

## A NAVIGATOR FOR THE PILED RIVER

Orteco srl, pile driver for guardrail and photovoltaic post installation machines producer, and Geotop “Control machine” specialist, are the actors of the joint-venture aimed to develop Topcon satellite technology on pile drivers.

With this relevant combination we will have a double advantage:

- in case of guardrails the optimisation of the work with the definition in real time of exact points in which piling the posts,
- in case of photovoltaic works the chance to stop the machine once reached the needed height.

The “Topcon pile driver GPS system” is composed by a palm top Topcon GRS-1, a receiver PGA-1, a tool for radio communication RH-1 Radio modem and a second GPS receiver located on a tripod ( HiPer Base Receiver ).

The first receiver, installed aligned with the hammer, catches the machine localisation signal and dials with the palm top software, to allow the second receiver to correct the metric error that a “used all alone GPS” normally has. The error is via radio communicated to the system installed on the machine and it immediately corrects the position, guaranteeing a precision in a range of 1cm.

Afterwards the palm top GRS – 1 has to be mounted on a truck, in order to detect piling points path, then it defines the overlap between the machine and piling points.

Once “uploaded” the information, the tool can go back on the pile driver and the work can start. Using the monitor the operator knows exactly where to drive the machine and where to pile the post with the highest precision.