Top of the class software for inspections

In this changing world of the pandemic, PES was pleased to catch up, albeit remotely, with Geoffrey Vancassel, CEO and founder of Sterblue. This seemed very apt for a company that doesn't need a physical presence to serve its clients. Their state-of-the-art software can save their clients huge amounts of money and be used independently.

Geoffrey Vancassel

PES: Hi Geoffrey, welcome back to PES Wind. Could you introduce our new readers to Sterblue?

Geoffrey Vancassel: At Sterblue we make energy infrastructure inspections easy with the support of our centralized software solutions. We help energy companies capture clean data using off-the-shelf drones and Sterblue mobile app, or upload satellite, smartphone and helicopter data into our cloud platform.

This data is then processed and analysed with the help of artificial intelligence (AI) and workflow automation. In the end, we output actionable information for the maintenance team, who can access a digital twin of their assets and flexible inspection reports in one single platform. There is a video available on our website.

PES: It's been more than a year since the last time we talked. How has your business evolved?

GV: By working closely with major utilities such as ESB, AEP, Enedis and EDP, we've learned the importance of understanding our customers' processes and helping them bring automation and digitization to their daily operations, making their jobs easier.

This allowed us to build an even more modular and flexible product, which can be tailored to unique use cases and connected with a large software ecosystem, including major players such as ESRI, SAP, Zapier, DJI, Parrot, Skydio, SpacePT, etc.

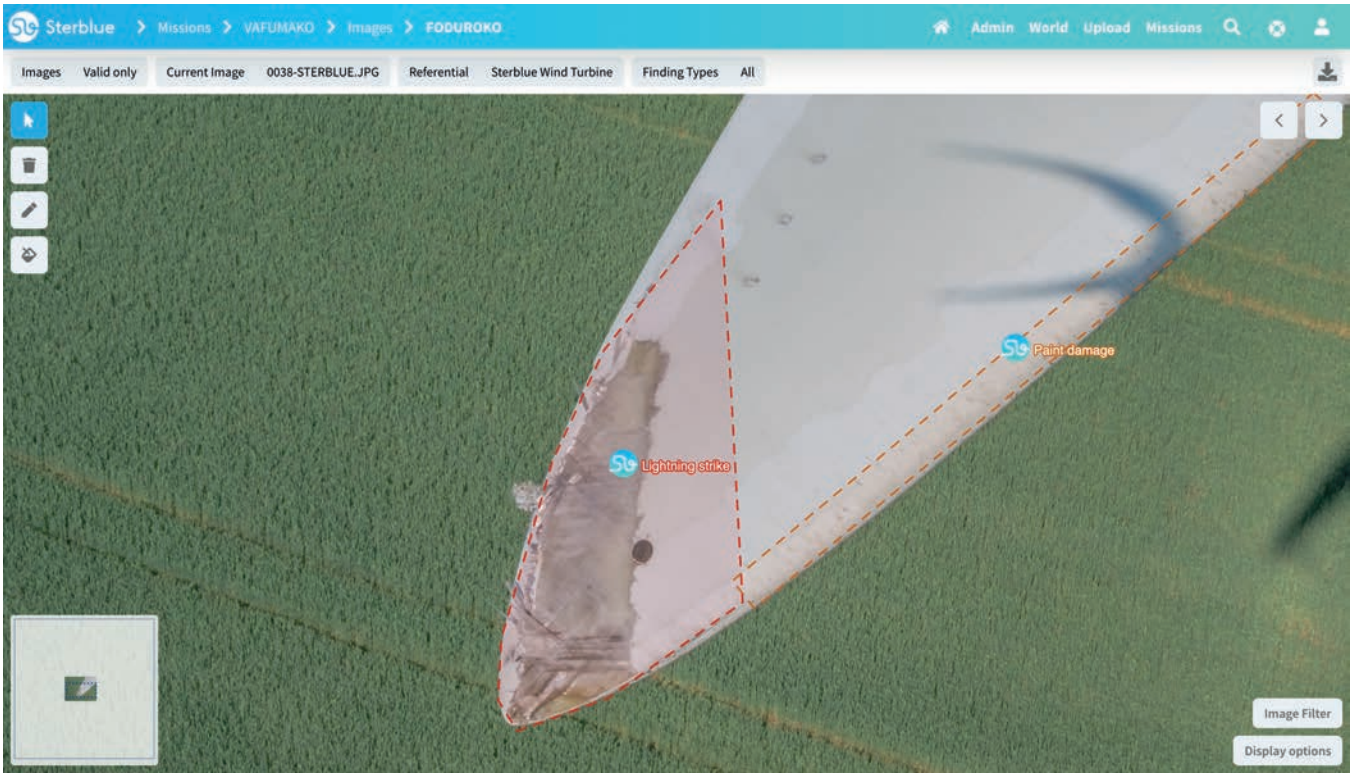
PES: We know your platform allows for managing multiple types of assets. Can you tell us some of the advantages for the wind industry?

GV: With automatic flight trajectories, using the Sterblue app, one drone pilot can safely inspect up to 12 wind turbines per day with an inspection downtime between 20 and 35 min. This results in high resolution pictures, with defects visible up to a millimetre precision on our platform.

Our AI capabilities then allow for a fast image analysis which is then validated by a team of industry experts. Decision makers only need to access our reports and analytics to monitor asset health and generate clean energy more efficiently. You can learn more in our webinar here.

