

Does your motors run lightly loaded for long periods?

If you use motors in the plant's process (conveyors, jaw crushers, granulators, injection machines, reciprocating compressors), and the process is lightly loaded for long periods of time while the speed needed is constant the efficiency can be controlled and running costs greatly reduced.

Are you using dampers or throttles to control flow?

Many plant processes use centrifugal pumps, fans and screw compressors and control their output through valves, vanes, dampers or throttles, this presents a big opportunity to reduce emissions and save money by using more efficient control methods.

Motor controllers

Improving efficiency of electric motors



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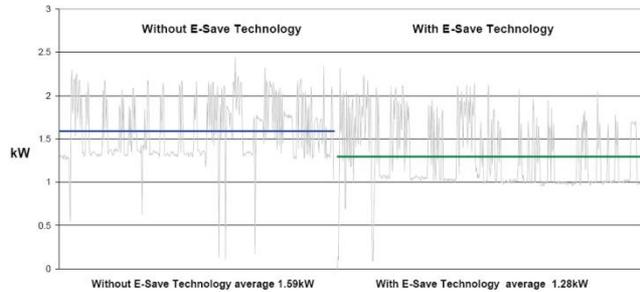
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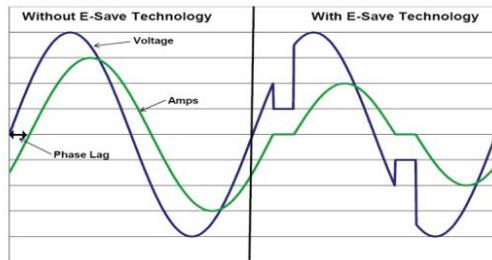
Enresco profitably improves the efficiency of electric motors reducing energy use and carbon emissions

Efficiency regulators for lightly loaded motors

Cyclic loads and oversized motors waste energy through motor losses. Our efficiency regulators (soft starter w/flux control) improve the efficiency of electric motors by up to 35% in constant speed and variably loaded applications by minimizing these losses.



Efficiency regulators continuously monitor the phase lag between current and voltage. When the phase lag indicates the motor is running inefficiently, the efficiency regulator lowers the RMS voltage to deliver the exact amount of energy needed, minimizing the energy losses on the motor and resulting in lower energy (kW) consumption without affecting the load.



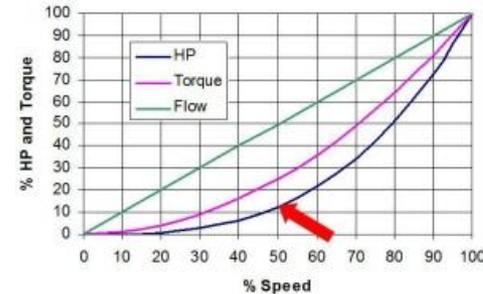
How much will you save?

Enresco will survey your energy usage and conditions and, based upon your electricity bills, provide a free estimate of your annual savings from implementing our Motor controllers.

Variable Speed Drives for variable flows

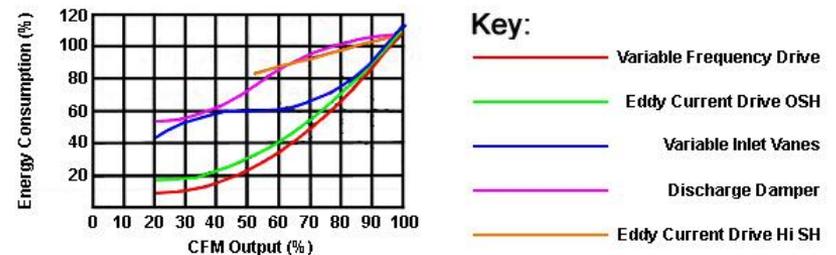
- Reduce energy costs and carbon emissions
- Increase process control and reliability
- Reduce maintenance costs and production risks

In centrifugal pumps and fans, the horsepower required varies with the cube of the speed, resulting in a large reduction of horsepower for even a small reduction in speed. The motor will consume only 25% as much energy at 50% speed than it will at 100% speed.



Variable speed drives (VSDs) allow you to consume less energy than other speed control techniques when load requirements are less than full load.

Energy Consumption of a Centrifugal Fan System



- Key:**
- Variable Frequency Drive
 - Eddy Current Drive OSH
 - Variable Inlet Vanes
 - Discharge Damper
 - Eddy Current Drive Hi SH