

SIKANEWS

FIRST COMMERCIAL 3D CONCRETE PRINTER WITH SIKA TECHNOLOGY IN OPERATION

US-based Pikus Concrete teams up with Sika to commercialize 3D concrete printing technology in the construction industry and to capture its vast potential. Pikus' first 3D concrete printer with Sika technology has commenced operation in Lehi, Utah. The company is working on implementing the technology in the first construction projects.





Sika's 3D concrete printing technology allows complex geometries to be realized economically.

SIKA - TECHNOLOGY LEADER IN 3D **CONCRETE PRINTING**

Sika's entire know-how in digitalization and industrialization of concrete construction, built over decades, has been brought together in its 3D printing technology. The expertise ranges from robotics, process control system, and extruding system, to concrete technology and mix design and formulation of 3D mortars to allow for precise control of how the

concrete behaves. Sika is the only company capable of supplying all the technologies required for industrial 3D concrete printing from a single source.

INCREASED SPEED IN CONSTRUCTION

One key advantage Pikus sees is the increased speed of a project build, as building and dismantling of formwork is no longer necessary. "We will be able to print our structural elements before a job even starts

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and ship them to the site when needed. Depending on the complexity of the structural element, this could save months of construction time and a lot of costs on a larger project", says Rob Pikus.

HIGH EXPECTATIONS AND INVESTMENT IN TECHNOLOGY

Pikus is convinced of the technology and its market potential. Rob Pikus: "Right now we have invested over USD 3 million in this project. This includes a new building to accommodate the large 3D printer, the actual printer and the labor to get the process started." Pikus intends to invest heavily in the coming years to reach their goal of 20 printers around the US by mid-2024.

BROAD RANGE OF APPLICATIONS

3D concrete printing allows architects to realize the most challenging shapes. Dynamic curves and futuristic interlinked structures can be printed directly and efficiently from digital plans. The strategy of Pikus is now to define areas where 3D printing will be most beneficial to the industry. Rob Pikus: "We see a huge opportunity in printing items that are difficult or very expensive to form. This will help bridge the gap between architectural and structural elements."



"We undertook a lot of research to find the best 3D concrete printing technology. During a European tour, we met with Sika's experts who explained their technologies and showed us an impressive live demonstration of the printer. This was really the turning point for Pikus. We knew we needed Sika's expertise to put this process into practice."

Rob Pikus, owner Pikus Concrete, is pioneering commercial 3D concrete printing.

ABOUT PIKUS

Pikus Concrete is a well-recognized, forward-looking, commercial and industrial concrete contractor in the USA. Their ability to keep all aspects of structural concrete in-house sets them apart. Logically, Pikus is testing new technologies like 3D concrete printing. On their tour through Europe to purchase a printer they met experts from Sika, and finally found a suitable partner.

SIKA AG

Zugerstrasse 50 6341 Baar Switzerland www.sika.com

FURTHER INFORMATION

- Sika's solutions in 3D concrete printing
- Pikus Concrete
- Video 3D Concrete Printing – a new construction method