

# POWER Engineering

the magazine of power generation

Special Report:  
**Gas Development  
Executive Roundtable**

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These products include high-pressure valves, fittings and tubing, reactors, pressure vessels, intensifiers, gauges, pumping systems, gas booster systems and pressure generators.

*High Pressure Equipment Co.*  
Info. [www.highpressure.com](http://www.highpressure.com)

**Cage mills**

Stedman offers a variety of size reduction equipment including several cage mill series, "A", "F", "G", "H" and "Y", with specific models available for wet, sticky materials and blending or cleaning products.

Stedman custom builds their cage mills to fit each crushing, pulverizing, blending and mixing application of abrasive or non-abrasive materials.



Many companies in industries such as brick and clay, shale, detergents, fertilizers and others rely on Stedman for sizing of materials to maximize yields to a close range. Typically after crushing, the oversize material will be returned to the cage mill for further reduction and fines are returned to the compactor. The cage mill line offers varying maximum capacities from 70 to 240tph and models featuring single-, two-, four- and six-row cages.

*Stedman*  
Info. [www.stedman-machine.com](http://www.stedman-machine.com)

**RCI pump**

RCI Technologies introduces the FRS 660-11-DPU-UL (DPU), the newest addition to RCI's line of diesel fuel purifiers and fuel recirculating systems. The DPU, or



Duplex Pump Unit, is the newest model of RCI's Fuel Recirculating Systems (FRS). It is designed to automatically circulate and clean the fuel in customers' fuel storage tanks on a preprogrammed schedule. The DPU features two fuel pumps, which operate alternately to circulate the fuel through the system. RCI's

other FRS units utilize a single pump.

All FRS units employ RCI's patented filter-less technology, using no filters or moving parts. The FRS is used for primary fuel purification and removes free water, including emulsified water, and up to 98 percent of the normal solid or particulate contaminants found in fuel, including sludge and algae.

*RCI Technologies*  
Info. [www.rcitechnologies.com](http://www.rcitechnologies.com)

**Dust caps**

Martin Engineering has introduced Martin Dust Caps to prevent the problems of material accumulation and corrosion at the base of conveyor structures. The buildup of fugitive material on the floor or ground around belt conveyor supports creates a mess and potentially a fire hazard. These buildups also capture moisture, leading to the corrosion



and weakening of the conveyor structure. Installed on the "legs" of the conveyor, Martin Dust Caps prevent these material accumulations.

Made from accumulation-resistant molded polyurethane, Martin Dust Caps are pyramids that cause the material to fall away from the conveyor foot, making it easier to collect dust and clean it by washing down or sweeping around the conveyor.

*Martin Engineering*  
Info. <http://martin-eng.com>

**John Deere engines**

John Deere Power Systems (JDPS) has announced the technology solutions it will use to meet Interim Tier 4/Stage III B mobile off-highway emissions regulations for the company's complete lineup of industrial diesel engines. These regulations require at least a 90 percent reduction in particulate matter and up to 50 percent reduction in nitrogen oxides (NO<sub>x</sub>) from previous Tier 3/Stage III A requirements.

JDPS will continue to offer the familiar John Deere PowerTech displacements of 4L, 4.5L, 6.8L, 9.0L and 13.5L. Power

ratings will also be similar to the Tier 3/Stage III A offerings. For all of its engines 6 kW (75 hp) and above, John Deere will start with Tier 3/Stage III A PowerTech Plus engine platform, which includes cool



exhaust gas recirculation (EGR) for NO<sub>x</sub> control and additional exhaust filtration for reduced particulate emissions. Displacements in this power range include the 4.5L, 6.8L, 9.0L and in-line, four- and six-cylinder engines, all of which feature a four-valve cylinder head, high-pressure fuel system, turbocharging and an air-to-air aftercooling system. As with previous emissions tiers, John Deere will offer appropriate levels of technology specific customer needs in a wide variety of applications.

*John Deere Power Systems*  
Info. [www.JohnDeere.com/jdpower](http://www.JohnDeere.com/jdpower)

**Atlas testing**

Atlas Material Testing Technology introduces a new technology for ultraviolet accelerated exposure testing. This outdoor testing device can provide approximately 63 years of South Florida UV radiation exposure in a single year. Atlas developed this new solar concentrator technology in partnership with the National Renewable Energy Laboratory (NREL) and the Ru Institute of Laser Optical Technology (ILOT) under a U.S. Department of Energy (DOE) program.

Similar in concept to Atlas' moderate accelerated EMMA technology, the ultra accelerated testing device tracks the sun while concentrating reflected sunlight on test specimens mounted in a target area. The new patented mirror system used in the ultra-accelerated concentrator has very low reflectance in the UV and near visible wavelength ranges while attenuating reflectance in the longer wavelength visible and IR portions of the solar spectrum. This technology is ideal for very high concentrations of UV energy without excessive heating of test samples.

*Atlas Material Testing solutions*  
Info. [www.atlas-mts.com](http://www.atlas-mts.com)