# Plugged Chutes?



### Customization is **Key!**

Valley Rubber manufactures highly customized rubber liners to fit your applications.

Our Liners can be delivered to fit various shapes, sizes, thicknesses and curvatures.

The metal backing can be anything from mild steel to stainless steel.

Our rubber compounds play a major role in the cost effective performance of our liners.

Cabinets can be further customized with other features: additional air outlets, lighting, heating, outside controls, operating indicators, remote controls and more!

### Solution: Inflatable Liners

Sticky material is no longer a problem with Valley Rubber's gorilla-tough Inflatable Liners.

- Virtually eliminates chute maintenance in troublesome areas
- Custom manufactured to fit required space
- Lab tested rubber compound gives long life and protection against impact, cut, tear, and abrasion
- Dramatically reduces buildup of sticky material
- Rubber compound includes a nonstick release agent
- Liners inflate with minimal plant air

### **Before**



### After



Cost Effective when installed in areas where there is severe buildup as a result of high moisture content in the material. These systems consist of rubber liners inflated by means of using plant air fed into a control box and reduced to low pressure prior to passing through the liner system. These systems provide extensive periods of maintenance free service in areas which were previously high upkeep and downtime.

Valley Rubber produces three different Inflatable Liner control boxes:

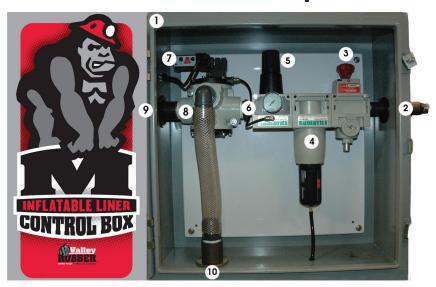
- 1) M Class
- 2) MDX Class
- 3) MDX Plus

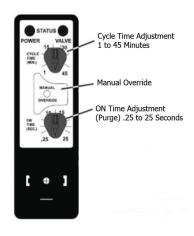




## M Class Inflatable Liner Control Box

### **M Class Specifications**





### **Valley Rubber Can:**

Control PSI to liners
Change time of inflation
Control intervals between inflation
with our electronic control
Inflate approximately 100 square
feet of rubber liners

- 1. 24" x 24" x 24" Nema Housing
- 2. Plant Air Inlet 140 psi max
- 3. Shut-off Valve
- 4. Air Filter
- 5. Air Regulator

- 6. Pressure Gauge
- 7. On/Off Time
- 8. Solenoid Valve
- 9. Air to liners\*
- 10 Air Exhaust

\*One-inch air line runs to a manifold that distributes the air to each liner through equal length air lines. (End user supplied.)



Our engineering team and support staff is larger and more capable than ever, and you now have a direct association with the manufacturer of the components within the solution. Combining the solid manufacturing capabilities of Valley Rubber with their proven Engineered Solutions provides you with a start-to-finish partner for projects that include **field reconnaissance, engineering and manufacturing.** 

### MDX Class Inflatable Liner Control Box

### **MDX Class Specifications**



### **Control Cabinet Features:**

The MDX inflation control cabinet is specifically designed to offer maximum flexibility in delivering proper compressed air pressure and control in a repeatable manner to inflatable liners. The PLC based control is set up so that each liner or "station" can be configured separately to meet the overall system needs.

Each station has its own configuration. The operator has the ability to set operating pressure for each station, pressurization time, cycle time, on time, off time and dwell time. The MDX can have up to eight (8) stations.

The MDX consists primarily of a NEMA 4 carbon steel enclosure, 36" x 30" x 12", SMC shut-off valve and particulate filter with auto drain, pilot operated regulator, pressure control valve, poppet valve manifold with up to eight (8) stations, 130 PLC/HMI, universal power supply, Surge protector, Hammer 2-pole circuit breaker, and a polyester modular enclosure NEMA 4X for housing the control components internal to the main enclosure.

### **Valley Rubber Can:**

- Control different PSI to each liner set
- Change time of inflation
- Control intervals between inflation with our computerized controller
- Inflate up to approximately 800 square feet
- Sequentially inflate liners
- Pulsate liner inflation

- Have a computerized inflation program for each liner set
- · Create faster deflation with dual exhaust
- Offer separate housing for computerized controller, extra protection for rough environments
- On/Off inputs (Example: if the conveyor stops it will automatically shut off inflation system and then start back when conveyor begins running again)

### MDX Plus Class Inflatable Liner Control Box

**MDX Plus Class Specifications** 



### The MDX can be made into the MDX Plus by adding any or all of these options:

### **Enhanced Air Preparation Pack (AP)**

The "AP" option provides enhanced air preparation to the standard particulate filter included in the base MDX. This option will eliminate water droplets in the compressed air up to 99% and oil mist of rust sized 0.3 microns or greater. The "AP" option also protects downstream components inside and outside the control cabinet via an automatic shutoff of compressed air if an abnormal differential pressure is detected across the air preparation train. An indicator light is provided to annunciate that a shutdown has occurred. When the cause of the abnormal pressure drop is corrected, the system may be reset via a pushbutton. This option consists primarily of a water separator with auto drain, the standard particulate filter with auto drain provided in the base MDX, coalescing filter with auto drain, solenoid operated poppet valve, controller and pressure transducers.

### **Dust Shield (DS)**

The "DS" option provides a drip shield atop the control cabinet to reduce the possibility of dripping water, settling dust, dirt, stones, etc. from entering the control cabinet when the door is opened. In the case of the MDX, the drip shield will be constructed of carbon steel and painted cabinet grey. In the case of a control cabinet with the stainless steel option "SS", the drip shield will be constructed of 304 stainless steel.

### **Heaters (H):**

The "H" option provides interior heat to the enclosure during extreme cold conditions. The heaters are sized to keep the interior temperature above 32 degree Fahrenheit with the outside temperature down to a minus 40 degrees Fahrenheit. This option consists primarily of two (2) 950 watt heaters, tamper proof thermostats, and circuit breaker.

### **Interior Light (L):**

The "L" option provides an interior light for the enclosure. The light is an LED and is fused separately.

### **Stainless Steel Enclosure (SS):**

The "SS" option provides a NEMA 4X, 304 stainless steel enclosure that replaces the standard Carbon steel enclosure. It also includes a 304 stainless steel outlet port cover plate and all exposed hardware.

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