PES: You mentioned Sterblue had identified an important shift on the blade inspection market. Can you elaborate?

GV: Absolutely. Ten years ago, blade inspections used to be a big pain for wind energy operators, both for safety and economic reasons. So, when drones appeared on the market, the potential was huge. We call this the 'Age of Education', where hardware was still very embryonic and



not scalable and organizations were not familiar with it.

When Sterblue was founded, back in 2016, drones were already reaching interesting maturity levels and we started watching multiple external service providers creating solutions for the wind industry. This was very important, since it allowed utilities to test this technology and understand the importance of having a structured data management workflow.

Today, large wind park operators want to become strategically autonomous and build their own internal drone and data programs. Having a growing number of inspections to perform and huge amounts of data to deal with afterwards, there is a need for software solutions that allow these organizations to be competitive and in control of O&M costs.

PES: So how is Sterblue positioned to address this shift?

GV: Sterblue is built to help organizations making this shift by themselves. We are the only purely software player on the market, capable of integrating with off-the-shelf drones. This allows us to fill the gap between inspection hardware and software.

Sure, there are other good solutions out there, but some make it harder for large utilities to scale in the future. Skyspecs for example, uses in-house hardware, which doesn't allow building internal programs.

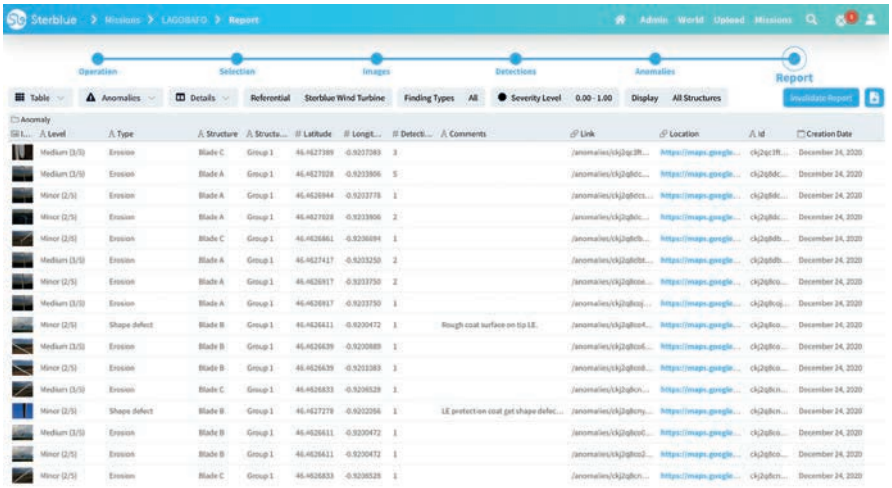
Scopito on the other hand, despite being a more versatile solution, presents some bottlenecks when it comes to large volume inspections. For example, you have to manually organize data in folders before being able to upload it on their platform. Even if this takes only a few minutes per turbine, imagine if you have thousands of them.

PES: Economically speaking, how beneficial is the transition from external to internal inspection programs?

GV: We are currently onboarding a large energy operator in Italy, so that they can inspect 300 wind turbines every year, using our software solutions with full autonomy.

This represents a saving of $40,000 every single year when compared to subcontracting external inspection services, meaning a 41% cost reduction. Plus, the Italian utility can now rely on Sterblue to become strategically independent managing their teams and data, which is free and always accessible on our platform.

PES: Is that the case for every customer you have?



GV: We have different offers for organizations at different stages of the learning curve. You can either be fully independent and use our software with a 'pay-per-use' pricing model or take advantage of our worldwide network of drone pilots and experts while you make the transition.

A common first step is to build a business case to demonstrate the benefits of performing drone inspections using Sterblue solutions. This allows organizations to understand the profitability of the investment before putting together teams and changing processes. One great example is ESB, with whom we have been awarded a long-term contract to complete inspections of turbine blades with the support of our network in Ireland and the UK.

PES: Your platform is able to automatically detect defects on blades thanks to AI. How important is this for your customers?

GV: The truth is that AI is just a tool in a complex inspection process. It certainly helps to accelerate and improve image analysis and defect annotation, but the real value lies in what you can do with the thousands of detections you end up with. In other words, the capability to aggregate this information and display it in an intuitive and actionable way.

For example, the Sterblue platform is able to automatically assign images and defects to the exact location on the blade. Thus, the maintenance team knows exactly where and how serious the problem is and can take action.

PES: What is your current geographical reach?

GV: Literally everywhere. More seriously, we now have customers in twenty-one countries. This is only possible thanks to our easy-to-deploy software solutions.

PES: That's an impressive international presence. How did COVID-19 and travel restrictions affect your business?

GV: COVID-19 has definitely been an unexpected challenge for every business, and Sterblue was no exception. We took this opportunity to reinforce our online training academy, which allows us to launch operations remotely anywhere in the world.

Actually, our first fully remote project happened last year in Japan, where we trained 5 drone pilots to provide detailed wind turbine inspection reports to a large Japanese wind energy operator. More recently, we also trained a customer in Norway without having to travel there.

PES: Finally, how can a wind park operator start using Sterblue solutions?

GV: Reach out to us and we can inspect wind turbines all over the world in less than 2 days. We have an ad-hoc program in place for our customers to make their inspections easy.

www.sterblue.com