



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Topolzoacán, 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.): **EE040ADE1MR21BY** No. Serie (Serial Number): **16C7199**
 Fecha (Date): **September 15, 2016** No. De Tag (Tag Number): _____
 Clientes (Customer): _____ No. Pedido del Cliente (Customer PO Nr.): _____
 Partida (Customer Item): _____ Partida (Item): _____

Linea de producto (Product line):	Cast Iron	Extremos (Ends):	FF	Operación (Operation):	Handwheel
Tipo de válvula (Type of valve):	Stem Gate Fixed	Cuerpo (Shell):	GRAY IRON	Otros (Other requirements):	
Diámetro (Nominal diameter):	4	Interiores (Trim):	#E1 (BCE)		
Presión clase (Pressure class):	125	Figura No (Figure Nr.):	FIG W719		

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

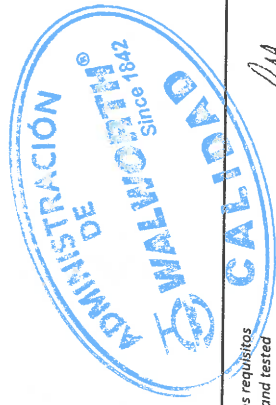
Parte (Component)	Material (Material)	Colada (Heat)	% P	% S	%	%	%	%	%	%	%	%	%	%	%	%	%	
BONETE (BONNET)	ASTM_A_126_GR_B	C64T	0.081	0.073	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CUERPO (BODY)	ASTM_A_126_GR_B	C65R	0.082	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DISCO 1 (DISC 1)	ASTM_A_126_GR_B	C65G	0.093	0.071	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	AVG	1st	2nd	3rd	AVG
BONETE (BONNET)	C64T	NO APLICA	0.0000	41.3250	0	0	0	0	0	0	0	0	0
CUERPO (BODY)	C65R	NO APLICA	0.0000	31.1750	0	0	0	0	0	0	0	0	0
DISCO 1 (DISC 1)	C65G	NO APLICA	0.0000	32.6250	0	0	0	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)	PRESSION (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 589 METAL PLUG VALVES - FLANGES, THROTTLES AND WELDING
 API 581 PROCESS VALVE QUALIFICATION PROCEDURE
 API 623 STEEL GLOBE VALVES-FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS
 API 603 STEEL GLOBE VALVES-FLANGED AND BUTT-WELDED ENDS, BOLTED BONNETS
 ANSI B16-10 FACE TO FACE AND END TO END FLANGED AND WELDED END STEEL VALVES
 ANSI B16-11 FORGED FITTINGS, SOCKET - WELDING AND THREADED
 NACE MR0175-1 USEL MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION
 NACE MR0180 - MATERIALS FOR USE IN HIGH PRESSURE CRACKING IN CORROSIVE PETROLEUM ENVIRONMENT
 MSS SP51 - PRESSURE TESTING OF STEEL VALVES

[Signature]

Quality Assurance Department
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FAC-24 Rev. Original.