

E-KASTOR : Electrical drive arm mower

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The E-KASTOR is an electrical drive arm mower. Our innovation and evolution has been operated within the power transmission chain. The hydraulic power system has been replaced by an electrical one to run the rotor.

The idea came from three main challenges: to anticipate the coming transition of agricultural machinery to the electrical, to show the involvement of ROUSSEAU in the sector's future and demonstrate its consideration for the current environmental challenges.

This electrical system transmits mechanical PTO of the tractor to the cutting head through both a generator and an associated power electronics device. The rotor is driven by electricity while electrical power components are cooled by a biodegradable mixture.

Major innovation, the E-KASTOR brings many important technological advances to the product, its user and his work environment :

- Eco-designed product : replacement of the oil with a biodegradable mixture (water / glycol)
- Performance configuration adjustment : electrically transmitted data allow the finest setting according to the use of the machine
- Time savings : reactivity and increased precision (40 % of energy efficiency gain)
- Optimum safety : the system will go on default in case of dysfunction
- Reduced total machine weight
- Reduction and simplification of maintenance costs
- Reduction of tool holding time : no more emptying or changing of filter

Silver medal at the SIMA Innovation Awards 2017, the E-KASTOR arm mower is a hybrid model with electrical management of the rotor and hydraulic management of movements. However this is a first step towards a full electric arm mower.

PATENTLY ROUSSEAU