



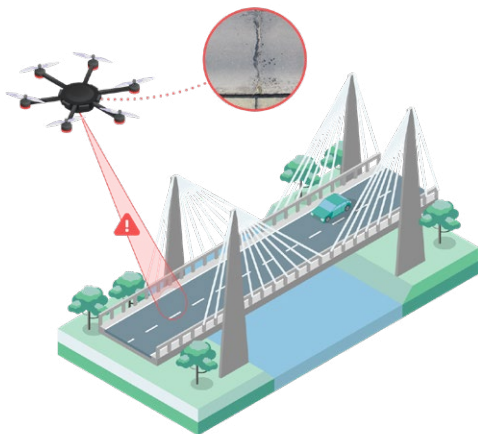
## CUSTOMER SUCCESS STORY

# AUTOMATED BRIDGE INSPECTION WITH DRONES AND AI

Industrial services provider GMB GmbH carries out automated structural inspections with drones using the FlyNex Enterprise Suite without needing heavy equipment.

## SITUATION

For decades, the German **industrial services provider GMB** has been inspecting bridges and other structures throughout the country. GMB sees the growing market for structural inspections and the energy turnaround as an opportunity to switch to innovative processes. The aim is to carry out procedures more safely and efficiently and expand their market share further.



Industrial service provider

**Size:**

approx. 300 employees at  
10 locations in Germany

**Turnover:**

over €32 million in 2020

**About:**

subsidiary of Lausitz Energie  
Bergbau AG.

**Business areas:**

Mining Services, Engineering Services,  
Power and Heat Generation.

[www.gmbgmbh.de](http://www.gmbgmbh.de)

## CHALLENGE

Carrying out regular **structural inspections** is very time-consuming: Using **elevating platforms and bridge inspection devices**, scaffolding, closing bridges in part or in full, and preparing an inspection report can take up to 1.5 days in total.

Conventional methods have so far failed to collect adequate data for automated assessments. This data must be available in high image quality and recorded in places difficult to access. That is the only way to reliably detect even the slightest **damage in the millimeter range**.

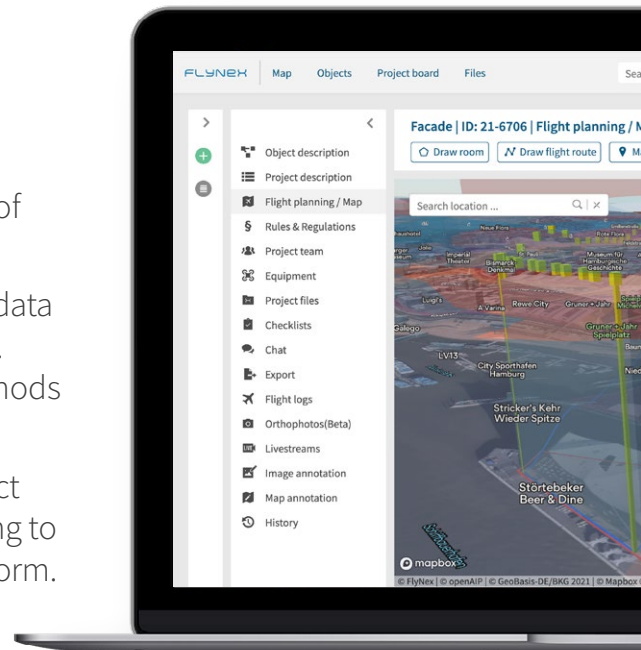
## SOLUTION

GMB relies on using drones for **automated data generation** during structural inspections. The inspections can thus be carried out without heavy equipment and road closures.

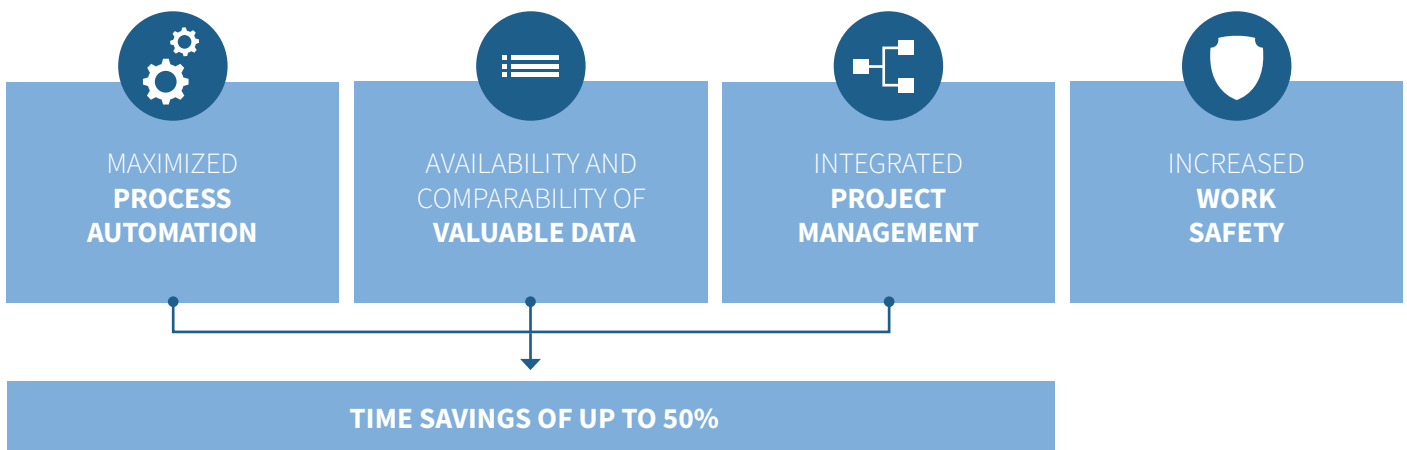
The **FlyNex Enterprise Suite** covers the management of the entire project, from planning and drone flight to the analysis of the obtained data.

By using particular camera technology, high-resolution image data can be captured by drone, even from hard-to-reach locations. The data is collected in less time than with conventional methods and is available in better quality for subsequent analysis.

**Image AI analyses**, such as those from Viscan Solutions, detect defects with an accuracy of 0.3 mm. The data is stored according to the highest security standards on the cloud-based FlyNex platform.



## RESULT



„Based on the successful tests, we are looking to apply the innovative software-based drone inspection process consistently in the future, which will save us a lot of time and effort.“

Dr. Thomas Koch, head of the GMB engineering office in Cottbus

**CONTACT US** if you are also looking to digitize your work processes with drone data and improve their efficiency: **contact@flynex.de**