



A Self-made Man's Success

by Kenneth Staack Mortensen

Imagine growing your business and creating new opportunities, expanding your knowledge and skills, and benefitting your partners – all at the same time. Jonas Nielsen managed all this and more when he bought a Leica iCON robot 50 total station in the summer of 2012. The revolutionary iCON (intellegent CONstruction) user platform introduced by Leica Geosystems serves as one integrated platform for the control of all positioning and measuring tasks in the building and construction industry.

The Danish owner of JN Gravning started out in the paving business eight years ago but has moved on in leaps and bounds from his original business model. “Where technologically based measuring equipment is concerned, in just a couple of years I have moved from absolutely nothing to a two-man manual Leica Builder R200M solution and recently to the most advanced equipment in the segment; the motorized Leica iCON robot 50 total station,” says Nielsen.

Easy Start

Getting started with a new system proved to be simpler than expected: “Thanks to the iCON build



Prepared for the Future

The iCON build software is prepared for a future product range even larger than today. In the future, measurements from the Disto laser distance meter, a digital level or even a cable detector may be integrated.

Through the myWorld online portal (myworld.leica-geosystems.com) it is already possible to purchase new hardware and software for the update of each of the various functions in each customer's individual iCON solution. This enables customers to continuously optimize their solutions and workflow.

softwares, easily understood menus you are guided through the system as a new user," says Jonas Nielsen. "I was pleasantly surprised with the operating ease and accessibility of the system. At first I thought it would be very complicated, but after sitting down and using it for about two days to get acquainted with the system, I quickly found it easy to use. The iCON build field software is very intuitive and my personal experience shows that using the help menus and doing five to ten minutes of self-study in the field solved most technical questions I have had. Furthermore, one half day of free training and support was included when buying the iCON build."

Growth through Precision and Efficiency

In the past there would be daily downtimes spent waiting for the surveyor to come and stake out a point on site. This is a thing of the past, as are the old-fashioned methods he used to use: "No more using strings and stakes. With the iCON build I feel perfectly equipped to perform exact measuring and am able to design and project a given job correctly right from the start. iCON build can be programmed to focus 100% on the area to be worked on – large or small. With the Cut & Fill application it is incredibly easy to determine if I am above or below the terrain. Since I complete all measurements by myself JN Gravning grades 50% more than before. The number of unproductive periods waiting for surveyors or other external partners during the workday has been dramatically reduced," says a pleased Nielsen. "Besides staking out points, iCON build allows me



■ Jonas Nielsen finishing a subcontractor job preparing the terrain for a large house-building project.

to upload exact measurement data and continuously document the progress of the current job from start to finish, even in the field – a very popular service with all my clients. On the other hand, a client can supply his data in a DXF file, which I upload to the system and then I am able to immediately start staking out the measurements and begin work. With iCON build I have optimized and improved the efficiency of my company's daily routines in the best possible way," Jonas Nielsen concludes.

The iCON robot 50 motorized total station allows Nielsen to work alone, which means he saves time and the expense of another worker holding the prism for tasks where reflectorless measuring is not possible. On the site he is working at now, he improves the efficiency for the contractor, as they no longer need to send a surveyor every time they need to check a height, re-stake a point, etc. This would usually take the surveyor away from the office, interrupting data management and waste time driving back and forth, etc.

But Jonas Nielsen isn't the only person using the new instrument. His workers on site all use the iCON solution, accessing terrain models for Cut & Fill, staking out points and lines and checking heights. These are construction workers with no background in advanced measuring solutions – just some hands-on training by Nielsen himself and they were up and running in no time.

One Coherent Workflow

Besides being faster and more efficient, Nielsen found moving up from a Leica Builder to the iCON robot 50 also benefitted data handling both to and from site surveyors and machine control. A new feature of the iCON build is the ability to transfer data directly from the measuring situation to a machine control unit, skipping extra data handling at the office. This saves time and money, efficiency is improved, and independence is increased."

The iCON build software is controlled from a PDA or a tablet, gathering all information. Nielsen uses

a CC60/61 tablet with built-in camera. "The user-friendly interface offers very well-arranged graphics, providing the user with an optimum overview of all jobs and projects," states Jonas Nielsen.

Nielsen is considering a 2D Machine Control System for the future but hasn't decided whether to go for it yet, as it will demand other jobs and workflows compared to what he does today. However, it wouldn't be the first time this self-made man successfully took the leap into new technology and new business opportunities. ■

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