



ADVANCED AIRBORNE CONDITION ASSESMENT OF POWER OVERHEAD LINES

SOPHISTICATED AND HIGHLY ACCURATE POWER LINE MAPPING PRODUCTS, CORRIDDOR MAPPING
SOLUTIONS FOR THE POWER INDUSTRIE FOR BOTH DISTRBUTION AND TRANSMISSION POWER LINES



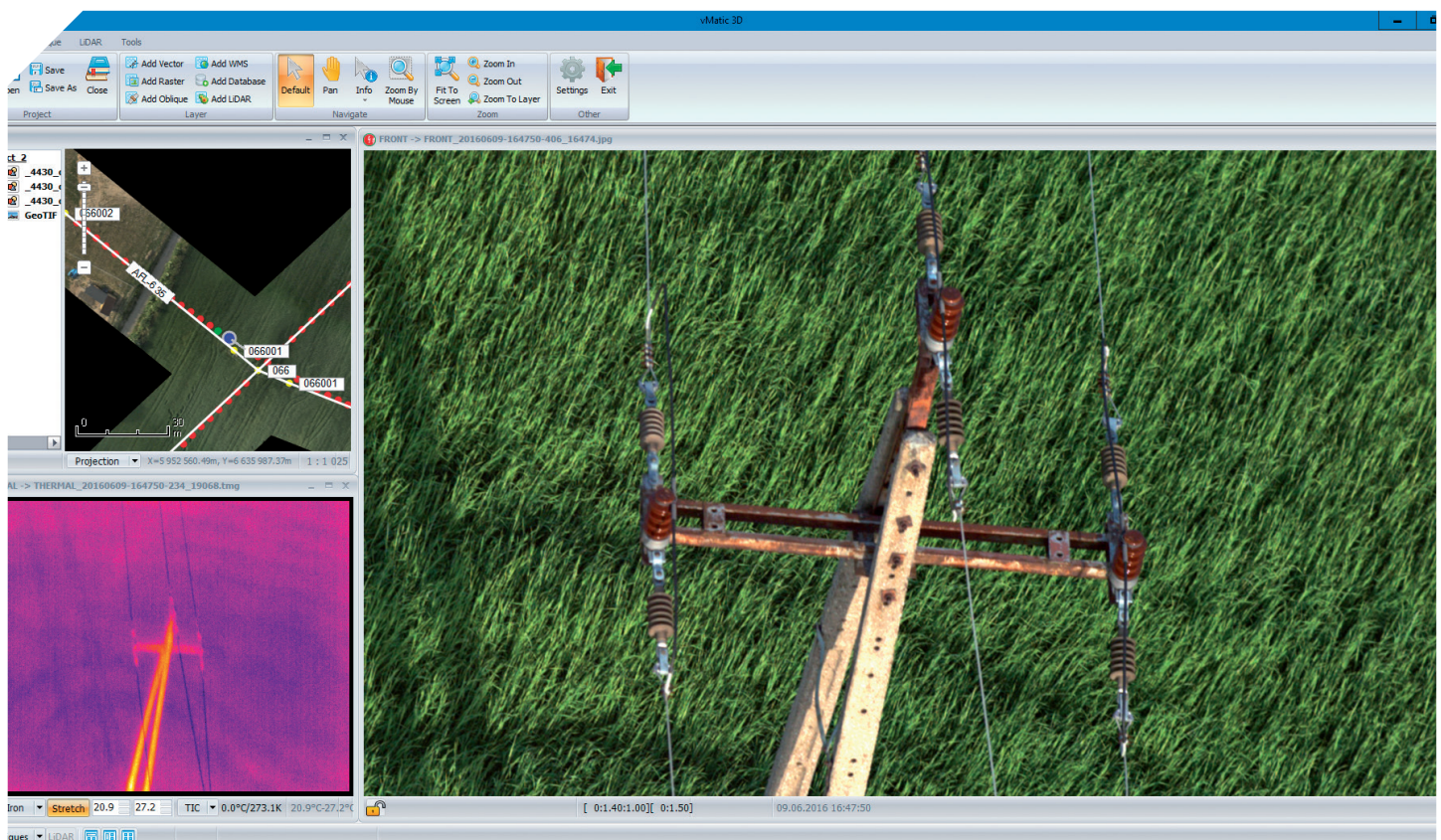
power-arbor.pl

Power arbor provides sophisticated and highly accurate power line mapping products and corridor mapping solutions for the power industry **for both distribution and transmission power lines**.

We are a team of qualified specialists and managers who are passionate about **advanced technologies and innovative solutions**. We specialize in the field of power engineering, photogrammetry, geo-informatics, GIS and software development. Our products and services are based on **over 10 years of experience** of cooperation with the power industry. Although we deliver data on thousands of kilometres of power lines, we are still open to the implementation of innovative ideas and pioneering projects.

Time is money, information is crucial and energy must be delivered to customers. Using top technology and science and deliver a complete picture of your infrastructure right to your desk is our goal.

