

Installation & Automation Requirements for DHV Gate Valves

Vertical orientation requirement of valves during operation, testing, and installation is prescribed to all gate valves.

Assembly

Includes all non DHV branded hand levers, gearboxes, actuators, and any connecting adaptor plates and/or couplings.

- All gate valve operators must be assembled in the upright position vertically above the valve's centerline.
- Gearboxes, actuators and necessary adapters must conform to the valve's ISO pad top works design where applicable.
- Adapter plates and gears must be bolted to the valve top works plate using the correct bolt size, torque, and tightening pattern.
- The stem must be protected at all times from unnecessary movement, stress, force or other potential damage while insuring the stem remains centered in the yoke tube during installation
- Automation mechanisms must be designed, assembled, and supported in a manner as to not exert uneven or unbalanced forces on the valve assembly that could contribute to a side load condition.

NOTE: DHV valve top works fully comply with the requirements set forth in ISO 5210 latest edition. All gears or actuators assembled to DHV valves shall comply with the requirements of ISO 5210 latest edition. Additionally, all gears or actuators shall utilize a spigot return to ensure proper ISO pad alignment on all connections and/or attachments including valve, adapter plates, gearboxes, and actuators. Exceptions may be considered based on order requirements outlined in the purchase order.

Operation

Gate valves must be oriented in the vertical position any time the valve is operated or cycled.

- Personnel installing the operator must ensure there is no abnormal stem movement or run out during operation.
- All "stops" and or "limits" must be correctly set to prevent damage or unnecessary wear to the valve.

Testing

Applies to all methods of hydro testing and pre-commissioning testing.

- Gate valves must be oriented in the vertical position during any operation and testing processes.
- Procedures must be compliant to API specifications.

Installation

- Gate valves must be installed and operated in the vertical position only.
- Gate valves must always be either fully open, or fully closed once installed and are not designed or intended for throttling applications.

Shipping

Valves need to be fully closed during shipment and actuators need to be braced to support the extra weight at the top end of the valve.

Failure to follow these manufacturer prescribed requirements will void any warranties