

DRONE APPLICATIONS

The ability to inspect hard-to-reach places is essential in mining, manufacturing, engineering, construction, and other industries. Accurate surveying and mapping are crucial in civil engineering projects. Imagery is everything, but there are operational costs and safety risks when trying to collect data. Drone applications present cost-effective alternatives to manned aerial inspection by rope, scaffold, and aircraft. Drone use can also replace hiking, climbing, and entering confined spaces to acquire essential data.



Access the humanly inaccessible with safe, cost-effective technology.

Drones are valuable tools for inspection, surveying, and mapping. The unmanned devices enable safer, more cost-effective means of collecting imagery from hard-to-reach and previously inaccessible places. SynTerra uses drones to support project goals, enhance work products, improve results, and reduce risk while maintaining or reducing project costs.

With drones, it's easier and safer to inspect elevated structures such as rooftops and towers, confined spaces such as tanks and tunnels, and large areas such as quarries, landfills, and wastewater systems. SynTerra uses drones to collect data for survey-grade maps and 3D models that support civil engineering projects. And it all can be done in hours on site instead of days.

SYNTERRA DRONE PROGRAM

Inspection capabilities

- Access to towers, roofs, piping racks, and other elevated structures
- Access to tanks, tunnels, and other confined spaces
- Able to cover large acreage or features, including: mine/borrow pits, wastewater systems, dams and dikes, and pipelines
- Construction site progress monitoring
- High-resolution images
- Thermal imaging
- Orthoimagery (*i.e.* georeferenced aerial photography)
- GIS intergration

Surveying and mapping capabilities

- Topographic mapping for plotting, planning, and evaluating sites
- Volumetric estimates for inventory tracking, reporting, and planning
- Thermal mapping for energy evaluation, wastewater treatment assessment, wildlife studies, etc.
- High-resolution data for generating 3D models, topographic maps, *etc.*

Benefits

- Risk reduction
- Reduced site time
- Small and lightweight equipment
- Easy setup and programming
- Preflight visual and operational inspection
- Self- or hand-launched

Qualifications

- Licensed drone pilots
 (FAA remote pilot certification)
- FAA registered drones
- Insured
- Compliance with FAA Small Unmanned Aircraft Rule (Part 107)

