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DESIGNED FOR AGRICULTURE AND FOOD INDUSTRY - INMA

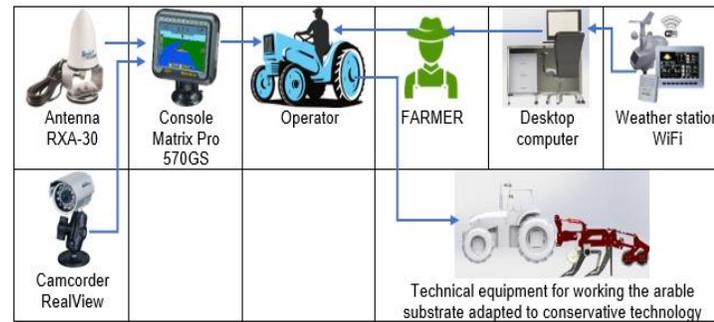
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DESCRIPTION

Biosolids are organic solids obtained by In order to capitalize on renewable resources in terms of efficiency, care for the environment and climate action, the project develops the following:

- ❑ **Innovative system for conservation work of the soil**, which uses advanced method management where data is collected and stored on the spot (such as humidity, temperature, soil pH level) through smart sensors, and farmers will receive real-time information using a computer / smartphone, allowing them to make instant decisions, saving time and labor for on-farm inspections.
- ❑ **Technology for field crop protection** according to "Agriculture 4.0", which targeted application of fertilizers and herbicides with an unmanned aerial vehicle (drone) equipped with a high stability system at a fixed point for targeted spraying of crops, to take off / land on a platform located on a general-purpose trailer where the drone's liquid tank can be refilled and the battery can be charge.
- ❑ **Intelligent system of ecological heating of a farm based on solar energy**, which uses a smart thermostat with access, via a mobile device or a PC, to the web control panel to maintain the temperature and reduce the relative humidity in a solarium.
- ❑ **Innovative system of irrigation to make use of the humidity in the air**, which uses warm water from the buffer of the intelligent ecological heating system, warm water is circulated through a battery to two nozzles mounted on top of chamber humidification and spray in a current of hot air, which causes vapors to condense on the surface of the collector walls, the water is drained and stored in a tank from where it can be used to irrigate crops.

Diagram of the innovative soil conservation works system for the SMART farm



Scheme of the system for the protection of field crops according to "Agriculture 4.0"

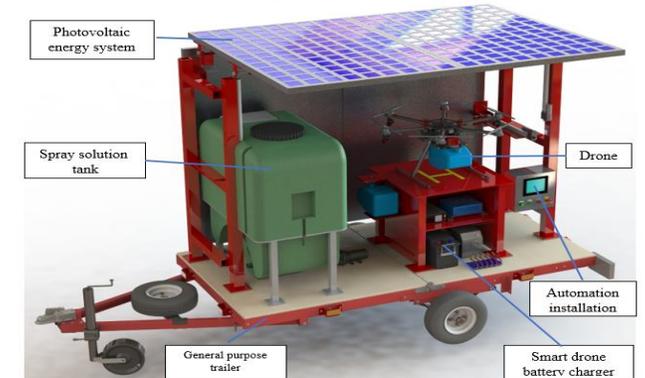
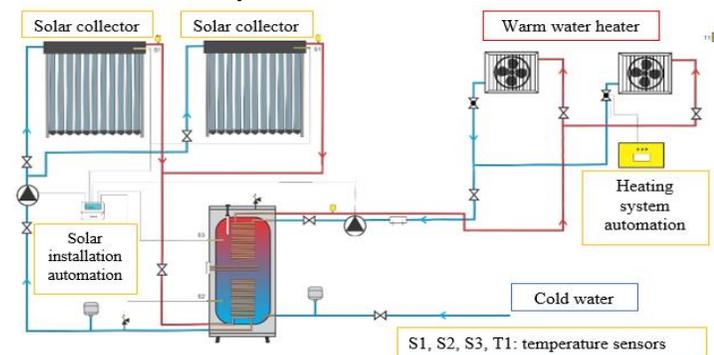


Diagram of the intelligent ecological heating system of a SMART farm



Scheme of the innovative irrigation system which makes use of humidity on the air for SMART farms

