

Hitachi launches the first Zaxis-6 excavator in Europe

21 April 2015 by HITACHI

Hitachi Construction Machinery (Europe) NV (HCME) has announced that it will present the first model of its Zaxis-6 medium excavator range at Intermat. The ZX300LC-6 – among the stars of the movie-themed HCME stand – benefits from several enhancements made to the Zaxis-5 range. More advanced technology, even higher levels of quality, and greater versatility, durability and reliability, has resulted in a further reduction of emissions and running costs.

Advanced technology

Hitachi design engineers have incorporated new TRIAS II technology into the Zaxis-6 range of excavators to meet EU Stage IV emission regulations. Hydraulic loss is decreased by reducing the amount of hydraulic oil returned to the tank due to cooperative control of the pump and valve. Two solenoid valves have been added to control the pump flow effectively, lowering fuel consumption. An auto shutdown feature also prevents fuel wastage, as well as reducing noise levels, exhaust emissions and CO₂.

Inside the cab of the ZX300LC-6, the technology within the multi-function LCD monitor enables operators to check the machine's status and settings at a glance. Like all Zaxis-5 medium excavators, the new machine also benefits from the advantages of Hitachi's remote monitoring Global e-Service.

Quality

The design and build quality of the Hitachi Zaxis-6 range of excavators is evident from the elements and materials used. For example, the console in the cab has been made from AES material to prevent discoloration caused by ultraviolet rays. Seal material around the cooling package and acoustic material on the upper structure have been changed to EPDM or PET to prevent heat damage and reduce noise levels. The machine's covers on the upper structure have been improved with a higher quality of sheet metal, providing greater stiffness.

Another significant change to the Zaxis-6 range is the implementation of a selective catalytic reduction (SCR) system. A urea solution is injected into the exhaust gas of the Zaxis-6 medium excavators to reduce nitrous oxide from the emissions. An after-treatment device – integrated with diesel oxidation catalyst, urea water mixing pipe, SCR catalyst and silencer – has also been incorporated.

To reduce the risk of oil leaks, Hitachi engineers have used rubber or hydraulic hose with flange instead of FMC for hose connections on the new ZX300LC-6. A more durable material, fluorine, has been used for the O-ring in the hydraulic components.

Versatility

An increased number of attachment modes on the ZX300LC-6 (now including rotary tilt and tilt modes) and two additional spools have resulted in greater versatility. The new Zaxis-6 model also has an improved OPG Level 2 front guard, which can be opened widely to 90 degrees by one-touch operation. A gas damper ensures a smooth opening movement.

The enhanced visibility of the ZX300LC-6 also contributes to a safe working environment for operators, who can work in comfort on the busiest of job sites.

Durability

The undercarriage of the ZX300LC-6 has been reinforced with additional track guards, which provide greater protection for track links. Other new features have been added to improve engine protection and enhance durability, including a spin-on type fuel filter and a larger capacity electric fuel pump. In addition, the fuel circuit has a cold fuel resistance valve as standard on the Zaxis-6 models.

Reliability

Easy maintenance features contribute to the overall reliability of a Hitachi Zaxis-6 excavator by minimising downtime. The engine covers can be fully opened on the ZX300LC-6, allowing easy access from the front. New equipment, such as a handrail and disconnect switch, also make it easier to carry out maintenance.

The engine output of the ZX300LC-6 has been increased to 186kW, compared to 140kW for the ZX290LC-5. The creation of a more powerful new machine offers the highest levels of productivity in the 30-tonne class. Productivity levels have increased by 14% in PWR mode, while fuel efficiency has also improved.

HCME General Manager of Engineering Hiroyuki Kamata was involved in the design and testing of the new Hitachi Zaxis-6 excavators. "Our first priority was to ensure that the machine worked properly," he said, "and the next priorities were the controllability and operating experience. Overall the results were positive in terms of performance. We are confident that Hitachi customers will be happy operating the new Zaxis-6 models."

Source: Red International Communication