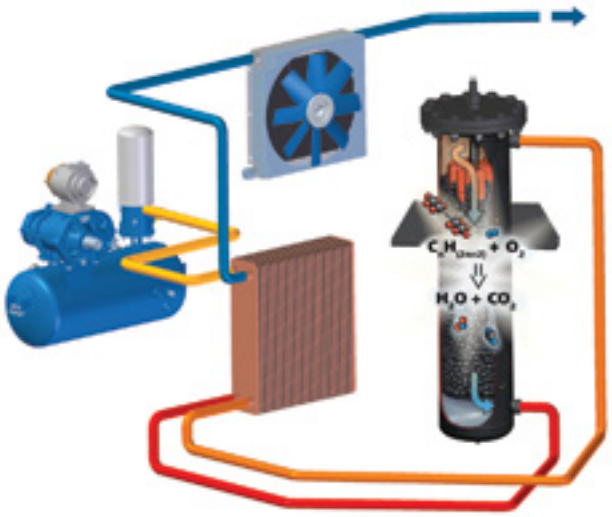
Some products are just plain energy efficient. Others make your processes more so. Then there are those that serve energy-saving technologies. Our editors have selected several in this loop to bring to your attention.



Better Production Of Oil-Free Compressed Air

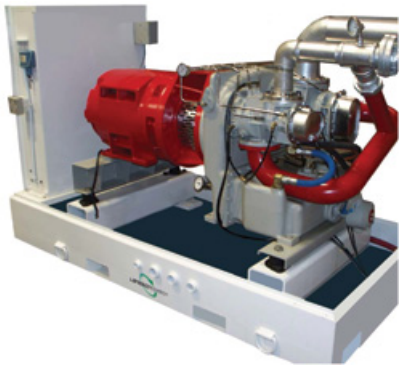
Prior to the introduction of its line of BLUEKAT compressors, Boge suggests that there were only two ways to produce oil-free compressed air: Use an oil-free screw compressor with high compression temperatures, lowered efficiencies and high leakage rates, or use energy- and maintenance-intensive multi-stage filtration. Based on the company's S Series screw compressors with traditional oil-injection technology, BLUEKAT units integrate a converter directly after the compressor stage to oxidize oil into carbon dioxide and water. Since the purified air has a residual oil content of less than 0.01 mg/m3, it is considered oil-free. The manufacturer says its integrated converters are more efficient than external downstream converters and also eliminate condensate disposal.

BOGE America, Inc.
Powder Springs, GA

Long-Life, High-Speed, Low-Torque Rolling Bearings

NTN's ULTAGE Deep Groove Ball Bearings for Ultra-high Temperature Environments help meet the demand for improved productivity and reduced power consumption in film-stretching machines that operate within high-temp furnaces. These high-speed, low-torque rolling bearings use a specially formulated solid lubricant in place of fluorine grease. Internal design improvements increase the amount of lubricant and optimize the shape of the bearings that, in turn, translates into improved operating life. For example, a metallic cover over the solid lubricant helps prevent the bearing's inner and outer rings from separating, even if the lubricant becomes extremely worn.

NTN Bearing Corporation of America
Mt. Prospect, IL



Clean Energy From Letdown Gas Pressure

Langson Energy's Edison Bronze Award-winning Gas Letdown Generator™ converts wasted letdown pressure from pipelines into clean electrical power for less than 3 cents per kWh. The company says the technology is more cost-effective than turbo expanders, turbines and other alternatives, and that users can capture the power for their own needs or sell it. The amount of power that can be produced depends primarily on how much flow is in the pipeline and how much pressure is let down or reduced. According to Helix Power Generators, an authorized distributor and service provider for these systems, the baseload power allows the generator to

run 24/7 with bearing maintenance every 50,000 hours on average.

Helix Power Generators, Inc.
Houston, TX

Powerful Fans Stand Up In Areas With Overhead Obstructions & Poor Ceiling Access

Rite-Hite's recently introduced Renegade series HVLS (high-volume, low-speed) floor-mounted fans improve air circulation in areas with overhead obstructions or limited ceiling access. Unlike ceiling-mounted HVLS fans, they can be moved when plant configurations change. While its AC motor consumes 640 watts of electricity, the same as two 30" hp pedestal fans, a single Renegade unit generates eight times the air volume and circulates it up to 50 feet from the fan's center in all directions, effectively covering up to 7850 square feet. Offered in 8-, 12- and 16-ft.-diameter models, these fans feature easy-to-use controls for adjusting fan speed or operating the units in reverse.

Rite-Hite Fans
Milwaukee, WI

Expanded Line Of Interchangeable Wind-Industry Gearbox Filter Elements

Swift Filters has expanded its filter-element offerings for wind turbines, including those in GE's

1.5 MW Series. Engineered specifically for wind-turbine gearbox lubrication lines, SwiftGreen™ filter elements feature a reusable machined-aluminum bypass-valve assembly that cuts expenses and disposal volume. When it's time to replace a used element, the bypass is removed and inserted into a fresh SwiftGreen element. Employing the latest generation of SwiftGlass™ Bx(C) ≥ 1000 (per ISO 16889) microfiber glass filter media, elements in this line provide high levels of fluid cleanliness while maintaining low-pressure drop characteristics. The manufacturer says these products are interchangeable with filter elements from Hydac®, Stauff®, Pall®, Parker®, Donaldson®, Purolator® and Filtrec®, among others.

Swift Filters, Inc.
Oakwood Village, OH

EISA-Compliant Motors For Harsh Environments

Nidec's U.S. MOTORS® brand Hostile Duty motors are general-purpose NEMA Premium® units that meet Energy Independence and Security Act (EISA 2007) efficiency requirements. The manufacturer notes these enclosed fan-cooled motors reduce operating costs and are well suited for rugged applications like pumps, compressors, conveyors or blowers in dusty, damp or dirty environments (i.e., in any industry that requires an EISA-compliant motor in a harsh environment). These heavy-duty workhorses are available in T-frame and C-face configurations, in TEFC ratings from 1-200 hp, dual-frequency nameplate. Cast iron frames (140 Rolled Steel) and cast iron end brackets, corrosion-resistant mill- and chemical-duty paint and heavy-gauge steel fan covers and conduit boxes are other notable features.

Nidec Motor Co.
St. Louis, MO