

Leica Geosystems TruStory

Expanding easily and accurately into the field of construction layout



The construction company SARL Tavares Mendes, founded in 1973 and located in Bougarber in the Pyrénées-Atlantiques region of France, offers expertise in building rehabilitation, specialising in general masonry, carpentry, ceiling construction and structural work. Mendes also renovates existing buildings and constructs new ones. Known for its high-quality work, Tavares Mendes is also involved in construction layout and does approximately 20 layouts a year. The company wanted to expand its business in the field of construction layout and recently decided to invest in a robotic total station: the Leica iCON robot 50.

Initially, the company's layouts were accomplished using the simple and adequate Profile Board Method, a procedure involving string lines and profile boards to mark the sites. This layout process took approximately half a day and required two workers. If Tavares Mendes wanted to increase its construction layout business, then they had to update their working method to becoming more accurate and more efficient. The solution was to buy a Leica Geosystems iCON robot 50 and their investment quickly paid off. Now the company can efficiently lay out a house because using the iCON robot 50 takes little more than one hour and can be done by just one person.



■ **Company:**

SARL Tavares Mendes
www.maconnerie-pau.com

■ **Challenge:**

Layout building geometry, footings and constructions lines on ground slab

■ **Location:**

France



■ **Equipment:**

Hardware

- Leica iCON robot 50 with the rugged
- Leica CC61 field tablet as remote control

Software

- Leica iCON build field software

■ **Objectives:**

Achieve gains in layout efficiency, accuracy and comfort



■ **Benefits:**

- Work alone in 1-person mode
- Increased accuracy of measurements
- Quick layout
- Intuitive software

With the addition of the iCON robot 50, Tavares Mendes not only increased productivity but can now deliver very accurate results with this easy-to-use robotic total station.

"In just one hour, I can accomplish layouts alone. Previously, two people were needed and they took half a day. Now I am more precise," says owner Tavares Mendes.

With approximately 20 layout jobs a year, investing in a robotic total station was not really necessary. However because Mendes can now achieve absolute efficiency and accuracy and the total station is so easy to use, it made the investment more than worthwhile.

Having little knowledge of engineering, Tavares Mendes thought investing in a robotic total station that is typically intended for surveyors did not come in question. He

mistakenly believed that he had to take advanced training courses to acquire the skills needed for using the robotic total station. Having already used a theodolite, he wanted an easier solution, based on this kind of technology. "The iCON robot 50 was exactly what I was looking for. It's robust and durable, built for construction purposes, and has a simple, easy-to-understand keyboard. "The intuitive iCON build software that controls the robotic total station from the field controller automatically calculates any layouts I need and provide me with exact layout location," says Mendes, "and with just one day of training, I was able to use the total station on my own."

The robotic total station iCON robot 50 enables Mendes to work quickly and easily. He took an initial one day training course and afterwards

understood 90 % of the product's applications. He learned the remaining 10 % by working with the robotic total station the following week on-site. The iCON robot 50 is designed to be very intuitive and users understand its applications very quickly.