Contractors Mechanical Plant Engineers

NATIONAL NEWSLETTER

CMPE NEWS

Welcome to another edition of your National Newsletter.

National AGM Weekend

Arrangements for the National AGM and Dinner Dance and are well in advance with just minor details to be finalised.

The **National AGM Weekend** will take place from **Friday 21st July 2023 to Sunday 23rd July 2023** and will be held at the **Alma Lodge Hotel & Restaurant, 149 Buxton Road, Stockport, SK2 6EL - Tel: 0161 4834431 -** www.almalodgehotel.com

The itinerary includes:-

Friday:-	Reception from midday
	Evening meal with entertainment
Saturday:-	Breakfast
	AGM at 9.30am
	Buffet Lunch at 12 Noon
	Visit to Trafford Centre Shopping Complex at 1.30pm Returning at approx 5.30pm
	Dinner Dance reception 7.00pm for 7.30pm
Sunday:-	Breakfast
	Say your goodbyes before your journey home

INDUSTRY NEWS

Volvo brings 23-tonne E-digger to market

The first mid-size electric excavator by Volvo Construction Equipment is now available, the Swedish manufacturer says

Above: *the Volvo EC230 Electric*

The Volvo EC230 Electric excavator has been working in China since 2021 and Norway for a year but is now being made more widely available to selected customers across Europe.

The 23-tonne EC230 Electric is powered by lithium-ion batteries and has been designed to carry out a full eight hours of work, with a one-hour lunch break for a quick re-charge.

According to Volvo CE, operator feedback confirms that it has been achieving a similar digging force as its diesel equivalent, the Volvo EC200E, but doing so with an even faster cycle time and much less noise.

This is the first of Volvo CE's excavators in the mid-size range to be made electric and has recently been joined by the 20-ton L120H Electric Conversion wheeled loader. Both machines follow the commercialisation of Volvo's electric compact machines, the ECR25 Electric excavator and L25 Electric wheeled loader. Since then, the ECR18 Electric and EC18 Electric compact excavators and the L20 Electric wheel loader have also been introduced to the market.

Above: *The battery pack*

Bobcat reveals battery-powered skid-steer

Bobcat has unveiled what it says is the world's first all-electric skid-steer loader.

Above: *The battery-powered Bobcat S7X skid-steer loader*

The Bobcat S7X skid-steer loader, powered by a 60.5 kWh lithium-ion battery, was presented as a prototype to customers at a series of demonstration days in Czechia this week.

The S7X follows in the wake of the T7X, the world's first all-electric compact track loader that Bobcat presented last year. It has electric drive motors and uses ball screw actuators for lift and tilt functions.

Together, the battery and electrical powertrain generate instantaneous torque that is three times greater than traditional loaders, the manufacturer says. It promises operators "a smooth and comfortable experience with minimal vibration and nearly silent operation".

Doosan Bobcat global innovation vice president Joel Honeyman said: "The S7X can operate for up to eight hours on a single charge depending on the application, giving most operators more than a full day's work when breaks and downtime are considered. A full charge takes approximately 10 hours."

Kubota refreshes its eight-tonner

Kubota has added a new 8.5-tonne mini-excavator to its range of construction machinery.

The KX085-5 *(pictured above)* can be fitted with a two-piece boom for expanded working range. The innovative hydraulic mechanism enables operators to run the arm, boom, bucket, and swivel simultaneously, boosting work efficiency.

The KX085-5 is designed with a shorter rear overhang, which has cast-iron protectors to protect from damage.

High-performance features include a pair of auxiliary circuits with adjustable maximum oil flow, load sensing hydraulic system for smoother operation regardless of load size, float function for easy ground finishing, and an auto-shift system designed to provide intuitive control when dozing and turning.

As well as an auto idling system, it has Engine Auto Stop as standard, automatically turning off the engine when an operator-defined idling time has passed.

The cabin has been given a wider entrance, more legroom and a double-adjustable air suspension seat. There is also a new seven-inch LCD digital display screen ensures as well as LED working lights and a rear view camera.

The KX085-5 has the tracking system technology that is available on all Kubota three, five and eight tonne mini-excavators giving operators access to real-time operating data that can help increase machine efficiency and security. Geofencing is also available, which allows users to designate specific areas of use, with the portal notifying operators should the machine leave that area.

Also new from Kubota are a pair of electric compact wheeled loaders.

The RT210-2e and RT220-2e *(pictured right)* are powered by a 48V high-torque electric motor that is fed by 260Ah lithium-ion batteries. The motor can be recharged in 90 minutes with the optional supercharger, Kubota says.

The loader arm of the RT210-2e has a reach of 2,852mm, while the RT220-2e has a shorter loader arm but an increased lift capacity of 1,140kg.

Both machines have all-wheel steering on each axle, with a pivot steer of 44 degrees.

Volvo thinks small

Volvo Construction Equipment is setting up a new business unit specifically for mini and compact machinery.

Volvo Construction Equipment Compact Business Unit is being created “to maximise the opportunities in the growing compact equipment segment”, Volvo said.

The new unit will operate as an independent entity within Volvo CE, taking care of everything from design and production to marketing and distribution for compact equipment, including electric powered ones.

