



ADVANCING INSPECTION TECHNOLOGY

Following Terra Drone's investment in RoNik Inspectioneering, the new joint venture, Terra Inspectioneering, will focus on non-destructive testing and inspections of global oil & gas assets



The use of drones across key operational areas of tank terminal facilities has taken a step up with the combination of one of the largest providers of industrial drone solutions and the creators of a niche UT inspection technology.

Terra Drones' investment in RoNik Inspectioneering opens up the Dutch company's potential to significantly expand deployment of its patented UT technology across Terra Drone's global. Rebranded to Terra Inspectioneering, the company will focus on non-destructive testing and inspection services for industrial, hazardous and enclosed spaces including storage tanks and pipeline. The company will also have a dedicated focus on the global oil and gas industry.

Having performed more than 200 inspection projects, including thousands of drone flights and counting major oil and gas companies among its clients, the company has several growth and development ambitions, including further enhancements to its inspection portfolio technology as well as the continued roll-out of its product globally.

The company, established in 2016, has carved a unique niche by developing a proprietary drone technology which makes ultrasonic thickness testing in hard-to-reach enclosed spaces easy. As well as eliminating the need to put humans in dangerous places, it also significantly reduces the time taken for tank inspections by up to 60%.

The data collected by the drones is then shared in cloud-based 3D models of the equipment, which are fully compliant with industry inspection standards such as API 653 and EEMUA 159.

In an interview with *Tank Storage Magazine* Marien van den Hoek, co-founder and co-owner development at Terra Inspectioneering, says that following a string of successes in the Benelux and other European markets, the company was looking to further scale-up.

'We came across Terra Drone as they are specialists in the use of UAVs for external inspection flights and it was a good match for us. We can deploy our own patented technology to the existing contacts they have globally.'

Established in 2016, Terra Drone is a leading provider of industrial drone solutions globally. The company utilises the advanced in unmanned hardware, sophisticated LiDAR and photogrammetric surveying methods and drone data processing techniques in offering services for sectors including oil and gas, construction and utilities.

Terra Drone CEO Toru Tokushige says: 'Oil and gas companies are fast realizing how drones can be used to improve plant operation rates, save time, and reduce costs. By incorporating RoNik's proven and reliable NDT technologies and inspection services to the solution set we offer via Terra Drone's global network of more than 25 countries, we will be able to cater to oil and gas companies in all parts of the world.'

'Our key focus and niche market is the inspection of confined spaces,' van den Hoek explains. We are unique in the market because we combined visual inspections with wall thickness measurements using



Beam UT measurement on top of tank



Universal platform for wall, roofs and beams

drones. We measure the vertical walls and roof plates as well as the condition of supporting structures.

'That is a big step for asset owners because they don't need to send people into the tank.

'We have big industry players invested in and using our technology with 75 customers in the process industry.

'There are two key drivers for asset owners in the use of drone technology. The first is reducing downtime because you don't need to build scaffolding for the inspection and the second is safety – our technology is based on doing the work without needing anyone to operate it.

'We can reduce inspection time from three weeks to four days.

Looking ahead van den Hoek says there are plenty of opportunities to grow further in the market and the company has an ambitious short and long-term development plan.

'We have a five-year plan using the most known measurement technology next to UT measurement. Another step for us is how to deal with corrosion in a fully automate way using robotics.