

# CONCRETE 3D PRINTING TECHNOLOGY

BUILDING TRUST



# TECHNOLOGY

**ADDITIVE MANUFACTURING OR 3D PRINTING** are already implemented in the fields of automotive, aeronautic, consumer products, medical, architecture or even food, has a slower implementation in the construction field mainly due to the large scales involved and the complexity of the physics and chemistry of the materials used.

Traditional concrete placing is the most economic construction method and as consequence 3D concrete printing should be competitive with traditional method to demonstrate its efficiency. This is precisely what Sika's technology is designed to achieve.

A fundamental change is taking place in construction, heralded by the digitalization evolution. This transition can

be only achieved with the knowledge of materials chemistry, process technology but also civil engineering and architecture to ease a successful and rapid implementation of environmental materials for 3D printing.

Construction sites are changing. Instead of building work being carried out entirely on site, structural modules are increasingly being pre-fabricated under

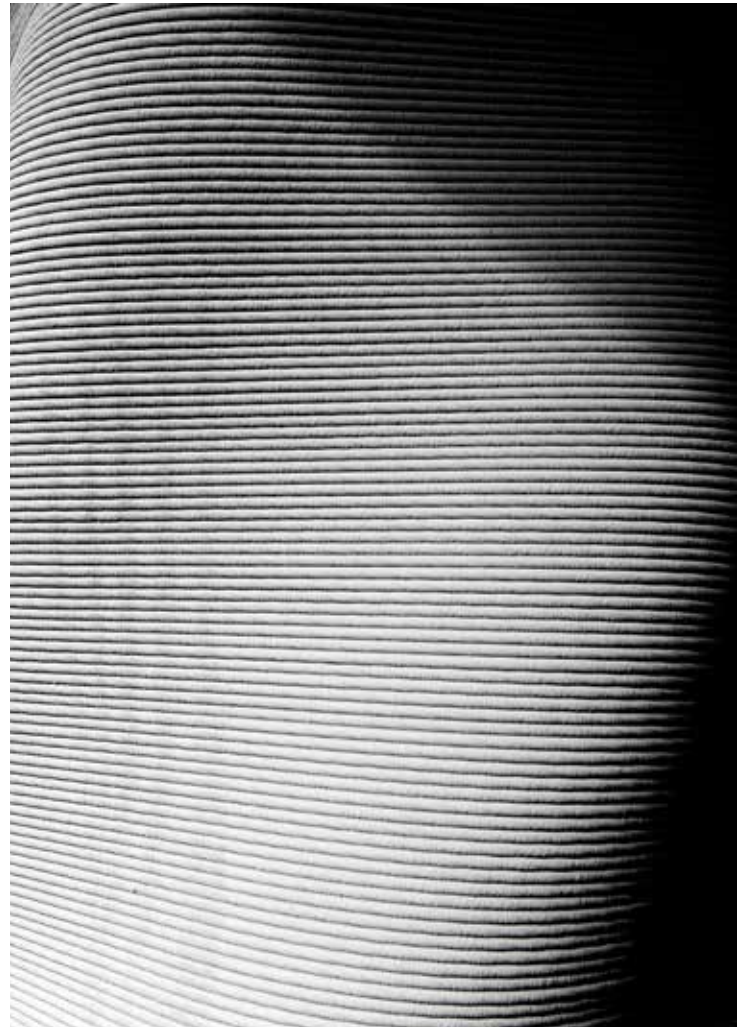
industrial and automated conditions and just assembled on the construction site, saving time and cost for better quality. To produce pre-fabricated modules such as bathrooms, floors, walls, roofs, or complete houses, solutions for the construction process as a whole are needed for the automated assembly of individual components such as seals, thermal or noise insulation systems.