Initially it will be responsible for compact excavators up to nine tonnes and compact wheeled loaders up to the L50 model.

Above: *Excavators up to nine tonnes will be in the new division*

The compact segment now represents 50% of the total construction machinery market, compared to 35% a decade ago, Volvo said, and it expects this growth to continue.

Thomas Bitter, Volvo CE's head of technology, will take on the role as head of the Compact Business Unit from September 2023.

He said: "Our pioneering work in electrification and digitalisation has positioned us as an innovator in compact equipment. And now because of compact equipment's ever-growing influence on the market, we are focusing our attention on our compact machine portfolio to provide customers with productive and sustainable products and services. The people who join us in this journey will not only develop specialised skills in this important area but be playing an integral role in our wider purpose of building the world we want to live in."

Heidelberg accord

In a separate initiative, Volvo Group has signed an agreement to collaborate with Heidelberg Materials, one of the largest building materials companies in the world, to explore the scope for battery powered vehicles and machinery.

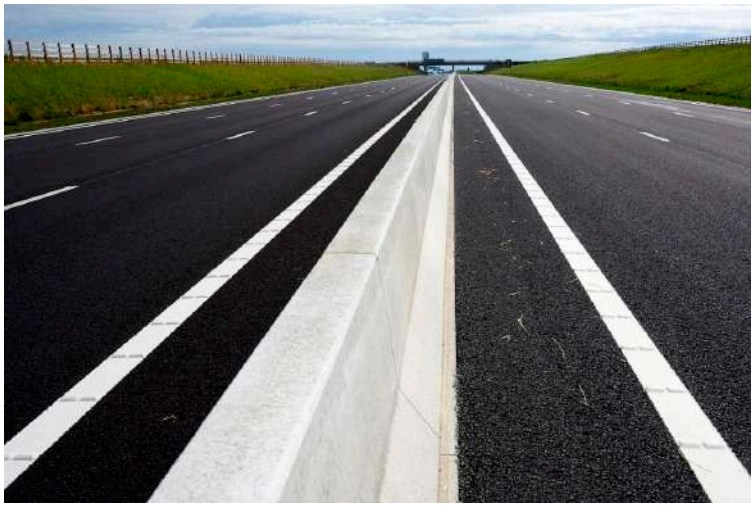
The six-month feasibility study will be carried out this year to determine which emission-free vehicle technologies and charging infrastructure solutions would best suit the requirements of Heidelberg Materials.

“While we are focused on reducing carbon emissions for both our products and our own operations, we are also committed to helping our customers lead by example through innovative collaborations that deliver much-needed change,” said Martin Lundstedt, president and chief executive of Volvo Group.

As part of this agreement, Volvo Group’s battery-powered solutions – a mix of electric trucks and construction machinery – will be put to work in several Heidelberg Materials’ sites and quarries. One example of the equipment that will be employed by Heidelberg Materials is Volvo Construction Equipment’s recently introduced 20-tonne L120H Electric Conversion wheeled loader.

ThermoPrint paint wagon passes trunk road test

WJ's ThermoPrint road marking vehicle has completed its first trial on National Highways’ network.



The machine was used to install road markings on the A47 near Postwick, east of Norwich for Ringway. It painted an arrow and ‘All Other Routes’ signage, as well as renewing existing arrow markings using its scanning technology.

The vehicle is equipped with scanners that detect existing road markings and automatically match them to programmed designs, allowing workers to lay them from the safety of the cab. ThermoPrint’s onboard technology also has all road symbols used on the UK network programmed into the system.

It has been developed by Norwegian road marking machine manufacturer Trysil Maskin, which calls it the Trafficprinter. Road marking specialist WJ is the first UK customer.

In the past, thermoplastic road markings required manual application using hand moulds. This machine removes manual handling risks, such as potential burns, and is said to be quicker because it removes the need for pre-marking before installation.

Following the trial, WJ tested the retro-reflectivity of the markings, achieving dry results exceeding 250 mcd, which corresponds to an R4 category. This performance is much higher than that of traditional hand-applied markings, it said.

Shaun Moseley, National Highways' project manager for the section of the A47 where the ThermoPrint trial took place, was evidently impressed. "Safety is an absolute priority for National Highways so any form of innovation that avoids people working directly on the carriageway is a positive step forward," he said.

"The work completed by the ThermoPrint was of a high standard and we look forward to helping WJ develop their technology which has the potential to help the construction sector and contribute to making our roads safer."

Ringway regional director John Sunderland said: "For Ringway, this trial is instrumental in supporting health and safety improvements, thereby reducing the risk to our operators on the ground whilst providing transformational operational outcomes for customers. We are looking at further implementation opportunities trials across all our contracts using this technology in the future."

WJ South managing director Andy Stubbs said: "Now the trial has been completed, we're confident that it will start to revolutionise the way road markings are installed in the UK. As well as delivering increased safety, it also offers efficiency benefits for our clients and we're looking forward to rolling it out across other sites, as we look to improve the safety for all our people."

Above: *Wj's Thermoprint, called the Trafficprinter by*

It's Norwegian producer

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