



4" Valve Gear Operator Change

MSI Technical Bulletin 039

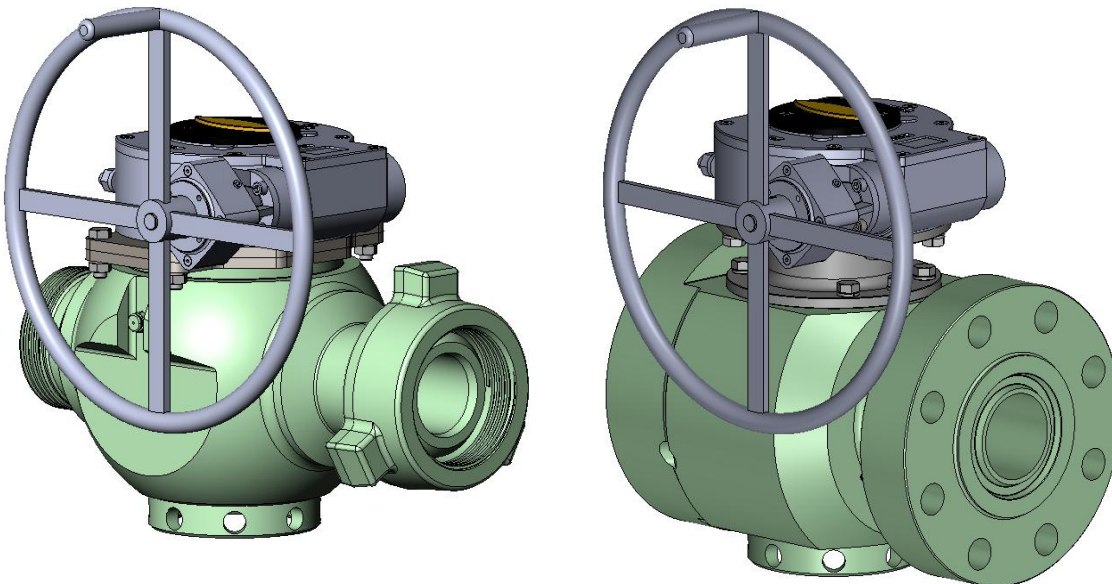
Subject: Introduction to the new 4" valve gear operator.

In March of 2014, MSI standardized on a new worm gear operator used on all 4" valves, the AA6500 gear operator. The AA6500 is a rugged design well capable of actuating the valves through their entire working pressure range. The AA6500 gear operator has a high mechanical advantage which provides the 3750 ft-lbs breakaway torque needed to operate a 4" standard service valve at full 15,000 psi working pressure with only ~82 lbf rim pull.

The gear operator installation and removal is simplified due to a design that incorporates completely external mounting bolt access. See the performance table below for the AA6500 specifications.

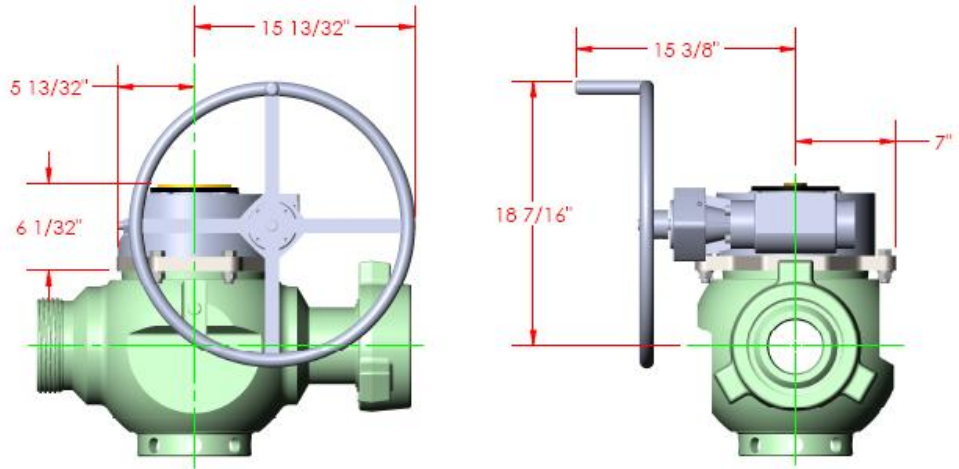
Gear Operator	AA6500
Handwheel Diameter	16"
Gear Ratio	267:1
Mechanical Advantage	68.4
Maximum Torque @ 105 lbf Rim Pull (ft-lbs)	4792
Output Torque @ 80 lbf Rim Pull (ft-lbs)	3648
Turns to open/close	67

All 4" gear operated valves manufactured after this bulletin will use the AA6500 gear operator. Valves with hammer union or flange connections will use a double plate mounting system for installing the gear operator (left image). Valves with studed flange connections will utilize a spool mounting system for installation (right image).

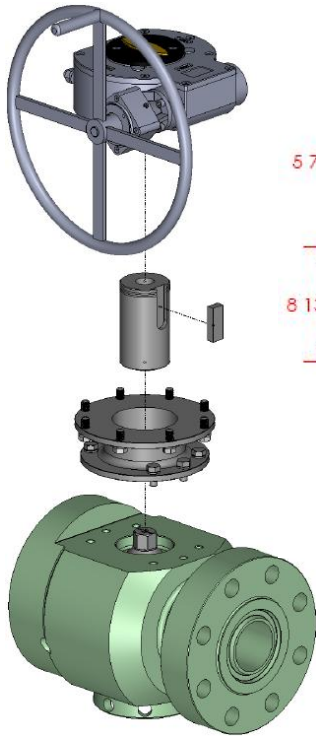




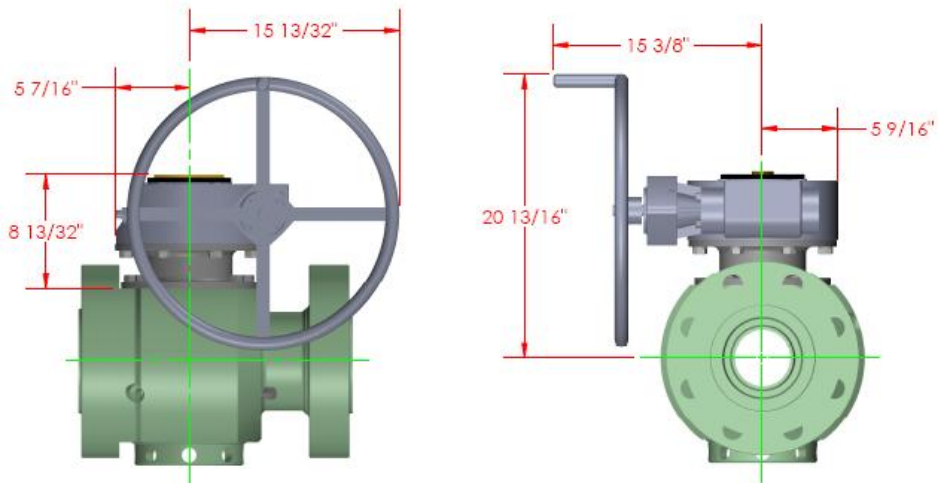
Valves with Hammer Union or Flange connections



Note: If there is limited space around the valve, it is important to verify that the geometry will not interfere with existing equipment near the valve that would make it difficult to operate.



Valves with Studded Flange connections



Note: If there is limited space around the valve, it is important to verify that the geometry will not interfere with existing equipment near the valve that would make it difficult to operate.

You may contact an MSI representative at sales@diwmsi.com or engineering@diwmsi.com if you have any further questions or concerns.

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