



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 Tepiczoatlán, Estado de México, México C.P. 54610

No. código interno (Product Code Nr.): **ER080ADE1MRNTBY**

No. Serie (Serial Number): **16R2265**

Fecha (Date): **September 1, 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
Extremos (Ends):	FF
Tipos de válvula (Type of valve):	Check Type Swing
Cuerpo (Shell):	GRAY IRON
Diámetro (Nominal diameter):	8
Interiores (Trim):	#E1 (BCE)
Figura No (Figure Nr.):	FIG W928
Presión clase (Pressure class):	125

Operación (Operation): N/A
 Otros (Other requirements):

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

Parte (Component)	Material (Material)	Colada (Heat)	% P	% S	%	%	%	%	%	%	%	%	%	%	%	%	%
CUERPO (BODY)	ASTM_A_128_GR_B	C59X	0.065	0.068	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_128_GR_B	C54H	0.049	0.055	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_128_GR_B	C59D	0.050	0.063	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)	C59X	NO APLICA	0.0000	40.8900	0	0	0	0	0	0	0	0	0
DISCO 1 (DISC 1)	C54H	NO APLICA	0.0000	38.5400	0	0	0	0	0	0	0	0	0
TAPA 1 (COVER 1)	C59D	NO APLICA	0.0000	41.7600	0	0	0	0	0	0	0	0	0

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 SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1)	200	0.5 min	ACEPTADO (ACCEPTED)		
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)		



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 600 - STEEL VALVES - FLANGED, THREADED AND WELDING
- API 605 - STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- API 607 - FORGED STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- API 608 - STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- API 609 - STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- API 610 - STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- API 611 - STEEL GLOBE VALVES - FLANGED AND BUTT-WELDING ENDS
- ANSI B16.1 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.3 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.4 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.5 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.6 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.7 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.8 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.9 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.10 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.11 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.12 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.13 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.14 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.15 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.16 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.17 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.18 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.19 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.20 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.21 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.22 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.23 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.24 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.25 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.26 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.27 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.28 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.29 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.30 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.31 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.32 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.33 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.34 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.35 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.36 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.37 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.38 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.39 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.40 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.41 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.42 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.43 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.44 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.45 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.46 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.47 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.48 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.49 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.50 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.51 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.52 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.53 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.54 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.55 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.56 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.57 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.58 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.59 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.60 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.61 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.62 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.63 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.64 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.65 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.66 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.67 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.68 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.69 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.70 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.71 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.72 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.73 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.74 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.75 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.76 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.77 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.78 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.79 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.80 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.81 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.82 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.83 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.84 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.85 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.86 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.87 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.88 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.89 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.90 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.91 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.92 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.93 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.94 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.95 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.96 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.97 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.98 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.99 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH
- ANSI B16.100 - FORGED FITTINGS, SOCKET, WELDING AND TRENCH

[Signature]

Quality Assurance Department
 Yolanda Ponciano Montoya