High Performance Spherical Disc Valve P21

Engineered for the most demanding applications in general chemical, pharmaceutical and most solids processing industries.

The P21 is designed for ANSI class VI sealing from full vacuum to 150 PSI and is available in most alloys including carbon steel, stainless steel, Hastelloy and Titanium. The P21 is offered with standard ANSI or DIN flanges and ISO actuator mounting. It can be configured with a solid reinforced Teflon (RPTFE) seat, metal seat or inflatable seat. Options include the full range of sanitary finishes and clean in place spray balls or nozzles.

The P21 High Performance Spherical Disc Valve is designed to meet tomorrow’s demanding requirements for containment of solids, powders and slurries.

Applications:
- Reactor Feed Valve
- Isolation Valve
- Dense Phase Conveying Valve
- Pressure Tank Shut off Valve
P21 High Performance Valve

DESIGN PRINCIPLES

Top 10 Features of the P21 Valve

To learn more about a specific area, click on the corresponding number.

1. Full Port Opening:
Unlike a butterfly valve, the shut off disc swings completely out of the flow preventing bridging and promoting mass flow.

Solids and slurries have completely different characteristics than liquid and gases. So don’t be surprised when traditional ball, butterfly and slide gate valves give trouble in solids processing applications.

The most common problems when handling solids with these valves are:

1. Material bridging on the center vane of the butterfly resulting in the use of vibrators, ramrods, sledgehammers and other instruments of destruction.
2. Material jamming into the tracks of slide gate valves resulting in sealing surface abrasion with every cycle of the valve.
3. Material packing into the tight cavities of ball valves until the valve ceases or the seat tears apart.