

The new DryWet sewage pumps set to change the market



Caprari has launched an innovative new product with an exclusive patent, that is set to be a turning point in wastewater pump design. The new K + Energy range of pumps take reliability and efficiency to a new level, and captures Caprari's core business to find new efficient solutions for water management.

Thanks to its dedicated research and development division, Caprari—headquartered in Modena, Italy—is able to offer its customers products with high efficiency and distinctive performance. Each new pump is designed to be efficient and technologically advanced, ensuring they meet market demands.

To meet the needs of end users who are increasingly concerned about energy savings and operational costs, as well as to anticipate changes to the European Union's Ecodesign Directive, Caprari has released a new pump range which has unique and revolutionary features for dealing with wastewater—the K + Energy range.

The new K + Energy range of pumps is designed with IE3 Premium Efficiency motors, as defined in *EC Regulation 640/2009* specific for surface motors, to ensure optimum efficiency. The careful selection of the best performing materials and cooler motors ensure total reliability of operation, even in critical applications.

A turning point in pump design

The brand new K + Energy range represents a turning point due to its innovative and unique "DryWet" system which keeps the pump cool.

The "DryWet" cooling system is simple and reliable, can be easily activated, and is standard for the full

range. Customers are able to use a single model for both submerged applications and in dry chambers.

In addition, the "DryWet" system has two important advantages: it does not require additional maintenance and does not absorb energy, allowing the pump to perform at its best. The K + Energy range is also available in an explosion-proof version with ATEX and IECEx (North America explosion protection directive) certifications.

Another interesting feature is the conductivity probe in the oil chamber—also available in the ATEX version (patent pending)—which is unique to the K + Energy range.

If the first seal is damaged, an alarm signal is immediately sent to the panel so that repairs can be carried out before the pumped liquid passes the barrier created by the second seal. This ensures the electric motor is always protected.

The connector—supplied as standard on all K + Energy models—allows the pump to be disconnected without having to remove the cables from the panel, before transporting and reconnecting them. This significantly reduces intervention time and guarantees the safety of operations.

The large precision cast stainless steel handle is robust, ensuring easy handling of the pump and allowing operators to easily recover it when submerged.

There are numerous features of the new DryWet pump to ensure reliability over time and operational performance, including:

- Configuration
 - » Anti-sedimentation system on the suction side
 - » Fibre-cutting system on the back impeller to protect the mechanical seal
 - » Blades on the back have the dual advantage of cleaning the area for seal protection, as well as compensating for axial thrust to protect the bearings
 - » It has amongst the widest passages for real anti-clogging
- Double mechanical seal
 - » Independent and non-proprietary mechanical seals (no cartridge system)
 - » Less oil is required to ensure low environmental impact and ease of disposal
 - » Disassembly of mechanical seals has been improved so they can be replaced on the pump side, leaving the motor safe
- The gasket is between pump and coupling foot to ensure perfect sealing between components with no head loss over time

Caprari, with its new K + Energy range and exclusive "Dry Wet" system, presents itself as the leading company in advanced solutions for water management and meeting customers needs.