

## Seat system

**Grammer's** Maximo Evolution premium off-highway vehicle seat system was designed for high-performance tractors above 3.5 t (3.8 ton). Features include an active seat climate



system for hot and cold weather, integrated electronic circuits that fully adjust to the operator's mass to prevent poor posture and maximize comfort, self-explanatory controls for setting the seat, and optimization of the suspension systems in all three axes. The seat climate system offers a layer of activated charcoal beneath the seat cover to absorb heat and sweat away from the driver's body while flowing cool, dry air through a ventilation layer to remove moisture and cool the seat surface. Electric heat seating can be switched on during cold weather.

*For more information, circle 27*

## Centrifugal pump

The **Godwin** Dri-Prime 6-in (150-mm) CD150M automatic priming centrifugal pump features solids-handling to 3 in (76 mm) in diameter, maximum flows of 1700 gal/min (6435 L/min) and 150 ft (46 m) of dynamic head, and indefinite dry-running capabilities. Suitable for straight dewatering and sewage bypassing in the construction and



aggregates industries, the CD150M is mounted on a highway trailer to make it a maneuverable, portable pumping system. Offered in electric drive or as bare-shaft pumpend, other pump benefits include a cast-iron construction, application flexibility, an air ejector priming device with no periodic adjustment, a dry-running mechanical seal, and a solids-handling ball-type non-return valve. A quiet critical silence pack is available for use in residential communities.

*For more information, circle 28*

## Radial tire

**Bridgestone Firestone North American Tire** offers the Bridgestone M850 on- and off-highway radial tire. The deep, 24/32-in tread all-position radial was designed to offer long tread life for flatbed haulers, dump trucks, and other construction jobs. A block/rib tread pattern offers even wear on a variety of road surfaces, while the wide tread improves flotation on heavily loaded steer axle positions. A larger footprint evenly distributes weight and wear forces over a larger area, promoting even tread life. Other product benefits include solid grip and improved wet traction from the block/rib tread pattern; groove-bottom platforms that prevent trapped stones from pushing into the grooves, piercing the belt layer and exposing the belt to rust; special tread compounds that resist road debris; and computer-designed tie bars that reduce block squirm and irregular wear.

*For more information, circle 29*



Product features include a fiber architecture, resin formulation, proprietary filaments, and an engineered geometric shape, all of which create a bushing that operates under loading conditions two to three times those of typical composite bushings, according to the company. In addition to high-strength properties in both static and dynamic modes, the bearing material is inherently self-lubricating, eliminating the use of grease and oil systems and the need to access hard-to-reach areas on large equipment.

*For more information, circle 30*

## Flatproofing material

**SuperFlex** soft-fill polyurethane material for off-highway tires is a suitable flatproofing product when ride, footprint, and flotation are needed. An **Arnc** SuperFlex-filled tire functions much like an air-filled tire, and its shock-absorber properties feature a softness of 8 durometer. The polyurethane liquid cures into a soft, rubber-like material that fills any tire with a sound casing to eliminate flats, blowouts, or other damage. The flatproofing product protects machines from vibration and jolting and improves a vehicle's stability, according to the company.

*For more information, circle 31*



## High-strength bearing

The **PolyLube** ultra-high-strength series bearing is a high-load, low-rpm bearing designed for applications needing self-lubrication.

## Portable compressor

The 150-ft<sup>3</sup>/min (4248-L/min) M43 Mobilair portable compressor from



**Kaeser Compressors** features a Sigma Profile rotary screw airend and a heavy-duty **Kubota** diesel engine to provide more air with less fuel. Units are suitable for construction and other off-highway applications. A galvanized steel canopy allows access to all components for servicing and reduces noise levels, according to the company. Other features include a cold-start battery and an instrument and lighting package.

*For more information, circle 32*

### Pedal control

**MICO's** line of electronic pedal controls was designed for long life in harsh on-and-off-highway applications. The control uses two non-contacting, Hall-effect sensors to offer improved durability without the failure modes of potentiometers. Each sensor features independent circuits for failsafe systems, and the electronic assembly is potted to the pedal base to minimize environmental effects while limiting tampering to the unit. Engineered for applications requiring an electronic signal proportional to the pedal travel, typical uses include throttle and accelerator pedals. The pedal is ergonomically designed to improve operator comfort and productivity; control options include pulse width modulation or analog output.

*For more information, circle 33*

### Air system connectors

**Norma Products** features NORMAQUICK V2 quick-connectors, said to lower the cost of secondary air systems while maintaining seals and connections. The connectors also reduce mass and assembly time while streamlining the number of components, according to the company. The V2 clicks into place, installing in less time than a hose pushed over a spigot and secured with a clamp. Other benefits include simplified disassembly for service, a connec-



tion that minimizes air leaks, compact size, and availability in various angles and diameters, including 19 and 27 mm (0.7 and 1.06 in).

