

Drone Deployable NDE

Technical Details

Drone Deployable NDE Capabilities

Clearsight's Drone Deployable Non-Destructive Examination (NDE) Solution elevates inspections to new heights and to better discoveries. Our expert team's groundbreaking drone can fly a 360-degree range of inspection and maintain altitude at any angle.

The drone performs thickness measurements using Ultrasonic Testing (UT), Electro Magnetic Acoustic Transducer (EMAT) obtained thickness, and Dry-Film Thickness (DFT) in accordance with most NDE industry standards.

Operational Details

- Clearsight's Drone NDE solution can be conducted both inside and outside facilities across most commercial and industrial applications.
- The average pre-mission, on-site preparation is minimal; most inspections can be completed without any surface preparation.
- Our expert team will coordinate collection and provide a detailed drone deployment plan for your approval.
- Final exam reports documenting the wall thickness reading obtained will be generated and compiled within a comprehensive report providing prioritized insights.



NDE drone captures measurements at any angle.



The Clearsight Drone Deployable NDE Solution is capable for indoor and outdoor missions. Our expert team will coordinate and provide a detailed plan for every mission.



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Technical Details

- Clearsight’s drone operators and NDE inspection professionals are certified in accordance with industry standards; experts obtain continuing training specific to our technologies and products as well as site specific job orientation.
- The drone can fly a 360-degree orbit and maintain altitude at any angle.
- Many drones fail to operate when too close to structures because they rely on GPS data for navigation; our drone utilizes multiple onboard sensors which help avoid obstacles and navigate challenging environments.
- Inspections can be completed using UT, EMAT, and DFT sensors to obtain measurements in accordance with most industry NDE standard methods.

Drone Dimensions	31" x 31" x 12"
Max Flight Height	350 ft
Max Wind Speed	22 mph
Flight Battery Life	13 minutes 1 minute to swap batteries
Accuracy of Sensors	Accurate to +/- .002" of actual material thickness
Max. Temp Restrictions	EMAT — 200°F UT — 200°F DFT — 200°F
Compatibility with Materials	EMAT — all ferrous materials UT — all metals DFT — all metals
Surface Prep Requirements	EMAT — no surface prep required UT — paint/rust removed down to bear metal DFT — no surface prep required
DFT Thickness Range	0 – 30 mils
Codes and Standards Adherence	<ul style="list-style-type: none"> • ASME Boiler and Pressure Vessel Code, Sections III, V, VIII, XI • API 510 • API 570 • API 653 • ANSI / ASME B31.1 • ASTM E1774-17
Is Clearsight’s Drone Deployed NDE Approved for Beyond Visual Line of Sight Flying (BVLOS)?	Not currently
Can Drone Deployable NDE be Performed in the Rain?	No

The Difference Is Clear

Contact Clearsight and our NDE industry experts will work with you to identify the best solution to meet your needs.



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