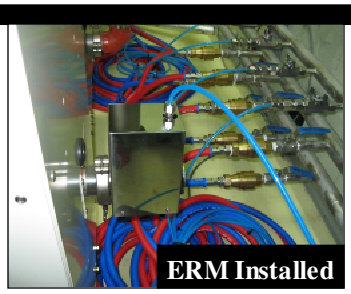
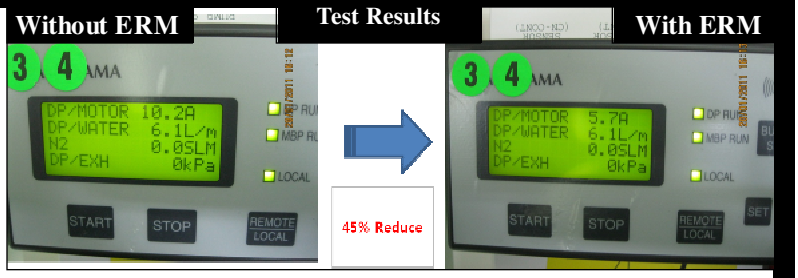
Electrical Savings Device for Dry Pumps
www.wetbenches.net

ERM is a device that reduces the electrical power consumed by Dry Pumps. It is suitable for applications with no effluents, such as loadlocks, buffers, and some processes.

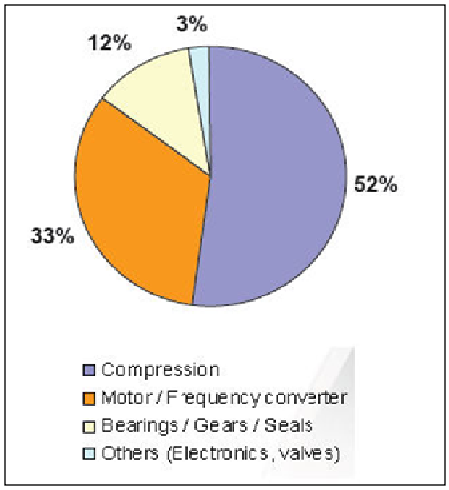




ERM installs at the exhaust end of a dry pump and requires some CDA. In the above test, the user realizes a 45% reduction in power consumed.

- **Over 1000 ERMs are installed and running in FABs now**
- **Widely used in Taiwan & Korea, it is now available in USA**
- **Utility and tax incentives are available in many USA states**
- **Priced at only $1250, typical ROI is about 1 year**

Research points to four major factors that impact the power consumed by dry pumps. As shown, the compression rate of vacuum pressure has the greatest impact. ERM uses a patented process to reduce back pressure, mainly at the last stage. This has a cascading effect that impacts all prior stages as well. With ERM reducing back pressure up to 10X, there is less burden on the pump's motor, and therefore less electrical power consumed. Also, ERM assisted pumps run cooler, quieter, and with minimal need for N2 ballast.



Example Savings

Savings = energy savings + rebates + N2 ballast flow savings

(pump and HVAC) + (gov't and utility co) + (N2 savings)

($400-$800) + ($450-700) + (0-$700)