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PRODUCT BULLETIN
DRY BULK / LOW FRICTION RUBBER LINED BUTTERFLY

Milwaukee Valve Company introduces a special configuration of our rubber lined butterfly valves, designed to address dry bulk services, and other applications where lubricant may be stripped out of the valve, or where friction, torque and cycle life are a performance concern.

The heart of this offering is a proprietary coating we apply to our liner. The coating is a solid dry film lubricant, applied directly to the surface of the elastomer. This coating may be used over any elastomer substrate we offer, i.e. Buna, EPDM, Viton, etc., as applicable to the service. The coating reduces the coefficient of friction of the disc on the liner. By means of the application process, and the wearing of the coating into the surface of the elastomer, this reduction in friction results in lower torque and extended life in services which would otherwise result in premature failure by excessive torque and/or destruction of the liner at the hubs.

Engineered solution for dry or lubricant stripping environment

Typical services include (but are not limited to):

- **Hopper dump valves, dry bulk, actuated or manual;**
- **Lubricant stripping services – one example is jet fuel, (intuitively is thought of as a lubricant in and of itself, the reality for butterfly valves is that torque will increase unless this coating is used);**
- **Low pressure pellet feeding lines;**
- **Dry and wet slurries (with no other severe issues related to velocity or erosion);**
- **Desiccant gas dryer skid valves, actuated or manual;**

While this coating will not provide infinite life, it can and will greatly extend the life and provide a superior practical solution for customers in these applications. A typical curve of performance with and without the system is shown on the graph below.

The maximum temperature capability of the coating exceeds that of the elastomer, and it typically stays on and embedded in the surface of the liners when used in services described herein, to the degree required to enhance performance of the valve or valve/actuator combination.

The standard offering of this configuration has the low friction liner, undercut disc (provided pressure does not exceed 50 psig), and 17-4PH stems for sizes 6" and larger. This standard offering is built around the primary service, which is pneumatically actuated valves on dry bulk hoppers. Variations on the offering include standard disc, and standard stem material (when the valves are manual or gear operated, typically the 17-4PH stem is not required). Pricing for the main offering and the primary variations are given on the attached schedule. If there are questions not addressed herein, please consult the product manager at the factory, Mr. Jerry Radomski.