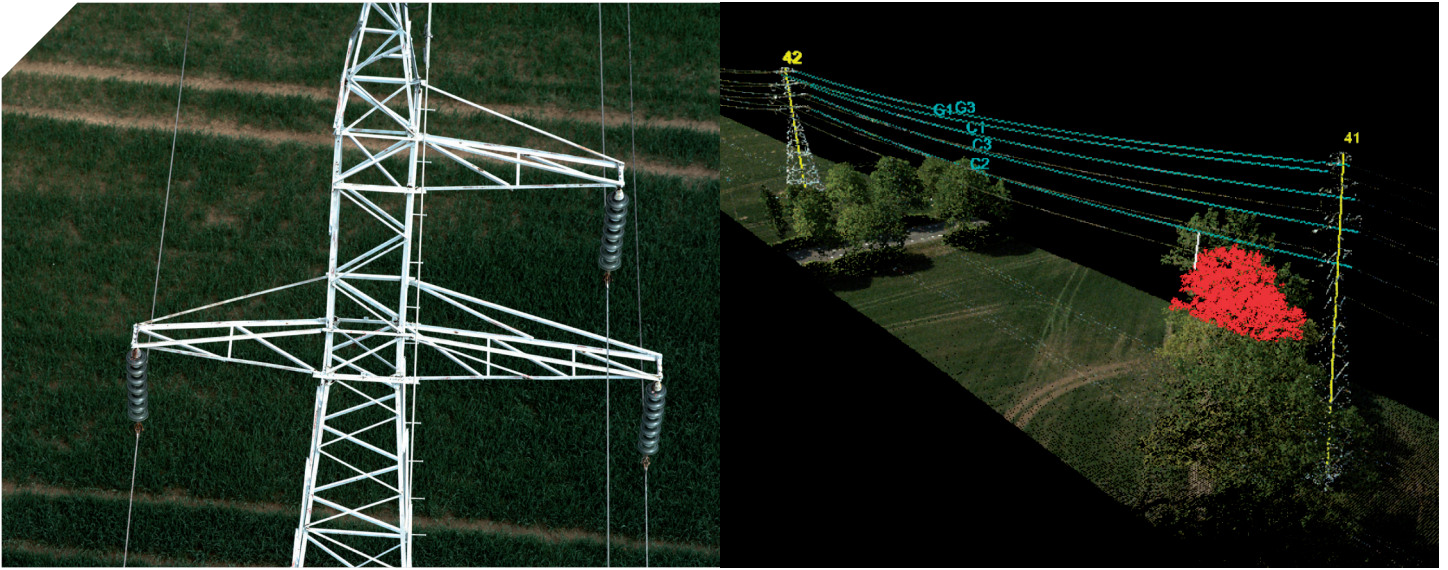
In order to obtain information and documentation of infrastructure, we use different types of helicopters equipped with specialized measuring equipment. The set up of the **system mounted on helicopter** is flexible and depends on the project goals and type of infrastructure.



Infrastructure plays a vital part in ensuring the operation of businesses and households. Therefore it is important to make sure the infrastructure is in good condition or to diagnose problems early on.

Our aerial power line inspection service uses helicopters, experienced pilots, the most advanced technology, software and electrical power line specialists to detect weak points before they impact the power line network.

The high resolution still frame zoom camera captures 16 Megapixel details of individual components and takes high quality photographs of the complete structure to integrate into maintenance software platforms. Damaged, burned or rotting structures, broken or damaged cross arms, missing aerial marker balls, unreadable structure numbers, etc. are common findings.



Orthophotomap

Power arbor generates orthophotomaps with very high ground resolution of up to 5 or 10 cm. It allows to accurately identify various objects on the ground and infrastructure details.

An orthophotomap can be used as a separate layer in GIS systems and to provide a background for the investment planning, maintenance or to create a variety of thematic maps.

