

## **Endurance Test Projects PMV Pumps Running Without Lubrication in Wet/Dirty Air Will Last for Years**

### **Why are the pumps being tested?**

The pumps are being tested to see how many strokes it will take to break a part or create enough wear to make them quit working. **(They're still going strong!)**

### **How is the test being conducted?**

Two PMV samples pulled from stock, a 3" oil pump and a 4.25" grease pump have been running in the lab for more than a year. They are running on about 90 PSI plant air with no filter or lubricator. Outlet backpressure duplicates real world application conditions. Wet, dirty air is deliberately allowed to reach the pumps.

### **What are the results to date?**

- The pumps have no visible leaks.
- The pumps regularly pass up and down stroke stall tests.
- A Power Valve Module inspection revealed no visible or measurable wear.
- The grease pump has 8 million cycles, equivalent to 950 x 400 lb. drums
- The oil pump has 4 million cycles, equivalent to 2000 x 55 gallon drums

### **Some Conclusions**

The test pumps are still going strong after the equivalent of 5 to 8 years heavy duty service without a filter or lubricator. The test validates the PMV design's reliability and durability without lubrication in hostile conditions where water and dirt in the air supply cannot be controlled. This is one more great value to present when talking to customers about PMV.



Testing PMV pumps in the St. Louis lab



Water condensing on PMV grease pump on a hot, humid St. Louis Summer day



An even wetter oil pump on the same day

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