HYDROPLEX
High Pressure Pump, Valve, and System Specialists

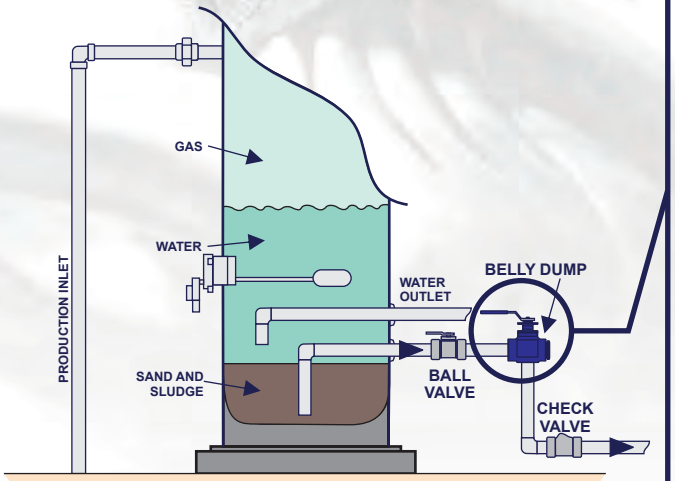
Application Information

BELLY DUMP VALVE ON A TWO PHASE SEPARATOR

The purpose of the belly dump valve is to evacuate the sand and sludge accumulated in the bottom or “belly” of a vertical or horizontal gas separator as a result of the separation process. The reduced level of sludge in the bottom the vessel results in less solids being processed through the liquid dump valve thus extending the service life of the seats and trim.

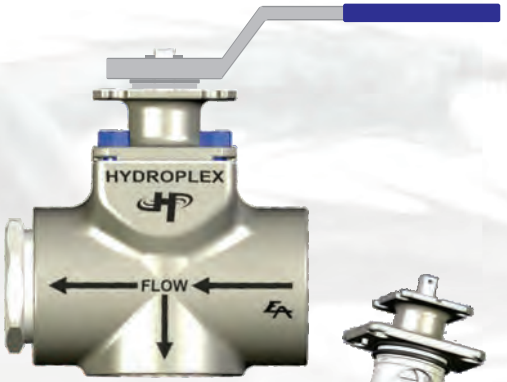
How A Belly Dump Works

The belly dump valve is normally installed as a manual device piped from the bottom of the separator. Field operations personnel will, on a periodic basis, open the valve and throttle the flow of sludge and sand laden fluids out of the separator into storage tanks. The purpose of throttling the flow is to prevent over pressurization and damage to the atmospheric storage tank. A belly dump valve is normally installed with a full port ball valve upstream for isolation and a check valve downstream to prevent back flow. The frequency of use is dependent on the amount of solids produced. The valve can be automated with electric actuation in conjunction with a pressure transmitter.



BELLY DUMP VALVE
ON A TWO PHASE GAS/LIQUID
SEPARATOR

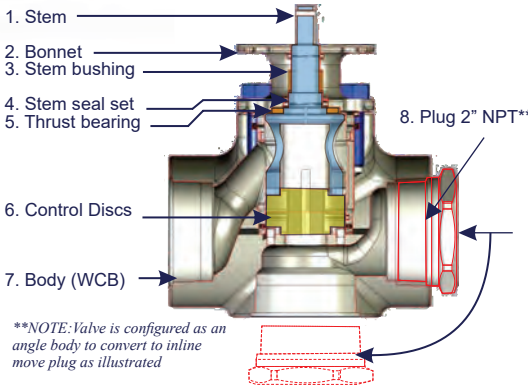
HYDROPLEX MINIMAX



2” MINIMAX WITH
MANUAL HANDLE

INTERNAL
CARTRIDGE ASSEMBLY

MAJOR COMPONENTS



Benefits Of Installing A Hydroplex Valve

- Ease of operation because of **Low Torque Requirement**
- **Simple operation** with 90 Degree Rotary Twin Disc trim
- **Twin Disc Design** separates control and sealing surfaces for longer useful life
- **Robust Stem and Seal** design integration provides for hundreds of thousands of cycles
- **Solid Tungsten Carbide Trim** minimizes seal and control surface wear
- **Longest Mean Time Between Service** with Stainless Steel internals
- **Inline or Angle Body** conversion by moving 2” NPT plug
- Ease of maintenance with the **Internal Cartridge Assembly**