



Industrial de Válvulas, S.A. de C.V.

Industria Ite 16 S/N Fracc. Industrial el Trébol de Tepetzotlán, 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.): BG010BA08AA2SBA1BG

No. Lote (Batch Number): AA00063129

Fecha (Date): May 26, 2016

No. De Tag (Tag Number): N/A

Cientes (Customer): PLESA ANAHUAC Y CIAS, S.A DE C.V.

No Pedido del Cliente (Customer PO Nr.): 23573

Partida (Customer Item): 4 Pedido Interno No (Walworth Sales Nr.): D000060299

Cantidad (Qty): 1 Partida (Item): 4

Table with 6 columns: 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.), Operación (Operation), Otros (Other requirements)

COMPOSICION QUIMICA EN % (CHEMICAL COMPOSITION %)

Table with 19 columns: Parte (Component), Material (Material), Colada (Heat), % C, % Mn, % P, % S, % Si, % Ni, % Cr, % Mo, % Cu, % V, and 7 empty percentage columns. Rows include CUERPO (BODY) and YUGO.

PROPIEDADES MECANICAS (MECHANICAL TESTING)

Table with 10 columns: 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) 1st 2nd, Prueba Impacto (Impact Test) (Joules) 1st 2nd 3rd AVG. Rows include CUERPO (BODY) and YUGO.

PRUEBAS DE PRESIÓN DE ACUERDO CON API 598 (PRESSURE TEST IN ACCORDANCE WITH API 598)

Table with 6 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), HIDROSTATICA DE CASQUILLO (HYDROSTATIC BACK SEAT), PRUEBA HIDROSTATICA SELLO 1 (HIGH PRESSURE CLOSURE SIDE 1), PRUEBA NEUMATICA SELLO 1 (LOW 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).

DESIGN IN ACCORDANCE WITH API 602 (FORGED STEEL & STAINLESS STEEL GATE)
API 599 METAL PLUG VALVES- FLANGED, THREADED AND WELDING
API 591 PROCESS VALVE QUALIFICATION PROCEDURE
API 603 STEEL GLOBE VALVES- FLANGED AND BUTT WELDING ENDS, BOLTED BONNETS
API 594 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
ANSI/ASME B16.34 VALVES FOR USE IN HIGH-PRESSURE ENVIRONMENTS IN OIL AND GAS PRODUCTION
NACE 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-SP21 PRESSURE TESTING OF STEEL VALVES

Quality Assurance Department
Yolanda Ponciano Montoya