



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepozotlán, 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.): ER120ADE1MRN1BY No. Serie (Serial Number): 17R1464
 Fecha (Date): September 18, 2017 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): _____

Línea de producto (Product line): Cast Iron / Hierro fundido Extremos (Ends): FF Operación (Operation): N/A
 Tipo de válvula (Type of valve): Check Type Swing/Retencion Tipo Columpio Cuerpo (Body): GRAY IRON Anexo No. (Annex Nr.): _____
 Diámetro (Nominal diameter): 12 Interiores (Trim): #E1 (BCE) Otros (Other requirements): _____
 Presión clase (Pressure class): 125 Figura No (Figure Nr.): FIG W928F

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

| Parte (Component) | Material (Material) | Colada (Heat) | % P | % S | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
|-------------------|---------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CUERPO (BODY) | ASTM_A_126_GR_B | C5XV | 0.052 | 0.061 | 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 | C5Y6 | 0.054 | 0.066 | 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 | C554 | 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 | 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) | C5XV | NO APLICA NOT APPLICABLE | 0.0000 | 38.8600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DISCO 1 (DISC 1) | C5Y6 | NO APLICA NOT APPLICABLE | 0.0000 | 40.4550 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TAPA 1 (COVER 1) | C554 | NO APLICA NOT APPLICABLE | 0.0000 | 36.9750 | 0 | 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 | 1 min | ACEPTADO (ACCEPTED) | | |
| PRUEBA HIDROSTATICA SELLO1 (HIGH PRESSURE CLOSURE SIDE 1) | 200 | 1 min | ACEPTADO (ACCEPTED) | | |
| PRUEBA HIDROSTATICA SELLO2 (HIGH PRESSURE CLOSURE SIDE 2) | 200 | 1 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).

DESIGN AND TEST IN ACCORDANCE WITH:
 DESIGN IN ACCORDANCE WITH MSS SP 71 (IRON SWING CHECK)
 MSS SP 71- GRAY IRON SWING CHECK VALVES, FLANGED AND THREADED ENDS

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