



## **DRAIN-ALL® SOLVES PROBLEMS**

a product of



this problem.

### **AVOID CLOGGED DRAINS**

Other drain devices with small orifices and poppet style valves are prone to clog when solid debris is present. Each Drain-All® has a large, smooth liquid flow path and discharge port as well as a heavy duty shear action ball valve designed to alleviate

### **NO ELECTRICITY CONSUMPTION OR CONNECTIONS**

Timer valves require electricity. There is a cost for installing and maintaining the electric outlets they require as well as an ongoing operating cost of electricity year after year. Drain-All® requires no electricity to operate since it is totally pneumatic and can be easily installed at any point along the compressed air system, providing low cost installation and ongoing operation.

### **INCREASED RELIABILITY**

Drain-All® cycling is controlled by a patented magnetic interaction with a totally pneumatic control circuit. While other pneumatic drains have a complex, lever-action “toilet bowl” type internal float with many parts, there are few moving parts in the Drain-All®. Since the Drain-All® is totally pneumatic, it is not affected by power outages or the other vulnerabilities of electrical devices such as timer solenoid valves, motorized ball valves or electrically operated float traps.

### **AVOID BYPASSED DRAIN TRAPS**

Smaller drains become plugged so often that cleaning them out becomes a very labor intensive operation. To avoid constant cleaning, there is a temptation to bypass the inadequate drain on smaller traps and crack open a manual bypass valve, causing it to drain constantly and thus causing a constant flow of wasted compressed air. Drain-All®’s anti-clog design eliminates the temptation to bypass the drain trap.

### **AVOID SYSTEM BLOW DOWN**

Manually operated drains, timer solenoid valves, motorized ball valves or electrically operated float traps blow away large quantities of expensive compressed air. Manually operated drains waste considerable compressed air because most operators feel it is necessary to have the drain open an extended period of time in order to get all the liquid out. Timer valves are almost always set to be open longer than necessary in order to drain all of the liquid and this also passes large quantities of compressed air down the drain. Drain-All® avoids this waste of compressed air and the resulting pressure drop in the compressed air system by maintaining a liquid seal in the bottom of the Drain-All®’s reservoir between each cycle.

### **CONTROLLED LIQUID DISCHARGE**

Manual draining and timer valve draining do not provide any information on the quantity of liquid being produced in the compressed air system. Each Drain-All® model discharges a specific amount of liquid on each cycle in a given application. With the addition of an optional Drain-All® cycle counter on the Drain-All® unit, it is easy to track how much liquid is produced over any period of time. This is particularly important for benchmarking system equipment performance and performing trend analysis. For example, it is essential to know the quantity of liquid produced by a compressed air system in order to properly size oil-water separators.



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### **CONTROLLED LIQUID DISCHARGE (cont'd)**

A cycle counter coupled with a Drain-All® unit is an instrument. Once installed, it provides tracking of the number of cycles for periods of time at different ambient temperature and humidity conditions. This data can be plotted on a chart. During operations thereafter, a check on the number of cycles per time period of actual operation compared to the chart for a given temperature and humidity will show if the correct amount of liquid is being received by the Drain-All®. Too many cycles, compared to the chart, indicates excessive liquid is being produced somehow and should be investigated. Too few cycles indicates that not enough liquid is being produced and this too should be investigated.

### **AVOID OVER-DRAINING**

Manual drain valve operation and timer valves are usually set for overkill in terms of frequency and duration of drainage times in order to be certain that no liquid accumulates in the system. This results in waste of expensive compressed air. Drain-All® is demand-activated and drains only when the liquid reaches the predetermined trigger point. The Drain-All® does not over-drain or blow down the system.

### **AVOID UNDER-DRAINING**

Timer drains must be preset to establish the frequency and duration of drainage. The settings may be vastly different in periods of high humidity from what they would be during periods of low humidity. It is common for this adjustment to be overlooked in the transition from winter to summer. Therefore, the settings are often inadequate to handle the higher summer quantities of liquid, which, in turn, result in excess liquid accumulation in the compressed air system. This liquid often backs up and can cause damage to dryers, compressors and hand tools that are expensive to repair. The Drain-All® is designed to cycle as needed when liquid accumulates and requires no adjustments from season to season.

### **OPTIMAL LIQUID REMOVAL**

The air pressure in the system being drained forces the liquid out of the Drain-All® reservoir. Because the power of the air system is behind it, the discharge can be directed upward, to a containment vessel, to an oil-water separator or to an overhead discharge piping system.

### ***Drain-All® Is...***

#### **AUTOMATIC**

No timers, works on demand

#### **PNEUMATIC**

Totally air operated

#### **ENERGY EFFICIENT**

Save valuable system pressure

#### **RELIABLE**

Robust, with few moving parts

#### **EASILY INSTALLED**

Simple pipe connection

#### **ADAPTABLE**

Special models for all applications