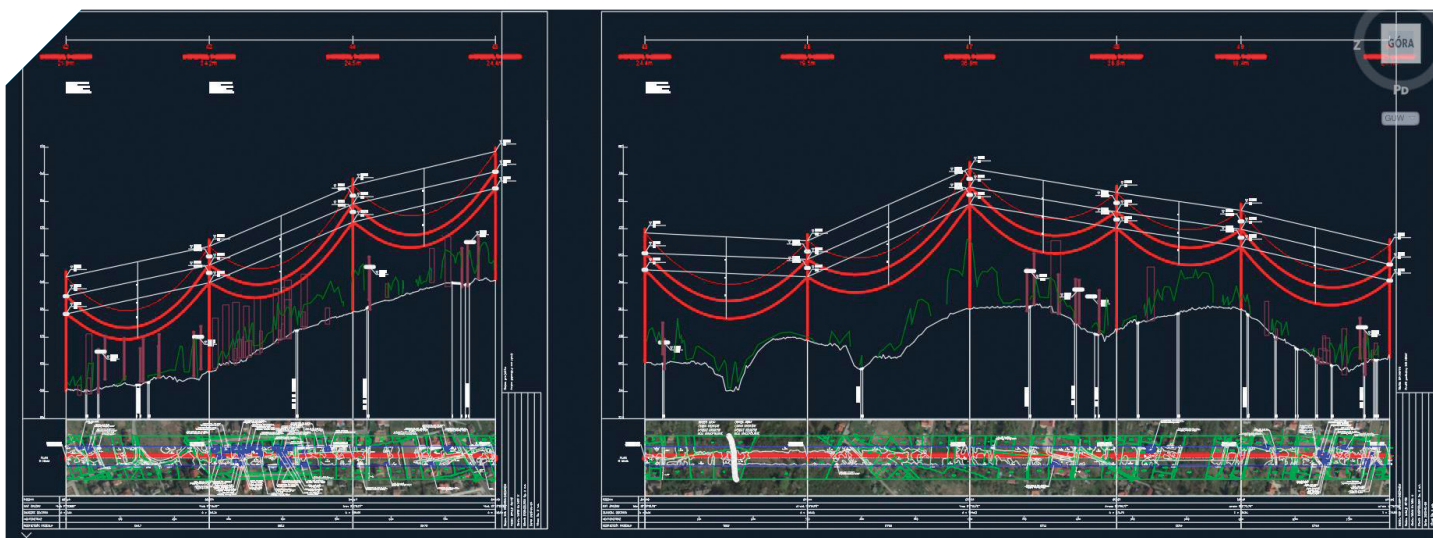


Laser scanning and 3D Modelling

Power arbor is a specialized **LiDAR analysis company** with thousands of km of experience in LiDAR processing for power lines, offending vegetation detection and 3D modelling, among others. Through our extensive experience, we have developed our own processing and QA software to provide you with better and faster results for projects for new power line network design and maintenance.

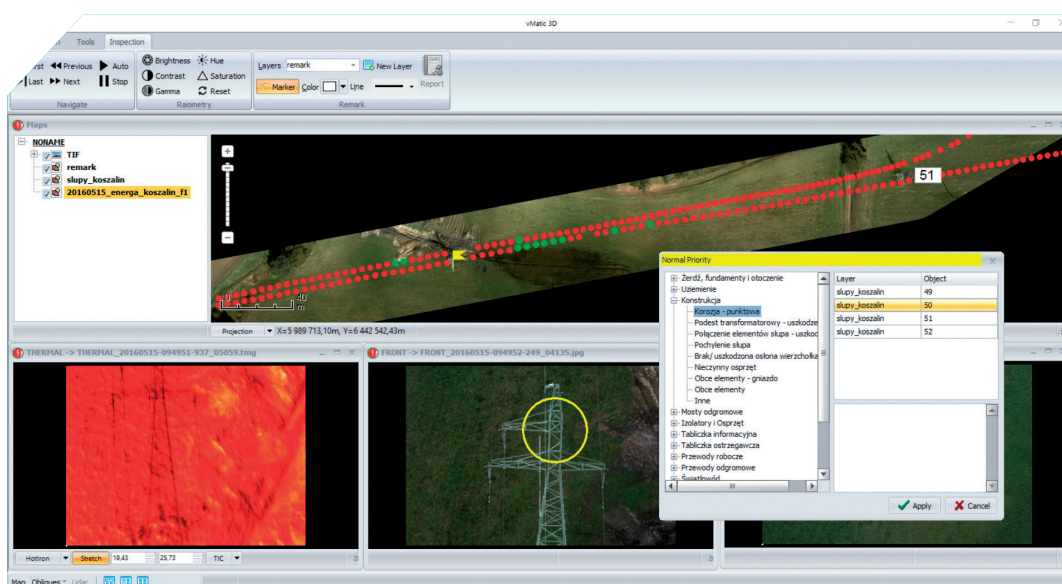
Data is stored in digital format and includes complete documentation of the network. All data is correlated and overlaid with exact GPS coordinates that can be easily linked to a digital map or GIS solutions. We perform a final review of the data after the flight and deliver detailed reports. The reports delineate all components that require attention and are divided into fault categories and priorities. The areas around power lines are also analysed and information about vegetation and distances to other objects are reported.

Power arbor has the ability to provide aerial infrared power line inspections. Our established experience and enhanced high resolution equipment allows us to locate potential problems and assist utilities to eliminate failures in transmission, distribution and substation systems.



Profiles

Along with the recorded electrical loading, meteorological, hardware and conductor data, the power line profiles can be modelled with high accuracy with a software package such as PLSCADD. The goal of this analysis is to determine the as-built condition and explore the potential thermal rating issues, if any, of the project power lines. Important features of the model include the ground surface model, structure location, cable location and potential ground or aerial obstacles.



Software

Power arbor provides dedicated **vMatic** software to manage all data supplied by our company to customers. **vMatic** software provides the visualization and integration of data acquired by the **Power arbor Mobile Mapping System** – oblique, orthogonal, thermography images, data from laser scanning, as well as digital raster maps and other GIS data.

We are certain that **vMatic** software can support the power industry in its daily work and improve the power supply quality.

**YOU ARE INVITED TO THE COOPERATION
WITH POWER ARBOR TEAM!**

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