*For more information, circle 34*

### Haul truck radial Bridgestone Firestone Off Road Tire

offers the Bridgestone V-Steel Rock Quarry Premium (VRQP) radial for the off-highway market, specifically for rigid haul trucks operating in quarry environments. The VRQP is available in two sizes and features extra-deep tread that lengthens tire life as well as a tread design that improves traction. A reinforced shoulder design prevents sidewall damage, according to the company.

*For more information, circle 35*



### Xenon lighting

Xenon work lamps from **Hella** allow precise placement in hard-to-reach areas, affording brighter illumination of the work area. Designed for heavy-duty vehicles that work through the night, lamps provide more than twice the output of lamps with



55-W halogen bulbs. An impact-proof light arc is used in place of the sensitive filament, eliminating the risk of a sudden failure. Ballast electronics can be mounted in a sheltered spot up to 10 ft (3 m) from the lamp. Other product benefits include 25% less energy consumption, a service life five times that of halogen lamps, and a compact size.

*For more information, circle 36*

### Self-priming pump

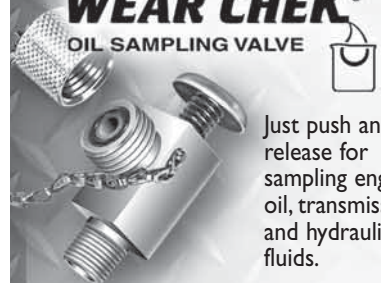
**Viking Pump** offers high-capacity pumps for terminals and tank farms. Self-priming, with suction-lift capability, they can be mounted above the liquid level for unloading barges and tankers. The pumps operate in either direction, so the same pump

**NO  
SPILLS.  
NO  
TOOLS.**

**Preventive maintenance  
has never been  
so clean, so easy!**

#### SAMPLE IT!

**WEAR CHEK<sup>®</sup>**  
OIL SAMPLING VALVE

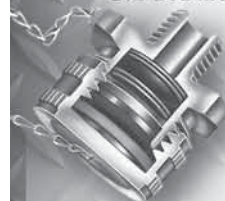


Just push and release for sampling engine oil, transmission and hydraulic fluids.

- Compact, rugged T-shaped design
- Double seal and automatic positive closing for leak-free performance.

#### DRAIN IT!

**WASTE  
GARD<sup>®</sup>**  
OIL DRAIN VALVE



Leak-free valve opens with just a few turns of activator/swivel hose assembly.

- Two-way seal
- High flow rate - short drain time
- Wide range of threads & sizes.

Contact us for complete new catalogs of standard sizes and connections



**Fluid Line  
Products, Inc.**

Designer and Manufacturer of Fluid Power Components  
(440) 946-9470 Fax (440) 946-9472  
flp@fluidline.com  
Visit us on the web at www.fluidline.com



can be used for loading and unloading or line stripping to eliminate the need for a second pump. Technologies for terminal operations include both internal gear and industrial lobe pumps, with thrust control and adjustable rotor clearances that compensate for wear and viscosity. Gear pumps feature capacities up to 1500 gal/min (5680 L/min), while lobe pumps provide low shear and pressures to 400 psi (27.6 bar) on medium to high viscosities with capacities to 1000 gal/min (3785 L/min). A slow rotational speed contributes to long service life; various material options are available.

For more information, circle 37

### Thread protection

Patented NYCOTE coating from **Nylok** is applied to threaded fasteners with 100% Teflon powder to provide protection against thread contamination from electrodeposited paints, primers, and adhesion weld spatter. A non-conductive white Teflon powder is applied to fasteners during the process and coats only external and



internal threads, eliminating masking, plugging, or capping of threads as well as the need for slave bolts and retapping. It also adds lubricity to fasteners and reduces torque versus tension scatter, according to the company. Typical applications include the agricultural, machinery, marine, and outdoor power equipment industries.

For more information, circle 38

### Corrosion inhibitors

**Hirschmann Engineering USA's** H<sub>2</sub>O Plus and H<sub>2</sub>O Plus Blue corrosion inhibitors were developed to prevent rust from forming in wire electric discharge machining (EDM) machines. The nontoxic products are removable with water and have no effect on



the cutting efficiency of dielectric EDM machines. H<sub>2</sub>O Plus prevents build-up of rust on workpieces and non-stainless workholders and can be used in new and existing installations. The concentration level can be kept at a ratio of 1 to 150 when adding water. In addition to preventing rust build-up, H<sub>2</sub>O Plus Blue keeps machinery clean and is recommended for use in new machine installations where components are free of contamination. A concentration level of 0.5 to 100 ensures optimal rust-proofing and cleaning.

