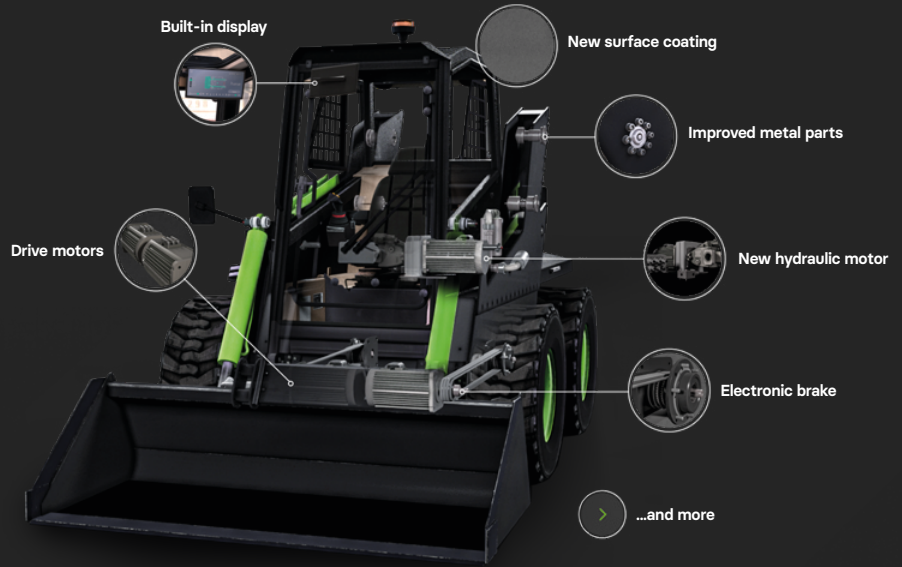


New  
**ELISE 900** MK3





Improved in every way, combining technology and experience.

## Overarching concept

A month ago, we presented you with a short table of innovations that we have prepared for Elise 900 during this year. However, it is not enough to list one point after another, we want to present you with a comprehensive concept, which is the third generation of our big machine. We have implemented many of these changes gradually. Our goal is not to wait for one bombastic unveiling and come up with something completely revolutionary, but to **continuously push the capabilities** of our machines, step by step.

This is neither a new model nor a facelift. It's a sum of changes that combine to make a machine that's a step further, a step higher, a generation more evolved. Let's go step by step, exploring in detail each change and its impact on the functionality, capability and expression of the machine. **Discover with us the new generation of Elise 900.**



## Hydraulic motor

The third generation Elise 900 uses a different type of electric motor for hydraulics than for drive, which results in higher efficiency and better overall system functionality. The new motor now operates at a lower speed of around **2700 rpm**, which is optimal for hydraulics. The motor is then connected directly to the distributor, which again simplifies the whole system, making it **easier to assemble** and service, and **reducing noise**.



## Drive motors

The Elise 900 now features European electric motors with **40 Nm more torque**, which has given the machine more power that the operator can easily recognise when turning, which is now **smoother** and **more responsive**, with the power more evenly distributed between forward movement and turning.

Compared to the previous version, the third generation Elise 900 runs much smoother, the machine behaves in a more cultured way, and is more comfortable for the operator. But despite their greater power, the new engines are **more efficient** and **economical**, managing the energy resources better, and thanks to their design have **improved cooling**, reducing the risk of overheating.

In the third-generation machines, the traction motors used for propulsion are different from those used for hydraulics.



## Inverters

Also working directly with the motors is the electric converter system, which is now **dual-processor**, offering more precise and sensitive power control with more responsiveness, putting even **more control** in the operator's hands. Thanks to the new **ECU** from Danfoss, we now also have the ability to „tailor“ the machine parameterisation to best suit the customer's wishes and needs.



## Hydraulic Cylinders

We have also improved the hydraulic cylinders on the Elise 900 boom and hinge. Their new generation is made of **higher quality materials**, using stronger metals, and a reinforced piston rod. These improvements increase their resistance to damage, benefit their **longevity** and therefore **reduce the need for servicing** or replacement.



