5 Ways a Drone Can Benefit Your Construction Company

The presence of drones for aerial mapping on construction sites is steadily growing. This is mostly due to the benefits of drones and how they help ensure construction projects go according to plan. Traditional construction site mapping methods are steeped in guesswork and uncertainty. Making the right decisions during a construction project is vital to its success – aerial mapping can help you make the best decision based on up-to-date and accurate data. Here are the five ways your construction company can use drone mapping to optimize construction projects and make the right decisions.

Up-to-date aerial data

As your construction project progresses, the site is constantly changing. With traditional methods, keeping track of these changes can be extremely time-consuming and, by the time the data is collected and processed, your construction site will have undergone even more changes. Thus, you are always making decisions based on out-of-date data.

Through the use of an aerial mapping drone, you can get real-time data and information about your construction site effectively and efficiently, when you need it. High-quality drone mapping solutions will allow you to capture and process aerial data in 12 hours or less. So, whenever you need to make a decision, drone mapping gives you accurate data in a timely manner to make the best decision for your construction project. Real-time aerial data also allows you to identify potential issues and problems before they happen. This helps your construction project stay on schedule and keeps your crew safe.

Stay on schedule with a mapping drone

Staying on schedule is an important part of any construction project. You need to keep your clients happy – but a project that drags on longer than intended is a costly issue. Costs relating to equipment and manpower can start building up, as well as fees for late completion of the project.

Aerial mapping drones can help you avoid this and ensure you make the best decisions and identify problems before they happen – allowing your construction project to stay on schedule. The accuracy of project planning also increases – leading to invoicing based on the resources used to date – since you can check in on your construction site as you need to capture aerial data.

You will be able to stay up to date with the progress of your project and you can relay this information to your clients and/or subcontractors – ensuring that everyone is on the same page regarding the progress of the project and resources.

With UAVs it is possible to capture data that goes beyond standard aerial images â€“ drone mapping systems allow for volume calculations to accurately determine the progress of an excavation project.

Earth moving progress tracking for excavation projects

It is important to track the progress of any earth moving project to determine the status and profitability of the project. With aerial mapping drones, you are able to capture data that goes beyond standard aerial images – drone mapping systems allow for volume calculations to accurately determine the progress of an excavation project. This makes it possible to identify whether a project is on schedule.

It also gives you the ability to determine fees accurately, since you will be able to determine the exact amount of earth that has been moved and make precise cost per cubic metre calculations. This information can be relayed to clients to prove how the cost of the earth moving project was calculated using accurate data from a drone.

Cross-system analysis

Integrating an aerial drone mapping system into our current workflow is not a difficult task. The aerial data captured by a drone can be exported to any file format you prefer, whether it's .dxf, .fbx, .ply, .zip, .pdf, .prg, .shp or .shx. Thus, you are able to integrate your drone mapping data across many devices and file formats. You can also integrate historical data to track the progress of your construction project.

Construction site safety

Lastly, but probably most importantly, aerial mapping drones can enhance the safety of your construction site. By integrating drones – also known as unmanned aerial vehicles (UAVs) – into your construction site workflow, you offer a safer site experience to yourself, your crew and anyone else entering your construction site.

Drones allow you to perform regular site inspections, without disrupting the operations on the ground. This allows you to pick up potential safety hazards before something happens. Additionally, since inspections happen from above with a drone, the risk of venturing into compromising situations – like unstable surfaces or stockpiles – to perform inspections is eliminated.

Aerial mapping drones will make the job of land surveyors quicker, more accurate and safer. There are always risks involved when working on a construction site. Drones help to minimize this risk and create a safer work environment.


ALTI offers a complete fleet endurance VTOL unmanned aircraft, allowing to acquire and deliver valuable aerial data.

Aerial mapping benefits your construction company

Aerial drone mapping will provide you with up-to-date, valuable and accurate insights that traditional methods simply can't. Payments and calculations become easy and accurate, while minimizing risk and ensuring safety on your construction site. An aerial mapping drone will help you make the best decision based on accurate data – making your construction project operations effective, efficient and safe.

This article initially was published by ALTI, a South African company that offers a complete fleet of the best endurance VTOL unmanned aircraft in the world – with drone mapping capabilities – allowing you to acquire and deliver valuable aerial data like never before. For more information on ALTI, please visit their website.

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