A_126_GR_B	11105	0.084	0.087	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		
CUERPO (BODY)	31025	NO APLICA NOT APPLICABLE	0.0000	35.2300	0	0	0	0	0	0	0	0	0	0
DISCO 1 (DISC 1)	31016	NO APLICA NOT APPLICABLE	0.0000	33.5800	0	0	0	0	0	0	0	0	0	
TAPA 1 (COVER 1)	11105	NO APLICA NOT APPLICABLE	0.0000	35.5250	0	0	0	0	0	0	0	0	0	

**PRUEBAS DE PRESIÓN DE ACUERDO CON MSS SP 71 (PRESSURE TEST IN ACCORDANCE WITH MSS SP 71)**

TIPO DE PRUEBA (Type of test)	PRESION (Pressure) (Psi)	TIEMPO (Duration) (min)	RESULTADO (Result)	TIPO DE PRUEBA (Type of test)	RESULTADO (Result)
HIDROSTÁTICA DE CASCO (HYDROSTATIC SHELL)	350	0.5 min	ACEPTADO (ACCEPTED)		
PRUEBA HIDROSTÁTICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1)	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).

Quality Assurance Department  
 Yolanda Ponciano Montoya

FAC-24 Rev. Original.

API 599 METAL PLUG VALVES - FLANGED, THREADED AND WELDING  
 API 581 PROCESS VALVE QUALIFICATION PROCEDURE  
 API 520 STEEL GLOBE VALVES - FLANGED AND BUTT WELDING ENDS, BOLTED BONNETS  
 API 524 TYPE TESTING OF PLUG 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/API SPECIFICATION 578 FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION  
 NACE MR0175/ISO 15156-1 MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION  
 MSS-SP-71 PRESSURE TESTING OF STEEL VALVES