



BRIGHT

BRIDGES HEALTH TESTING

Innovative and patented solution for the inspection of bridges and viaducts

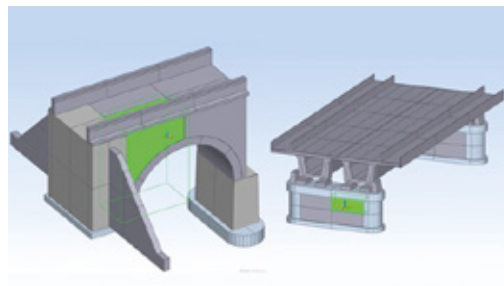
BRIGHT is the synergistic integration of processes through the use of Artificial Intelligence tools: the geometric and structural survey, the automatic location and classification of defects, decay quantification, index evaluation of structural vulnerability and priority of interventions. The analysis and management of data in a BIM environment, and the infrastructure 3D digital twin model take place on a dedicated proprietary web platform (**BeSafe**).



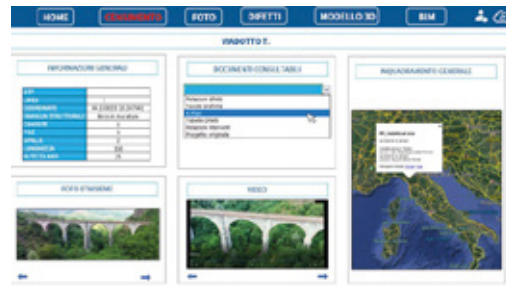
Use of Artificial Intelligence for the identification, classification, quantification of defects and evaluation of the structural vulnerability index, through the software **ADD_B© - Automated Defect Detection_Bridge**, to automate the identification of defects.



Detailed photographic cataloguing of structural elements and **georeferencing** of individual **defects** on the **3D digital twin model**.



Data archiving and centralization in a **BIM** environment.



BeSafe web platform to manage and query all data and results, for the prioritization of interventions.

**SAFER ON
THE ROAD,
SAFER IN
LIFE.**





INNOVATIONS

- Realization of the 3D digital twin model of the infrastructure;
- Use of Artificial Intelligence (AI) techniques;
- Automation of defect identification and decay quantification processes;
- Defect georeferencing;
- Simplified visualization of defects on the 3D digital twin model and BIM rendering;
- Data management in a BIM environment;
- Dedicated web platform for decision support system;
- Integration with continuous monitoring systems;
- Structural vulnerability index calculation.



✓ ADVANTAGES

- Detailed visual inspection using UAV technology;
- Automation of information management and transfer with reduction of errors;
- Objectivity of inspection results;
- Unambiguousness and traceability of data;
- Periodic remote control and monitoring of the safety levels of structural elements;
- Reduced use of human resources and greater safety;
- Automatic photographic cataloguing of structural elements and defects;
- Automatic calculation of the vulnerability index;
- Data management according to the international IFC standard;
- Management of the intervention priority.

