



Plug Valve Low Pressure Testing

MSI Technical Bulletin 024

Subject: Recommendations for achieving low pressure tests with tapered pocket plug valves.

While plug valves are not designed to seal at low pressures, here are some tips that can help achieve low pressure testing:

- Equipment
 - Split style inserts
 - GreaseSeal™ plug
 - Valtex “1502” plug valve grease used during valve assembly
- Method
 - Prior to performing testing on valves, install an appropriate blind fitting and cycle the hydrostatic test system to ensure it is functioning properly and that there are no leaks.
 - Advance adjusting nut slightly to reduce clearance between plug and inserts
 - Inject body grease just prior to testing, and after each actuation (Valtex “1502” grease is not injectable and regular body filler grease will be required)
 - If allowed, initially pressure to 5000psi then bleed down to hold pressure to set plug

If a successful test cannot be achieved the valve may need repair. Inspect the large OD of the plug, and the ID of the inserts, for any scratches or other damage that may prevent a metal to metal seal. Replace metal parts and seals as necessary. Refer to the [LT Valve Technical Manual](#) for disassembly and repair instructions.

You may contact an MSI representative at sales@diwmsi.com or engineering@diwmsi.com if you have any further questions or concerns, or would like to order a kit to repair your existing MSI plug valve.

MSI is a division of Dixie Iron Works, Ltd
300 W. Main St.
Alice, Texas 78332, USA
Phone: 800-242-0059
Fax: 361-664-4840
www.diwmsi.com