

# For the Trenches

TIPS & NEWS FOR EQUIPMENT OWNERS AND OPERATORS

## GPS, Automation, Machine Control & Guidance – Eliminate Intimidation Through Rental

Move dirt once, move it right. Sounds great, doesn't it? If your jobs include site prep, septic, foundation or roadway work, you've probably heard about the latest advances



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in machine control and guidance. Many people are talking about how this technology can decrease your operating costs and increase your profits. Users comment on specific advantages, from the more obvious ones, such as no stakes, precise placement of materials and fuel savings, to a wider range that includes less undercarriage wear and greater operator consistency. With so much to gain, what's stopping you from trying it yourself?

You're probably hesitant to jump in and buy a machine equipped with control and guidance technology – it's a serious invest-

ment. So here's the good news – today you can rent instead of buying. Renting allows you to see for yourself, on your own jobsites, with your own operators, on your own schedule, whether this is a worthwhile move for you. Before you commit significant resources to this new way of doing things, here are questions you want to make sure you ask your equipment supplier regarding rental of control and guidance-equipped machinery. The more you know, the better your decision will be.

### What can they do, before the equipment arrives at the site, to make you feel comfortable that the job will go smoothly?

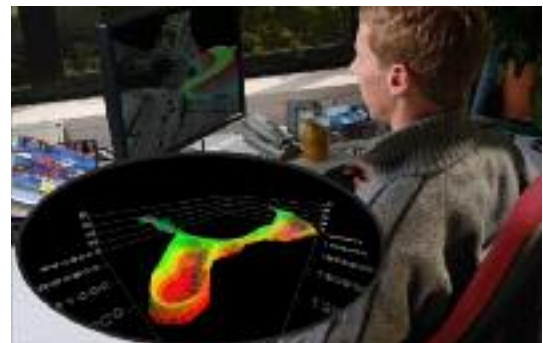
- Do they have a demonstration area where you can run many types of machines with control and guidance technology installed on them? Before getting too much further down the rental road, you want to check out for yourself how this technology works and ask questions, at your convenience, without having to spend any money or much time, either.



- Does the demonstration area provide real-world earthmoving projects like roads, sediment basins and trenchwork incorporated into a three dimensional data model? In order to make an informed decision, you want to be able to run those machines as you would on one of your own job sites.

- This one is a crucial question – is their control and guidance technology an add-on to their equipment, or is it developed by a company whose engineers work together with the engineers that have designed the machines? Jointly engineered technology runs smoother and gives better results; there are fewer hiccups and less fingerpointing once the job gets going.

- How many modalities do they offer? Today's control and guidance comes in many flavors, and you should be able to choose the one that makes sense for your jobs and your budget. The options range from machines with embedded two dimensional capabilities to laser-controlled two dimensional systems, progressing to the more complex three dimensional dual GPS and robotic total station controlled machines; each has its own advantages.



- How can your equipment dealer support you with the digital model of your job site? Your results will only be as good as your data model, so this is a crucial step that cannot be undertaken by just anyone. Can they point you to reliable modelers? Or, if you have your own in-house modelers, or a third party you trust, will your equipment dealer review your three dimensional data for the job site at no cost, and even make some recommended minor changes at their expense? That's how critical this stage is. You'll see the difference that it makes to have access to knowledgeable modelers who have proven themselves in many other jobs, so make sure you ask this question.

# For the Trenches

- Will the machines that you are renting be recalibrated after the last job that they were on, and prior to starting yours? While variations seldom happen, and they are usually small, drift can occur with any type of electronics causing errors and headaches. If your dealer has the capability to do calibration testing at their facility it goes a long way towards making sure your job will not be affected.

## Once the machines arrive, what happens then?

- Does your dealer perform or oversee a site calibration? This step harmonizes the individual machines with each other, in coordination with the site plan and the model. You definitely do not want to be in charge of this stage of the process; it should be handled by someone with the right background and experience.

- Does your dealer offer onsite training? As you can imagine, even though the latest control and guidance setups are very user-friendly, we're still talking about a complex technology that varies from dozer to excavator to grader and requires training for your operators, at your jobsite, by a dedicated trainer. Good training goes a long way to ensuring a return on your rental investment.

- Will they be reachable throughout the job? This is an intuitive technology that is easy to understand and utilize to your benefit, but being your first try, and with job site particulars, there are bound to be questions.

## After the job goes well, what's next?

- Which other machines does your equipment supplier have in stock, equipped with control and guidance technology? Once you and your crew see the benefit of this



technology, you are going to want to have all pieces of equipment on a job on the same platform, working together off the same grid. That's not the time to learn that your dealer has limited availability, maybe just one or two machines equipped with machine control and guidance technology. You want to

make sure they can offer you what you need, whether it's excavators, dozers, graders, rollers, or even a skid steer.

- Does your equipment dealer have a dedicated machine control and guidance specialist on staff? In the technological environment, things move at a very high speed and you really need an expert who is able to focus on the continuous new developments, deciding what makes sense and what doesn't, so that you can get the most out of the advances.

## How long will it take for you to know whether machine control and guidance is a direction that you want to commit to?

The answer is generally two months. That period of time allows you and your operators to get past the novelty of the technology and the learning curve, and



provides you with the data and "gut feel" as to whether you are realizing the two benefits that you were looking for in the first place – efficiency and profitability.

## Now what?

Are you satisfied with the answers you got? That's a question that only you can answer. If you are, you have a good foundation on which to build your trial run. ■



*This article is part of a series of articles designed to help equipment owners and operators lower owning and operating costs. Other article topics include:*

*Scheduled Oil Sampling • Parts Options • Financing • Certified Rebuilds • Getting the Most from Your PSSR (Parts and Service Sales Representative) • CSAs (Customer Service Agreements) • Safety • Machine Evaluations • Technology in the Field • Inside Sales*

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