Hybrid transmissions **from ZF**

ZF is now offering its Ergopower hybrid installation for its off-highway transmissions in order to make the creation of hybrid vehicle such as telehandlers and wheel loaders.

ZF claims that its Ergopower units are helping manufacturers obtain fuel savings of around 20 percent with efficiency savings of up to 40 percent, while being a logical evolutionary step towards all electric drive.

The hybrid system is suitable for all ZF transmission formats and can be implemented for direct and

separate transmission mounting. Advantages are said to include:

- Reduction of fuel consumption by start/stop function
- Recuperation of braking energy
- Relief of the burner for the particulate filter
- Stabilisation of the engine
- Electrified auxiliaries
- Possibility for engine down-sizing

Hybrid module



The ZF hybrid also works as a parallel hybrid, allowing the integration of a full electric power source of up to 120 kW into the regular transmission. The company is also offering a complete hybrid system, including the electronics for the electric power unit, including lithium ion battery and a hybrid control unit. The optimised energy and hybrid drive management

balances the interaction between electric power and combustion engine to avoid situations which would result in poor efficiency and increased emissions.



Wash your **wheels**

Innovative Equipment Solutions (IES) has introduced a new ultra-compact, portable wheel wash device. Dubbed the Tracinator it is a one tyre revolution dirt removal system for short-term construction projects or as a rental installation.

The Tracinator is designed to flush itself clear of debris by simply attaching a hose from a water truck or hydrant and placing the clean-out valve in the open position. Debris is then flushed out to the side. The unit can be configured with a set of hinged ramps, which allow the system to be set up and operational in just minutes. Alternatively it can be installed in-ground, flush with the existing road.

The device is intended to help contractors comply with the growth in regulations that forbid mud and debris from being tracked onto public roads from construction sites, landfills, mines, quarries and industrial sites.

Shackle load cells for harsh environments

UK-based LCM Systems has introduced a range of shackle load cells designed specifically for lifting and weighing applications in harsh or rugged environments. Intended for applications such as under-hook hoist and crane weighing and cable tension monitoring the sensors are available in either cabled or wireless versions.

LCM can provide the cabled versions with Crosby shackles as standard or with Greenpin shackles. The SHK-D cabled, shackle load cells use the Crosby G2150 and are available in a range from one to 35 tonnes, while the SHK-B cabled series runs up to 400 tonnes. All shackle pins are forged from high tensile carbon steel and proof loaded to 150 percent of the rated load. The standard product is sealed to IP66 to protect against harsh weather conditions.

All load cells in the series are easy to install and can be supplied with a range of instrumentation for a complete load monitoring system. For those wanting a wireless option, the Telshack range uses integral wireless telemetry electronics operating on the 2.4GHz license-free frequency. The housing is supplied with a built-in rechargeable battery allowing it to be removed for charging, while the shackle itself remains in place. A handheld battery-powered display is supplied as standard with the option of a single display that can monitor up to 12 shackles when the load cells are used in a multi-shackle configuration.



The LCM SHK-D shackle load cell



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