



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 SN Fracc. Industrial el Trébol de
 Tepozotlán, Estado de México, México C.P. 54610

No. código interno (Product Code Nr.): **ER080ADE1MRN17B**
 No. Serie (Serial Number): **16R2722**
 Fecha (Date): **October 6, 2016**
 Clientes (Customer): **PLESA ANAHUAC Y CIA S, S.A DE C.V.**
 No. De Tag (Tag Number): _____
 Partida (Customer Item): **9** Pedido Interno No (Walworth Sales Nr.): **D000060612**
 No. Pedido del Cliente (Customer PO Nr.): **24310**
 Partida (Item): **19**

Linea de producto (Product line):
 Tipo de válvula (Type of valve):
 Diámetro (Nominal diameter):
 Presión clase (Pressure class):

Extremos (Ends):
 Cuerpo (Shell):
 Interiores (Trim):
 Figura No (Figure Nr.):

FF
 GRAY IRON
 #E1 (BCE)
 FIG W928

Operación (Operation):
 Otros (Other requirements):

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

| Parte (Component) | Material (Material) | Colada (Heat) | % P | % S | % | % | % | % | % | % | % | % | % | % | % |
|-------------------|---------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CUERPO (BODY) | ASTM_A_126_GR_B | C66Y | 0.088 | 0.052 | 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 | C557 | 0.050 | 0.070 | 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 | C66Y | 0.088 | 0.052 | 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" (% min) | Reduccion de area (% min) | Dureza (Hardness) (Bhn) | | | Prueba Impacto (Impact Test) (Joules) | | | |
|-------------------|---------------|--|----------------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|-----|-----|---------------------------------------|-----|-----|-----|
| | | | | | | | 1st | 2nd | AVG | 1st | 2nd | 3rd | AVG |
| CUERPO (BODY) | C66Y | NO APLICA | 0.0000 | 38.4100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DISCO 1 (DISC 1) | C557 | NO APLICA | 0.0000 | 36.2500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TAPA 1 (COVER 1) | C66Y | NO APLICA | 0.0000 | 38.4100 | 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) |
|--|--------------------------|-------------------------|---------------------|-------------------------------|--------------------|
| 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 599 PRESSURE VALVES, FLANGED, THREADED AND WELDING
 API 603 PRESSURE VALVES, FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS
 API 603 STEEL GLOBE VALVES-FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS
 ANSI B16.1 WELDING OF IRON STEEL VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS
 ANSI B16.3 WELDING OF IRON STEEL VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS
 ANSI B16.11 FORGED FITTINGS, SOCKET WELDING AND THREADED
 ANSIB16.11 FORGED FITTINGS, SOCKET WELDING AND THREADED
 ANSINACE M017/5150 15156-T1 MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION
 MSS-SP61 PRESSURE TESTING OF STEEL VALVES

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