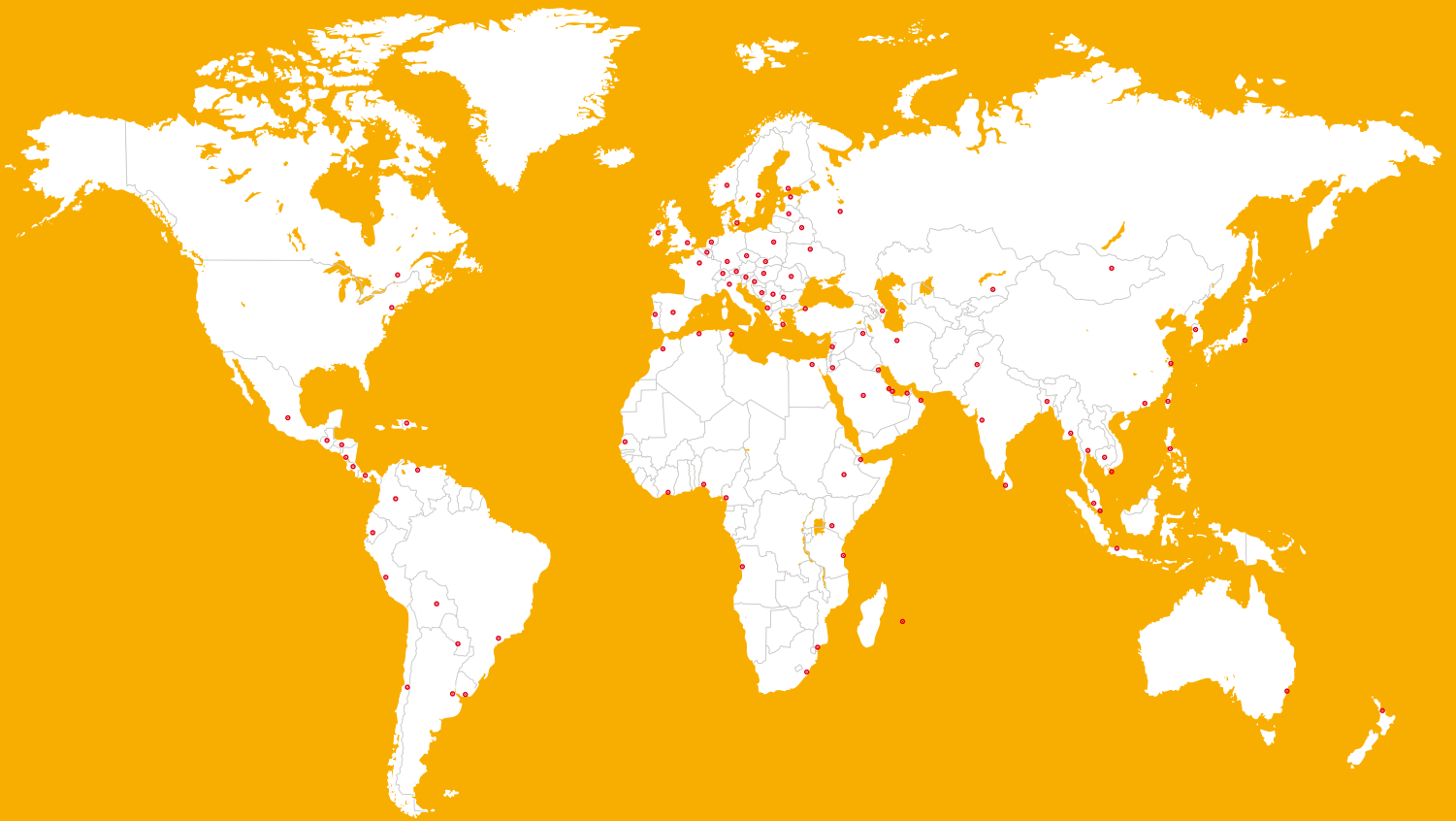
# SIKA SOLUTION

Thanks to its expertise, built up over decades, Sika is spearheading the digitalization and industrialization of concrete construction. Digitalization will be the driver for innovation and productivity in the construction industry. Now, thanks to the 3D printing of construction materials, processes can be now digitalized from start to finish raise standards and as consequence increase the entire construction speed and efficiency.

Sika offers a competitive industrial solution using 3D printing. With the Sika technology, it is now possible to print concrete rapidly, inexpensively, and precisely. Sikas expertise includes the material composition, the admixture technology for achieving flowability as well as rapid hardening. Also Sika has excellent know how about the printing equipment including the patented Sika printing head. With its experience and expertise Sika is the right partner to develop customer specific solutions with Sikas awarded 3D printing technology.



# GLOBAL BUT LOCAL PARTNERSHIP



## WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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