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Power Efficiency touts motor control devices

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CHICAGO (June 24, 9:36 p.m. ET) -- Las Vegas-based motor efficiency controller maker Power Efficiency Corp. (Booth W118022) is using NPE2009 to introduce itself to the North American plastics industry — a market company officials say is rife with opportunities to sell its energy-saving devices.

Power Efficiency's patented E-Save Technology uses a microprocessor and circuitry to monitor the energy requirements of a motor.

"By monitoring both voltage and current being fed to the motor, it can precisely calculate the power the motor requires," Power Efficiency's company literature said. "The high-speed response circuits continuously monitor the current and voltage to instantly provide the exact amount of energy the motor needs. This reduced unnecessary energy use. As a result, the motor maintains its rated speed and torque under variable loads, while reducing the energy consumption of the motor."

The inrush of electricity to a powered-on machine can actually cause a power shutdown in industrial facilities, Jay Mistry, the company's director of business development, said in a June 24 NPE interview.

Power Efficiency's motor starter creates a soft start, and reduces energy consumption throughout its run. The units are best suited for variably or lightly loaded applications, Mistry said, citing the vertical transportation industry — elevators and escalators — as examples of commonly used applications for Power Efficiency's technology. It is designed for motors that are running constantly but need an influx of electricity in variable doses.

A common example in its early adoption in the plastics industry has been for granulator units, Mistry said. The grinders run constantly and require a jolt of power only when scrap materials are added. During low load times, the unit is conserving energy by shutting off the voltage for part of the half cycle.

For companies that can measure power factor, it is the power factor that is the best gauge for what machines are a good candidate application for E-Save products. The higher the number, the more E-Save can reduce energy consumption, Mistry said.

Power Efficiency technology is being used in plants owned by packaging firms Berry Plastics Corp., Graham Packaging Co. L.P. and Ball Corp.

Company officials are in the midst of testing their products on injection molding, injection blow molding and extrusion machines. There is enormous market potential there, they said.

The company sells both single- and three-phase units with horsepower ranging from 15-300 and amperage ranging from 22-380 amps.

Depending on the application, E-Save will reduce energy consumption 15-30 percent, and there are case studies where a 40 percent reduction was achieved, Mistry said.

"We're just in our infancy in the plastics industry," he said. "This is a worthwhile product that can provide huge energy savings to people in this industry."

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