



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepotzotlán, 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.): ER020ADE1MRN1BY

No. Serie (Serial Number): 16R1178

Fecha (Date): August 17, 2016

No. De Tag (Tag Number):

Cientes (Customer):

No Pedido del Cliente (Customer PO Nr.):

Partida (Customer Item): Pedido Interno No (Walworth Sales Nr.):

Partida (Item):

Table with product details: Linea de producto (Product line): Cast Iron, Tipo de válvula (Type of valve): Check Type Swing, Diámetro (Nominal diameter): 2, Presión clase (Pressure class): 125, Extremos (Ends): FF, Cuerpo (Shell): GRAY IRON, Interiores (Trim): #E1 (BCE), Figura No (Figure Nr.): FIG W928, Operación (Operation): N/A, Otros (Other requirements):

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

Table with 20 columns for chemical composition and 3 rows for parts: CUERPO (BODY), DISCO 1 (DISC 1), TAPA 1 (COVER 1). Columns include Parte (Component), Material (Material), Colada (Heat), and various percentage elements.

PROPIEDADES MECANICAS (MECHANICAL TESTING)

Table with 10 columns for mechanical properties and 3 rows for parts: CUERPO (BODY), DISCO 1 (DISC 1), TAPA 1 (COVER 1). Columns include Parte (Component), Colada (Heat), Condición de TT Normalizado & revenido Heat Treatment condition, Cedencia (Yield strength), Tensión (Tensile strength), Alar. En 2" (Elong. In 2"), Reduccion de area (Reduction of area), Dureza (Hardness), and Prueba Impacto (Impact Test).

PRUEBAS DE PRESIÓN DE ACUERDO CON MSS SP 71 (PRESSURE TEST IN ACCORDANCE WITH MSS SP 71)

Table with 6 columns for pressure tests and 3 rows: TIPO DE PRUEBA (Type of test), PRESION (Pressure), TIEMPO (Duration), RESULTADO (Result), TIPO DE PRUEBA (Type of test), RESULTADO (Result). Rows include HIDROSTATICA DE CASCO (HYDROSTATIC SHELL) and PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1).



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 METAL PLUG VALVES - FLANGED, THREADED AND WELDING
API 591 PROCESS VALVE QUALIFICATION PROCEDURE
API 623 STEEL GLOBE VALVES-FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS
API 624 TYPE TESTING OF RISING STEM VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS
ANSI B16-10 FACE TO FACE AND END TO END DIMENSIONS OF VALVES
ANSI B16-11 FORGED FITTINGS, SOCKET - WELDING AND THREADED
ANSINACE MR0175/ISO 15156-1 MATERIALS FOR USE IN H2S-CONTAINING ENVIRONMENTS IN OIL AND GAS PRODUCTION
NACE MR0103 MATERIAL RESISTANT TO SULFIDE STRESS CRACKING IN CORROSIVE PETROLEUM ENVIRONMENT
MSS-SP61 PRESSURE TESTING OF STEEL VALVES

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