

APPLICATION SPOTLIGHT: SOLENOID VALVES HELP CONTROL END GATE ON END GATE DUMP TRAILER

A trailer company contacted Bimba | Pneumadyne to design a control mechanism that would be able to operate the gate on their end gate dump trailer. Their existing gate control system was scattered across the trailer, using valves to operate a pneumatic cylinder to open/close the gate, and an actuator to control a latch that secured the gate. Keeping the gate closed during transport is an absolute necessity to prevent the accidental loss of materials contained in the trailer before it reaches its destination. The customer requested a custom manifold block that consolidated all their gate control components into one assembly.

Bimba | Pneumadyne's engineers designed a custom manifold block to handle these operations in an efficient way that saves space, utilizing <u>System 8 and "22" Series</u> <u>solenoid valves</u>. In this custom manifold, the System 8 valve is used to control the latch that locks the end gate, while the "22" Series valves control the opening and closing of the end gate.



Custom manifold block

The **System 8** solenoid valve is used in applications where higher flow rates are needed. It can be fixed in either direction on the manifold and coil orientation is independent of valve orientation, making it versatile. The **"22" Series** solenoid and air operated valves offer a high flow 3-way and 4-way configurations and comes with manual override and balanced spool. The balanced spool design ensures that operating

forces remain unaffected by variations in the inlet pressure.



End gate dump trailer

Potential Applications:

- Automotive Equipment
- Textile Equipment
- Medical Instruments
- High Speed Conveyors
- Air Suspension
- Printing Equipment
- Food & Beverage Dispensing
- Animatronics

For additional information on the System 8 and "22" Series solenoid valve, or if you would like to configure a valve for your application, please contact our <u>customer service team</u>.