For more information, circle 39

### Comfort seat

**Grammer** equips the MSG 97AL/742 model series of seats for self-propelled harvesters with comfort features including a wide, scissors-type suspension that offsets stresses and accommodates one-sided loads from use of multi-function armrests and control consoles. An air suspension system absorbs vertical vibrations and allows the driver to sit steadier, while the pneumatic low-frequency suspension absorbs jolts and impacts to enable relaxed driving at high speeds. Other features include easy seat adjustment; a fore/aft travel of 210 mm (8.25 in); a long, ergonomically shaped backrest that can be angled up to 80° and prevents sideways slippage; a pneumatic lumbar support for ideal posture to prevent spinal disk injuries; adjustable head restraint and seat length; and options including armrests, a lap belt, and seat heating.

For more information, circle 40



### Heavy-duty fastener

**Protex** offers a heavy-duty latch designed type 47-2650 that is suitable for a range of resealable fastening applications in the agricultural, commercial vehicle,



logistics, and safety equipment sectors. Offering a strength of 9800 N (2200 lb) and equipped with a threaded draw bar that provides up to 20 mm (0.8 in) grip range adjustment, the fastener can be secured by a padlock or optional sealing pins. Latches are produced in zinc-plated mild steel and measure 207 x 40 x 22 mm (8 x 1.5 x 0.8 in).

For more information, circle 41

### Deep-cycle battery

**ODYSSEY Batteries of EnerSys Reserve Power Group** features a Group 31-size deep-cycle sealed valve regulated lead-acid (VRLA) battery that provides a service life three to four times greater than typical wet cell batteries. The 89-lb (40.5-kg) battery offers 70% more starting power at temperatures as low as -4°F (-20°C) and is



suited for heavy-duty, deep-cycle uses including trucks, buses, construction equipment, and marine applications. Other features include a 10-year life in operation, starting power up to 12 months in storage, a two-year storage life at room temperature, and cranking power at temperatures as low as -20°F (-29°C). Sealed Drycell construction prevents external venting and decreases terminal corrosion, while a rugged military construction improves vibration resistance and durability.

For more information, circle 42

### Self-sealing liner

**Arnco's** QuikGel self-sealing polyurethane liner provides protection from punctures up to 0.3 in (8 mm) in diameter and offers a lighter alternative to other flatproofing materials. The liner protects and covers the middle of the sidewall and features extra shoulder coverage for lateral punctures as

well as improved protection in the tread area versus the tread center line. The gel membrane allows the tire and vehicle to perform as intended and is centrifugally cast balanced to enable a smooth ride. QuikGel is suitable for skid steers, agricultural vehicles, telehandlers, golf carts, lawn and garden equipment, and other applications requiring less mass.

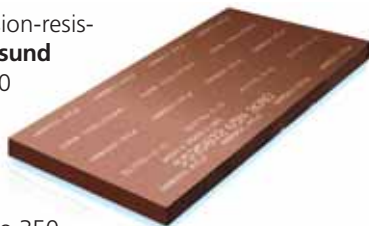
For more information, circle 43



### Resistant plate

The HARDOX HiTuf abrasion-resistant plate from **SSAB Oxelösund** offers a thickness up to 120 mm (4.7 in) for wear applications where structural integrity is needed. Features include improved hardness of up to 350 Brinell versus use of structural quenched and tempered steel with a hardness of 260 to 290 Brinell, longer wear life, and improved weldability and thermal cutting. HARDOX HiTuf is also two to three times tougher than a typical plate, according to the company, when subjected to bending forces such as rippers and cutting edges in larger excavator buckets.

For more information, circle 44



### Hose connection

The E-Z Clip system decreases assembly time by more than 50% vs. conventional hand-crimp systems, according to **Eaton**. A pliers-type assembly tool creates the hose-to-fitting connection without the use of a power source. Three components comprise the system, including a GH134 flexible multi-refrigerant hose, E-Z clip nipple, and a fitting retention system that uses a clip and cage combination to simulate the crimped retention of a traditional socket. Various sizes are available.

For more information, circle 45



### Rubber tire

The ERS three-compound, all-natural rubber solid tire from **Solideal** features a lower heat build-up with improved abrasion cut and tear resistance. The tire's high-traction tread design offers a deeper, better cleaning, aggressive footprint and longer tire life, according to the company, while a resilient center layer absorbs shock for a smooth ride that reduces driver fatigue. Steel cages built into the wheel construction provide resistance to slippage on the wheel, and the natural rubber prevents chunking. A quick-mount base variant is also offered.

For more information, circle 46



### Ergonomic harness

The Miller Revolution harness from **Miller Fall Protection** offers improved comfort, fit, durability, flexibility, and ease-of-use, according to the company. The PivotLink connection rotary design allows users a better ergonomic fit, with bending comfort and an attachment point for tools and accessories. The integrated accessory system offers a modular attachment design with connection points for removable belts and tools. One-hand adjustment and release of the cam buckle allows simultaneous adjustment of the shoulder straps and ensures a snug fit, while the ErgoArmor back shield minimizes impact from sharp or heavy snap hooks and self-retracting lifelines. DualTech Webbing and web finials also improve fit and comfort, and a self-contained label pack encapsulates labels to minimize loss.