### Shovel levelling

Operators will also notice the improvements to the hydraulic system when driving off-road thanks to the improved bucket levelling system, which now **responds more accurately** and quickly to changes in surface, tilt and uneven ground. For example, when climbing or descending at a high angle, or when raising the boom on a hill, the self-levelling system automatically adjusts the bucket position to **prevent tipping or spillage**.



### Stand-by hydraulics mode

Related to the motor is also the new option of driving without the hydraulic pump, when the system switches to stand-by mode. This not only allows the Elise 900 to **operate more quietly** when moving between locations, but also, of course, to **save energy**.



### Electronic brake

The brake system has also been changed. The third generation Elise 900 no longer features hydraulic brakes, which have been fully replaced by an **electromagnetic braking system**. This not only offers greater stability and confidence when stopping on a slope. If the machine needs to be unbraked, for example to pull an inoperable machine, the electromagnetic brake has completely eliminated the process of handling the hydraulic pressure, so everything can be done simply by connecting the brakes to a power source. Thanks to the electromagnetic braking system, the hydraulic circuit on the machine and its **maintenance has been simplified** overall.



### Hard-mount display

A major change to the machine's controls is the new option of a so-called „hard-mount“ display, an accessory that replaces the mobile phone and acts as the machine's central control panel. Located in the top right corner of the cab, the display offers the possibility of setting three profiles of travel speed and hydraulic settings, each tailored to the needs of different operators or to operate in specific environments.

The display also offers a real-time overview of the machine's tilt, along with sub-menus for **error messages and diagnostics**. This version of the control panel can be retro-fitted with a conversion kit on older generations of machines.



### Joysticks

The control joysticks have been completely replaced. They are now **more precise**, with less resistance and adjustable parameterization, so it is a more intuitive control system that can be customized according to your own preference. A change in their sensitivity is noticeable by the operator, for example, in the movement of the boom and shovel, which is now more precise.

The new CAN joysticks are now connected directly to the CAN-BUS distributor without the use of an analogue converter. The number of wires has therefore dropped to 4 from the previous 25, making the joysticks more reliable and **easier to service** and replace.

The F2 button now also functions as a switch to set the entire machine to stand-by mode. **The operator can now select the travel speed on the left joystick, while the right joystick adjusts the speed of the hydraulics**, so the operator **does not have to let go** of the controls at all. Similarly, the wiper control has been moved to the joystick, with which the automatic wiper is now linked.





## Batteries

For standard batteries, we have chosen a new surface treatment for their cover, which **eliminates the risk of rust** and staining and **prevents discoloration** of the entire battery pack.

In addition, the **battery capacity** is now accurately displayed within the app. In previous versions, the value displayed represented the current battery usage, but now it accurately displays the actual amount of power in the battery - just like a smartphone or laptop.



## Structural elements and surface treatment

The third generation Elise 900 is different at first glance. Thanks to the new **surface treatment technology** and **powder coating**, the machine is now more **scratch and rust resistant**, the smooth surface not only gives it an attractive appearance, but above all improves its washability and makes it **easier to maintain**, and the precision machined, laser-cut edges make it easier to assemble and repair in the event that a part needs to be replaced.



## Safety

The first safety feature the operator will recognise as soon as he enters the cab, is the new **door closure sensor**. This now notifies the operator of an unlatched door with a unique audible tone, which the operator cannot mistake for another, and the machine remains deactivated without fully closing the door. This means that you no longer break the door off due to lifting the boom.

**The seat belt is now equipped** with an **intelligent sensor** that makes sure the operator is actually buckled in and is not easily bypassed by buckling it behind the back.

**The below-mentioned start button** also plays a role in safety, as one of its key functions is the immediate emergency stop of the machine.



## Start button

The key has been replaced by a simple start button that is not only **intuitive and convenient**, but also acts as an **emergency stop and safety lock** for the machine, not only stopping it immediately, but also shutting down all electronics.



## Remote control

The remote control via the **Danfoss remote control** for Elise 900 is now self-activating when the seat in the cab is not pressed down. Furthermore, the travel and hydraulic speeds can be changed on the remote control, and as with the MiniZ, the speeds can be reduced via the tortoise/rabbit switch.



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