

Case Study

Drone-based Quantity Estimation for Largest Construction Company based in India



Client

The client is India's largest construction organization and ranked among the world's top contractors. It offers EPC solutions to execute large industrial and infrastructure projects from concept to commissioning on a turnkey basis with single-source responsibility.



Client Ask

- Accurate quantity estimation for reconciliation, production management, and theft loss prevention.
- Replacement of highly time consuming, subjective, interpolated and dangerous conventional methods with the latest technology.

LTIMindtree Solution

- Using drones to gather data to achieve higher accuracy and minimize the field team.
- The entire workflow of drone-based stockpile measurement is classified into:
 - Establishment of a control network survey
 - Mission planning & flying
 - Photogrammetry processing & delivery
- Using photogrammetric principles, the generation of stereo models
- Stockpile 3D models, orthophoto, and volume reports for end users through FAMEVol, an in-house GIS web portal.

Business Benefits

Reduced quarry survey
time from 144 man-hours
to just 36 hours

Minimization of 90% of
the usage of paper works
at the site and office

01

02

03

04

Enhanced accuracy for
better cost savings in
the quantity

Enhanced safety due
to the utilization of
drone surveys

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