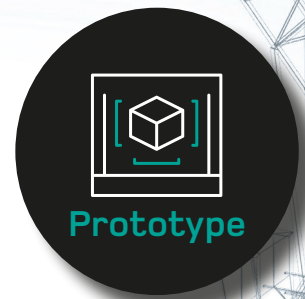


3D digital construction progress tracking.

Instant progress on all your construction projects.



Umdasch Group Ventures' 3D AI-based computer vision system that recognises progress on construction sites is revolutionising the way we work on construction sites. It not only detects physical objects and people on your construction sites, but also uses 3D technology to provide valuable information about their location. In other words, construction progress, processes and procedures are monitored and recorded almost in real time, enabling you to respond to situations rapidly when needed. Furthermore, the tool can be used to analyse and optimise completed processes for future projects.

COMPREHENSIVE DATA PROTECTION-COMPLIANT MONITORING



- Cameras on the crane ensure that the entire site is fully monitored throughout the construction phase of the building shell.
- Public areas are pixelated to ensure that personal privacy rights and data protection are respected at all times. Artificial intelligence (AI) is used to anonymise people who are filmed.

INSTANT RECOGNITION AND ANALYSIS



- AI analyses and recognises physical objects and people on construction sites instantly, enabling you to respond to situations immediately or carry out an analysis of completed processes for future optimisation. The software can be adapted in line with your specific needs.
- Construction processes – such as the erection of a wall using concrete formwork – are recorded by 3D computer vision intelligence using a unique stereo camera system. The data gathered is then transmitted automatically to the BIM model.

MONITOR PROGRESS FROM ANYWHERE



- The live view provides you with a picture of the current situation, without you having to go on site. Your 3D building model is automatically updated with the latest construction progress data.

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The system provides construction managers and foremen with additional information regarding the location of the physical objects it recognises. The tool is able to identify which formwork is in which stage of the works process, for example. All images, which are taken automatically by the camera, are stored centrally in the system, providing valuable additional information for your site records. Software updates enable the system to be adapted and enhanced in line with your needs. This enables the system to be optimised by training the AI to recognise new objects.

Umdasch Group Ventures' 3D computer vision system is another key step towards the modularisation, digitalisation and automation of your construction sites.

Benefits for digital construction site management:

- a comprehensive, live overview of the shell construction – without having to go on site
- clear information about construction progress transferred instantly to the 3D building model
- dynamic information about pre-defined tasks on the construction site
- access to a comprehensive image archive
- analysis of individual production steps and number of labourers involved in each step

About Umdasch Group Ventures

Umdasch Group Ventures is the technology driver within the Umdasch Group, developing new, disruptive solutions and business models. The company invests in mature start-ups and young enterprises that provide potentially disruptive business models and/or unique technologies/services in the fields of construction and retail. The aim of the innovation hub is to continue developing their own ready-to-market business models and portfolio of strategic investments, to establish these on the market and drive market growth.



Contact

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