For more information, circle 47



### Water tank

Big Shot water tanks from **Philippi-Hagenbuch** hold 6000 to 60,000 gal (22,700 to 227,000 L) and are suitable for off-highway equipment to assist with dust suppression, fire protection, road construction, and wash down. Big Shot tanks are built



## TOUGH TESTERS

For fast diagnostic troubleshooting of mobile or stationary hydraulic systems and components. Flo-tech turbine Sensor Arrays and Portable Testers have a reliability rating that is "Bullet Proof." Simultaneously measure flow, pressure and temperature achieving laboratory accuracy in the field. Sensor Arrays can be integrated with PCs, PLCs, recorders and readouts.

Call for immediate information or visit our Web site.



# HEDLAND.

flow meters

1-800-433-5263 • WWW.HEDLAND.COM

with high-strength, abrasion- and corrosion-resistant steel to ensure low mass and improved water-carrying capacity. A fluid tank baffling system ensures solid vehicle control, while the tank's interior offers easy access for movement throughout the unrestricted passage from front to rear. External construction features a flat top to minimize slipping, and a lifting eye design improves balance when raising the tank.

For more information, circle 48

### Silent pump

The PP44S10 is a 4-in (102-mm) version of the Silent Pack range of dewatering pumps offered by **Pioneer Pump**. The pump is fully enclosed in a durable stainless steel enclosure that reduces sound levels to below 62 dB(A) at 23 ft (7 m). A **Deutz F3M2011** engine powers the pump and delivers 35 hp (26 kW) at 1800 rpm. Other features include a prime series vacuum-assisted pump to enable a smaller, quieter engine; improved capacity; a maximum output of 1400 gal/min (5300 L/min); maximum head of 105 ft (32 m); and the ability to handle spherical solids up to 3 in (76 mm) in diameter with improved lift capabilities. The design offers a high flow rate across a wide range of head heights, and a canopy fully opens for easy access main-



tenance without the removal of panels. The pump is suitable for varying conditions in the construction industry.

For more information, circle 49

### Track pads

**BLS Enterprises** offers polyurethane bolt-on track pads for asphalt milling machines, asphalt pavers, and concrete slipform pavers from manufacturers including **Caterpillar**, **Ingersoll-Rand**, **Bitelli**, **LeeBoy**, and **Miller Formless**. The pads bolt to the steel grousers rather than being bonded to the steel. Features include easy installation and removal, cost savings on replacement parts and shipping, and long wear life.



For more information, circle 50

### Off-highway tire

V-Steel L-Traction tires (VLT) from **Bridgestone Firestone Off Road Tire** were designed specifically for the off-highway market. Tires feature a non-directional wide base design for scrapers, articulated dump trucks, and wheel loaders. A radial traction pattern provides improved productivity and longer life, while a self-cleaning tread pattern offers even wear. The VLT's large contact footprint provides improved traction, flotation, and rider comfort; the tire is available in six sizes.



For more information, circle 51

### Agricultural track

**Solideal Trackmaster OTT** rubber track offers improved traction, low ground disturbance, and improved flotation. The product was designed for skid steer machines to provide maximum traction and to permit the machine to be converted from a wheeled machine to a rubber-track machine. The company's Tiger and Leopard agricultural tracks offer heavy-duty carcass and double-angled bar lugs that move agricultural machinery through any condition. The improved ride and wear of the track make it suitable for a range of equipment including high-power tractors and harvesters.



For more information, circle 52

### Load ejector

**Philippi-Hagenbuch** produces a load ejector system to dislodge sticky material that clings to truck bodies. Overlapping, jointed plates are attached to the top of the front slope plate and extend down the body floor. During the dump cycle, the load ejector plates slide down and out of the body, hanging vertically, to eject the sticky material. As the truck body lowers, the plates automatically retract and conform to the body contours. Benefits of the system include increased capacity and elimination of bed cleaning.

For more information, circle 53

## Your Requirements are Within Our **CONTROL**

We will take the time to LISTEN to your needs, then customize a *joystick controller or complete operator system* for your specific application.

- 1-, 2- & 3-axis Joysticks for controlling electro-hydraulic proportional valves
- Digital and Analog Joysticks for crane control
- Heavy-duty Rotary Switches for outdoor use





- Low-cost Ergonomic Chair Systems with stylized consoles for tight cabs



**J.R. MERRITT** 

**CONTROLS, INC.** 

Stratford, CT • info@jrmerritt.com

Fixed or rotating models available

www.jrmerritt.com • 1-800-333-5762