VAL-MATIC Proof of Design Performance and Cycle Test Certification (78" to 96" - 250B Resilient Seated Butterfly Valve)

1. ITEM TESTED:

96"-250B Val-Matic Model 2496 Resilient Seated Butterfly Valve Construction per VM-2496/LSA, revised 9/26/11 and VM-2078-M, revised 10/9/09 Ductile Iron Body, Ductile Iron Disc, 316 SS Body Seat Ring, 17-4 SS Shaft Buna-N Seat and Packing, and Teflon/Fiberglass Bearings

2. PURPOSE:

To perform the Proof of Design Performance and Cycle Test requirements identical to American Water Works Association Standard ANSI/AWWA C516-10 Rubber Seated Butterfly Valves, Sections 5.2.1 and 5.2.3, respectively, on the 96"-250B valve. Valves rated at pressures greater than 150 psi are beyond the scope of the standard, therefore the acceptance criteria (number of cycles and leak test leakage) are presented for evaluation.

3. RECORD OF TEST:

The valve was operated 3 times from the fully closed position to an unseated position of 90-degrees, and then each side of the disc was hydrostatically leak-tested at 250 psig per Section 5.2.1. The subject valve was assembled at the VAL-MATIC Addison, IL Facility with the seat bolts adjusted for 250 psig and bolted to ductile iron 300 psi rated, reverse dished, test heads having flanges meeting AWWA C207 Class D dimensions in a vertical orientation and the stem in the horizontal position. The valve was then cycled a total of 500 cycles (greater than 3 degrees) with at least 250 psig differential pressure applied to the disc in the closed position for each cycle per Section 5.2.3. Following completion of 280 cycles, the valve was hydrostatically leak-tested at 250 psig per Section 5.2.3. The valve was drop-tight in both directions. Following completion of 500 cycles, the valve was hydrostatically leak-tested at 250 psig per Section 5.2.3 and was drop-tight with pressure on the shaft side of the valve and exhibited a leak rate of 9.7 ounces/hour (0.1 ounce/hour/inch) with pressure toward the seat side of the valve. During the test, no leakage from the top or bottom shaft penetrations were observed and no part of the valve had permanent visible deformation resulting from the tests.

4. CERTIFICATION:

Based on the above test record, we hereby certify that the subject valve has been tested in accordance with the Proof of Design Performance and Cycle Testing procedures given in Sections 5.2.1 and 5.2.3, respectively, of ANSI/AWWA C516-10 and serves to qualify the 78" to 96" valves with a 250B AWWA rating. A representative of Lockwood, Andrews & Newnam, Inc. (LAN), an independent engineering consulting firm, witnessed the tests.

CERTIFIED BY: JAN R. HOTHER	DATE:	11/19/2015
/John R. Holstrom		/ /
Engineering Project Manager		, ,
Val-Matic Valve & Manufacturing Corp.		
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WITNESSED BY: Ville //s	DATE:	11/19/2015
Osvaldo Garza, PE		7 7

Project Engineer
Lockwood, Andrews & Newnam, Inc.

Rev 1, 10/2015: Reviewed per AWWA C516-14, certification is valid for 250 psi in this edition.

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