The Application of Robotics in Construction

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Key words:	Positioning; ConstructionRobotics; Autonomous; Surveyor; Construction; Robots; Robotics; Bimprinter; BIM; Printer; StakeOut; stakeoutengineer; Topographe; SettingOutEngineer; ConstructionInnovation; SmartTopography; RealScale layout
SUMMARY	
Will construction robots replace surveyors on construction sites?	
First, let's have look at the types of robots arriving on construction sites:	
Concrete 3D printers	
Robots for drilling holes in ceilings	
Painting robots	
Masonnery robots	
Robots to equip elevators	
Robots for attaching rebars	
Quadruped robots	
Humanoid robots	
Exoskeletons	
Tracing robots	
Plan	

The Application of Robotics in Construction (12243) Vincent Agie de Selsaten (Belgium) projectors Let's recall the different tasks that a surveyor performs on our construction sites. What kind of instruments he use? Many new technologies have already been adopted by surveyors in last few years. GNSS RTK, Drones, Photogrammetry, 3D Scanners, mobile mapping... These new technologies scared us at first. Then they were widely adopted as new tools by survey companies. Most of these technologies were designed for scanning. The transition from "Physical" to "Digital". But construction is the transition from BIM, from the plans designed by the architect to the real project. The transition from "Digital" to "Physical". Which robots could replace the surveyor's job and which ones will help him? The story of a surveyor who wanted to create a "simple" topography tool so that he no longer had to work on his knees on construction sites. And which resulted in the very first autonomous printer robot for tracing the full layout in real scale. The Bimprinter was born.

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