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Don’t give up. You have options. Other control technologies can take up the flag when a VFD won’t work for your application.

It used to be that you managed your company’s facilities and all of the machines and technology in it. Today, if you’re like so many other facilities and maintenance managers, you’ve been assigned another area of responsibility: managing your company’s energy consumption.

Soaring energy prices have business and industry scrambling for solutions— with motor solutions at the top of the list. That’s because electric motors play such a significant role in our energy problems. The true workhorses of our industrial and commercial facilities, they consume roughly a quarter of all electricity produced in the U.S. and more than 60% of all electricity used in industrial facilities.

Unfortunately, electric motors often operate very inefficiently, consuming more electricity than required to maintain full speed (RPM). Overpowered motors waste substantial energy when they are lightly loaded or idling.Whether they are driving unloaded conveyor belts, plastic granulators with empty hoppers or jaw crushers with no boulders to break, these motors are doing nothing but sitting there generating heat and squandering electricity. (And we all know how heat can kill a motor–and how difficult those wee-hour-of-the-morning emergency calls to replace failed motors can be.)

Until recently, when looking for ways to reduce energy usage on motors, users typically have relied on solutions such as:

- The ON/OFF Switch–Of course, the best energy-saving device around is still the On/Off switch. But, shutting off an idling motor isn’t always an option.
- Right-Sizing Motors–A recent U.S. Department of Energy (DOE) study determined that 44% of industrial motors operate consistently at