

About AOC

AOC is a leading geospatial services company renowned for its work in the mining and engineering sectors. Our reputation is based on delivery of large projects in remote locations requiring accurate products often in situations presenting significant technical challenges.

Our teams in South Africa, Australia and SE Asia introduce leading innovations to the market such as LiDAR, High Resolution Satellite Imagery, Terrestrial Laser Scanning, 360° Spherical Imaging and SiteSee™.

Our advanced capabilities are built upon the core disciplines of surveying, aerial survey, mapping, data modelling and geographic information systems.

AOC has adopted a target of Zero Workplace Injuries and is committed to the protection and well being of the people, communities and environments in which we work.

Resources

- 200 Staff Globally
- 10 Aerial Survey Aircraft
- 4 LiDAR Units
- 7 Digital Cameras – 3 Large Format

Services in Detail:

SiteSee

SiteSee™ is the latest tool in safety that is being used in mining and engineering sites around South Africa and the world. SiteSee generates a virtual 360° tour of an area, which reduces the need for onsite visits. This allows engineers and surveyors to visualise hazardous sites from the comfort of their desk.

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Services Overview:

Visualisation Products

- Aerial photography
- Orthophotos
- Satellite imagery
- 360° spherical imagery

Site Measurement

- 3D 'as built' surveys
- Deformation analysis
- GPS surveys
- Dimensional control
- Structural design

Specialist Products

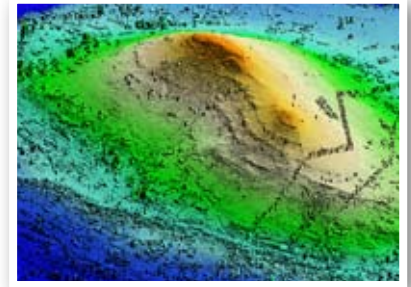
- Pit and stockpile volumes
- Surface/elevation models
- 'Bare Earth' terrain models
- Mapping, contours
- Mine mapping

Derived Products

- Mine mapping
- Vegetation height
- Rehabilitation monitoring
- Building outlines
- Asset information
- Erosion extent

LiDAR

Airborne Laser Scanning, or LiDAR, creates highly accurate and detailed models of the Earth's surface. LiDAR produces a dense cloud of points that are classified, eg. as ground or non-ground points. These measurements are further processed according to client specifications. Typical datasets include natural surface terrain, buildings, vegetation, contours and 3D models.



Aerial Imagery

Our diverse range of aerial survey technologies ensures the best tool is deployed to suit the accuracy, timeliness and scale of your project. Spectral resolution can range from natural colour, to colour infrared and multispectral. AOC remains a leader in the field through continuous investment in the latest imaging technologies including digital mapping cameras.



Satellite Imagery

High resolution satellites, such as GeoEye-1 and IKONOS, continuously orbit the earth, capturing submetre imagery on request. Stereo images can be ordered to create digital elevation models and contours. Imagery, simultaneously captured in panchromatic, natural colour and near infrared, can be processed with terrain data to generate accurate, georeferenced and GIS ready orthophotos.



Photogrammetry

AOC uses state-of-the-art mapping equipment combined with diverse, specialist knowledge. These mapping resources successfully meet the most challenging photogrammetric mapping and orthophoto requirements.

Land Survey

AOC surveyors provide ongoing support throughout the life of your project. We help develop, implement and document the most appropriate spatial strategies to maximise project benefits. Our technical solutions are founded on the scientific principles of geodetic surveying.

Industrial Survey

The adoption of 3D data modelling in a range of industries has seen an increase in the demand for terrestrial laser scanning for deformation and 'as built' surveys. Highly accurate 3D models of brownfield sites dramatically improve design and construction quality, virtually eliminating rework.



Terrestrial Laser Scanning

Terrestrial Laser Scanners permit the rapid capture of millions of accurate 3D point data from a safe distance. This data can be modeled or used in raw form for clash detection against designs. Our experience includes large industrial plants, offshore platforms and other complicated structures.