

Welcome to Energyya K42E, CIFA's fully electric pump

Receiving its world preview at Bauma is the Energyya full-electric pump: the first and only fully electric range in the concrete sector, with a focus on electrification, automation and connectivity. More than a range, an ecosystem.

Munich (Germany) - 24 October 2022 | CIFA is at **Bauma 2022**, at the stand of its parent company Zoomlion (FS 905/2), where it is **showcasing its latest innovation in the Energyya electric brand: the K42E truck pump**. As revealed at the Bauma Media Dialogue in June, this model adds to CIFA's eco-sustainable range - the first and only one in the concrete sector - and carries the slogan: "*more than a range, an ecosystem*". The aim is to **eliminate CO₂ and noise emissions** throughout the supply chain from transport to laying of the concrete by expanding the possibilities of using high-performance vehicles in areas where noise pollution and CO₂ emissions are prohibited. The special feature of the Energyya K42E pump is that the battery allows it to always operate in full electric mode.

As Davide Cipolla, CEO of CIFA, explained: "*The Energyya brand has been a revolution for the sector ever since its launch in 2013, presaging such current concerns as the importance of **electrification** for sustainability, **automation** and **connectivity**. Indeed, these have become prerogatives for all CIFA machines – by using the digitisation of management systems and remote monitoring (CIFA Vista). We are proud to have been pioneers in a traditional sector such as the concrete industry, which is becoming aware of the need to change and adapt in an evolving global situation. "The concrete sector has three approaches to achieve the objectives of the **2030 Agenda**: the introduction of **low-impact materials and processes**, **durability of the equipment** and **the reduction of CO₂ emissions on site**. CIFA has been on the right track for many years, and has taken a further step forward with Energyya K42E."*

Energyya K42E is a powerful truck pump which can operate in *full electric mode* without compromising performance. It includes many technological innovations that revolutionise the idea of a concrete pump, reducing consumption and emissions but with the same consistent performance as a traditional model. The boom extends for up to **42 metres**, and consists of five sections with the last two made from **carbon fibre**. A unique feature of the *Carbotech* range, this clever solution optimises the weight of the machine without compromising its sturdiness and reliability. As with all models in the series, the Energyya K42E takes its cue from aviation design, combining ruggedness with functionality. The international team of designers responsible for the Energyya brand focused on its simple, precise contours, making full use of special materials and high-tech solutions. All with the unique flavour of Italian design.

How does it work?

The K42E is equipped with a state-of-the-art system that uses a 30 Amp Hour Cell battery pack to power **two Rexroth electric motors**: the first drives the hydraulic pump to move the boom and open the outriggers; while the second drives the pumping unit (with a closed circuit and maximum capacity of 160 m³/hour at 80 bar) and



A ZOOMLION COMPANY

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other services. If the job requires higher performance than the batteries can provide, the new Energya pump can be connected directly to an **electrical outlet** on site. The system will then cut out the batteries and power the electric motors directly (a 40-metre power cable is included). This means the system will continue to operate with the **Diesel engine of the truck switched off** and therefore without emitting exhaust gas and noise. In the case of a complete lack of electrical sources, an **emergency system** allows you to connect the K42E to the truck's power take-offs and therefore use the engine to complete the work and close the boom and outriggers. The charging process is quick and easy and the integrated battery charger is compatible with the 220V system. The Energya pump is equipped with CIFA's best technological solutions, in the form of Smartronic® Gold which incorporates the advanced stability control (ASC) system, and the MBE function for unfolding the boom in sync with the outriggers.

Energya and Bauma, a *natural* affinity

It was at **Bauma 2013** that CIFA presented its **first Energya electric concrete mixer** with rechargeable batteries mounted on a diesel truck, introducing a **zero-emission electric machine** to the concrete sector for the very first time. In the following years, this novel technology was improved and accepted, to the extent that it can now be found on many construction sites in the major European cities. This is because it offers many advantages: zero CO₂ emissions, reduced fuel consumption, zero noise. In Energya mixers, the rotation system for the drum is driven by an electric motor that sources its power from a lithium battery. Or, when necessary, it can also be powered by the engine of the diesel truck. The Energya models can also be mounted on gas or electric trucks, thus using a totally green vehicle. **Bauma 2016 and 2019** saw the launch of two new electric machines: the CSSE shotcrete pump and the MK28E mixer pump. The latter was also on display on the stand this year, together with the new pump and the Scania truck-mounted concrete mixer, which is also electric (*for more information, refer to the Scania-CIFA press release*).

What's new at Bauma

Also on display at the Zoomlion stand are the new **Steeltech K50L** pump (just presented online on show for the first time) and the **Carbotech K60H and K47H**. The latter is certainly a best seller for CIFA, and the unit on show at Bauma also has a special claim to fame: it is **number 500!** So it's the 500th Carbotech machine we've sold. The use of carbon fibre has several advantages, indeed making the boom from this material makes the whole pump lighter. So, there are fewer restrictions to driving along European roads and lower fuel consumption; in other words, the pump is both **more economical and more sustainable**.

Meanwhile, our new range of machines for tunnels and mining is on display at a dedicated booth (**CIFA Underground** – Hall C5 / booth 239). The underground world is a very different environment from the classic construction site, and so CIFA has a specific development, production, sales and after-sales team, who focus on **mixers and pumps for shotcrete concrete**. CIFA Underground machines are "*Inspired by Nature*" and have been named after different animals (for further information, see the press release: "*CIFA Underground, machines "Inspired by Nature" – 24 October 2022*").

About CIFA

CIFA is a manufacturer of concrete machinery and equipment, a leading company on the Italian market and one of the world's top players. Part of Chinese industrial group Zoomlion since 2008, CIFA has a strong international reach, with sales networks and technical support on every continent. What's more, CIFA is able to provide customers not only with a range of reliable and quality products but also with financial support through Zoomlion Capital Financial Services. For further information, go to www.cifa.com.

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