



## TECHNICAL BULLETIN

### Repacking of Valves

MVTB-02-002, Page 1 of 1

August 2, 2002

#### **Hammond Valve Engineering Department**

16550 West Stratton Drive

New Berlin, WI 53151

Phone (262) 432-2800 Fax (262) 432-2801

[www.hammondvalve.com](http://www.hammondvalve.com)

This bulletin discusses the issues related to repacking of valves in the field, in terms of hardware and safety, and present's the company's official technical position related thereto.

Gate, globe, and angle valves have by manufacturing standard required a backseat in the design. Examples of the related standards and valves are: MSS SP70 Cast Iron Gate Valves, MSS SP85 Cast Iron Globe and Angle Valves, and MSS SP80 Bronze Gate, Globe, Angle and Check Valves. All of these standards, to which Hammond Valve manufactures product, call for a backseat, and in the same paragraph of each they all state that ***repacking of valves under pressure is hazardous and not recommended.***

Historically, some users have taken advantage of the presence of the backseat to repack valves in the field. While from time to time in easy services this might actually be done without harm or injury, there have also been so many cases of harm and injury that the standards had the precautionary language inserted and even strengthened over the years.

Ball valve specifications and standards, almost universally, call for blow-out proof stem retention. This is accomplished (for end entry valves) usually by retention of an internally inserted stem via a hard shoulder. Examples of the pertinent standards are MSS SP110 Ball Valves and API 608 Metal Ball Valves. Unlike the gate and globe standards, there is no 'backseat' functionality to be verified by test. Repacking of ball valves under pressure for this reason is absolutely against all good safety practice. To possibly exacerbate matters, a ball cavity of a closed valve can have pressure trapped within, even when the system is depressurized.

The above points lead Hammond Valve to take the position that irrespective of valve type, size, or style, we strongly recommend against field repacking under any and all circumstances, depressurized or otherwise. Customers who choose to move contrary to this recommendation do so at their own risk, and are wholly responsible to take whatever precautions are required to protect lives, safety, and property. Such users are especially alerted to the inherent risks of trapped cavity pressure in ball valves even in depressurized systems, as well as other obvious risks of the nature of the fluid, temperature, pressure, etc.

This bulletin is intended to provide our customers with the latest information regarding our valve products and services. The information is based on our experience as a supplier, and on the best data available at the time of publication. All users of this information are reminded that ultimate responsibility for the final selection of valve configuration, materials, and options remains the end user's. Milwaukee Valve Company does not warranty valves for specific applications. In all cases, our standard warranty applies. This information is subject to change without notice; for updated information and/or additional support, contact Hammond Valve engineering at 262-432-2800, or via email at [engineer@milwaukeevalve.com](mailto:engineer@milwaukeevalve.com).