



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Topotlán, 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.): ER080ADE1MRN1BY
Fecha (Date): July 11, 2016
Clientes (Customer): TUBOS MONTERREY, S.A. DE C.V.
Partida (Customer Item): 1 Pedido Interno No. (Walworth Sales Nr.): D000060038

No. Serie (Serial Number): 16R2174
No. De Tag (Tag Number):
No. Pedido del Cliente (Customer PO Nr.): 22699

Table with 2 columns: Extremos (Ends) and Cuerpo (Shell). Rows include Cast Iron, Check Type Swing, #8, #125, and other specifications.

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

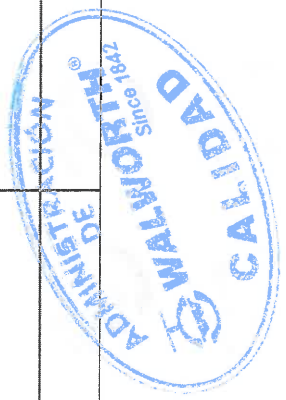
Table with 14 columns: Parte (Component), Material (Material), Colada (Heat), % C, % Mn, % P, % S, % Si, % Ni, % Cu, % Cr, % Mo, % Nb, % Ti, % N, % O. Rows include CUERPO (BODY), DISCO 1 (DISC 1), and TAPA 1 (COVER 1).

PROPIEDADES MECANICAS (MECHANICAL TESTING)

Table with 10 columns: Parte (Component), Colada (Heat), Condición de TT Normalizado & revenido (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). Rows include CUERPO (BODY), DISCO 1 (DISC 1), and TAPA 1 (COVER 1).

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

Table with 5 columns: TIPO DE PRUEBA (Type of test), PRESION (Pressure) (Psi), TIEMPO (Duration) (min), RESULTADO (Result), TIPO DE PRUEBA (Type of test), RESULTADO (Result). Rows include HIDROSTATICA DE CASCO (HYDROSTATIC SHELL), PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1), 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 589 METAL PLUG VALVES - FLANGED, THREADED AND WELDING
API 581 PROCESS VALVE QUALIFICATION PROCEDURE
API 582 STEEL GLOBE VALVES - FLANGED AND BUTT WELDING ENDS, BOLTED BONNETS
API 583 STEEL GLOBE VALVES - FLANGED AND BUTT WELDING ENDS, WELDED BONNETS
ANSI B16-10 FACE TO FACE AND END DIMENSIONS OF VALVES
ANSI B16-11 FORGED FITTINGS, SOCKET-WELDING AND THREADED
API 579 WELDING ENVIRONMENTAL CRACKING EVALUATION PROCEDURE
MSS-SP61 PRESSURE TESTING OF STEEL VALVES

Signature of Yolanda Ponciano Montoya

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