



Industrial de Válvulas, S.A. de C.V.

CERTIFICATE OF MATERIALS & TEST REPORT (CMTR)
 (CERTIFICADO DE CALIDAD DE MATERIALES Y REPORTE DE PRUEBAS CMTR)
 ACCORDING TO EN 10204 TYPE 3.1

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepetzotlán, Estado de México, México C.P. 54610

No. código interno (Product Code Nr.): **EEO40ADE1MR21BY**

No. Serie (Serial Number): **16C7283**

Fecha (Date): **September 15, 2016**

No. De Tag (Tag Number):

Clientes (Customer):

No Pedido del Cliente (Customer PO Nr.):

Partida (Customer Item):

Pedido Interno No (Walworth Sales Nr.):

Partida (Item):

Linea de producto (Product line):	Cast Iron
TIPO DE VÁLVULA (Type of valve):	Stem Gate Fixed
Diámetro (Nominal diameter):	4
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	Tensión (Yield 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	AVG
BONETE (BONNET)	ASTM_A_126_GR_B	C583	0.051	0.062	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
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

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	3rd	AVG
BONETE (BONNET)	C583	NO APLICA	0.0000	42.3400	0	0	0	0	0	0
CUERPO (BODY)	C65R	NO APLICA	0.0000	31.1750	0	0	0	0	0	0
DISCO 1 (DISC 1)	C65G	NO APLICA	0.0000	32.6250	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)	TIEMPO (Duration) (min)	TIPO DE PRUEBA (Type of test)	RESULTADO (Result)
HIDROSTATICA DE CASCO (HYDROSTATIC SHELL)	0.5 min	ACEPTADO (ACCEPTED)	ACEPTADO (ACCEPTED)
PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1)	0.5 min	ACEPTADO (ACCEPTED)	ACEPTADO (ACCEPTED)
PRUEBA HIDROSTATICA SELLO 2 (HIGH PRESSURE CLOSURE SIDE 2)	0.5 min	ACEPTADO (ACCEPTED)	ACEPTADO (ACCEPTED)



Certificamos que este producto ha sido diseñado, fabricado y probado de acuerdo con nuestro sistema de administración de calidad 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 600 METAL GLOBE VALVES - FLANGED AND BUTT WELDING ENDS, BOLTED BONNETS
 API 603 STEEL GLOBE VALVES - FLANGED AND BUTT WELDING ENDS, BOLTED BONNETS
 API 623 TYPE TESTING OF RISING STEM VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS
 ANSI B16.10 PACKING AND END TO END DIMENSIONS FOR STEEL AND CAST IRON VALVES
 ANSI B16.11 PACKING AND END TO END DIMENSIONS FOR STEEL AND CAST IRON VALVES
 ANSIMPACT 15.01 MATERIALS FOR USE IN THE CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION
 MSS-SP-11 PRESSURE RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIVE PETROLEUM ENVIRONMENT
 MSS-SP-81 PRESSURE TESTING OF STEEL VALVES

Quality Assurance Department
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 FAC-24 Rev. Original.