



YOUR TRUSTED PARTNER FOR
PRECAST CONCRETE PRODUCTION

DELIVERING THE RIGHT SOLUTIONS TO MEET YOUR CHALLENGES

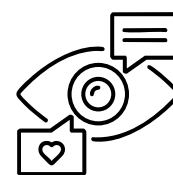
YOUR TRUSTED PARTNER

At Sika, we understand the daily challenges precast concrete producers face: delivering consistently high-quality products that win customer trust and generate new sales in a competitive market, while optimizing production efficiency, raw material use, and overall costs to protect margins. At the same time, increasing sustainability expectations require concrete solutions to reduce CO₂ emissions, energy consumption, and resource use – without compromising performance or productivity.

Sika offers solutions to optimize concrete mixes, from reducing water content and enabling high strength, high-quality surfaces and excellent durability of precast components, to supporting sustainability goals and optimizing hardening behavior for efficient and reliable production cycles.

Innovation is at the core of everything we do. Through our global, regional and local research and development centers, we continuously develop new technologies and improvements across every step of the precast production process. This ensures that we can address your challenges reliably, wherever you operate and whenever new demands arise.

With our global reach, comprehensive portfolio of innovative products, and expert services, Sika stands as a trusted leader and partner in precast concrete worldwide.



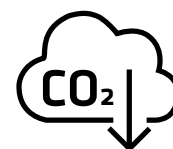
IMPROVING QUALITY AND AESTHETICS

Surface defects, inconsistent finishes, and variable concrete performance lead to rework, rejected elements, and increased production costs. Sika's precast manufacturing solutions support stable concrete properties and reliable surface quality, helping producers deliver consistent results across every production cycle.



MAXIMIZING PROFITABILITY THROUGH EFFICIENCY

Rising material, labor, and energy costs place increasing pressure on precast producers' margins, while shorter delivery times demand higher productivity. Sika's production-focused solutions support faster, easier manufacturing through optimized mix designs, reduced reinforcement effort, shortened curing time, reduced energy demand, and extended mold service life, helping producers reduce total cost per element while maintaining performance.



MEETING SUSTAINABILITY REQUIREMENTS

Precast producers are increasingly expected to reduce CO₂ emissions, conserve resources, and provide transparent environmental data. Sika supports more sustainable precast concrete manufacturing through resource-efficient mix designs, cement reduction and use of low-clinker cements, minimizing reinforcement steel, reduced curing energy, and credible environmental documentation.

YOUR CHALLENGES, OUR SOLUTIONS

YOUR CHALLENGES

FASTER AND EASIER PRODUCTION

Shorter cycle times and higher mold turns without sacrificing quality.

IMPROVING QUALITY AND AESTHETICS

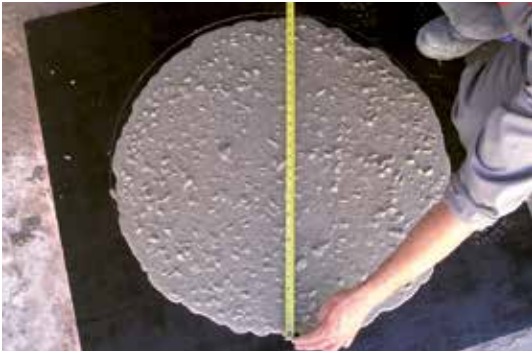
Surface defects and inconsistent finishes increase rework and costs.

TOTAL COST REDUCTION

Rising material and labor costs pressure margins.

REDUCING ENVIRONMENTAL FOOTPRINT

Clients demand solutions for resource savings and documented CO₂ reductions (EPDs).



OUR SOLUTIONS

Sika® ViscoCrete® Superplasticizer

- Faster and easier mixing and homogenization of concrete, even at low w/c ratios.
- Enables effortless complete filling of even challenging formwork geometries, in particular at easy and self-compacting concrete consistency.
- Maintains workability for a desired period (mostly 45–60 minutes), enabling smooth placement and faster casting.

- Excellent concrete distribution and release of air even at low w/c ratios.
- Cohesive mixes reduce honeycombing and bugholes.
- Low w/c ratio is the basis for a dense and highly durable concrete structure that withstands even the most demanding application conditions for longer.

- Water reduction / Lower w/c ratio enables:
 - (1) Total binder (cement) reduction and substitution by low-clinker cements and/or SCM without compromising strength.
 - (2) Strength increase enabling slimmer element dimensions.

- SCM: Supports slag/fly ash blends for lower clinker mixes with reduced GWP.
- Higher strengths resulting from lower w/c ratios allow for slimmer component geometries, thus lower carbon footprint.

SikaRapid® Hardening accelerators

- Accelerates early strength development, recovering stripping times even with low-carbon binders.
- Saves heating energy and time: Instead of raising curing temperatures, plants can reduce or completely eliminate steam or heat curing while keeping cycle times stable.

- Earlier demolding without damages to the concrete element.

- Faster strength gain enables:
 - (1) Cement reduction/substitution without compromising early strength.
 - (2) Less need for steam/heat curing, thus heating energy and time savings.

- Maintains cycle times with low-carbon binders without extra heat curing.

SikaFiber® Micro and macro fibers

- Replaces steel reinforcement. This can reduce the time required to prepare the steel reinforcement or even eliminate it entirely.

- More uniform stress distribution when using macro fibers compared to conventional mesh reinforcement.
- Microfibers prevent the formation of shrinkage cracks that reduce quality and, in the event of a fire, protect against dangerous spalling.

- Replaces secondary reinforcement meshes, cutting steel and labor.

- Cuts steel-related emissions.
- By eliminating steel reinforcement, the concrete cover no longer needs to be maintained, which allows for material savings and smaller component geometries.

Sika® Separol® Mold release agents

- Choosing the right release agent and applying it correctly reduces concrete adhesion and thus the required formwork cleaning effort.
- Automatic release agent spraying systems reduce application time and result in consistently high efficiency and quality.

- The tailored release agent type selection and application method results in clean and uniform concrete surfaces.
- Minimizing the amount of release agent material not only saves costs but also improves the quality and durability of the concrete surface.

- Keeps the formwork clean and extends its lifespan.

- Use of environmentally friendly and health-safe release agents and lowest possible consumption.

SikaEmaco® Repair mortars SikaRep® Pore filler Sikagard® Impregnations and coatings

- Concrete cosmetics that are easy to process and apply and that harden and/or dry quickly.

- If it is unavoidable or for special requirements: The right solution for every repair, cosmetic and concrete protection task.

- More customer satisfaction by concrete repair and cosmetic rework.

- Less waste.

Automated Sika Mix Design

- The app's quick and mobile analysis means faster decision-making, improving project timelines.

- More efficiently analyze sand and aggregates for higher quality concrete.
- Real-time concrete quality measurements.

- ShapeFactor analysis (via Sika Sand App) reduces cost.

- Generate verified GWP data and EPD for your specific concrete.
- Design of fit-for-purpose concrete with focus on long durability, low-carbon footprint and minimized water need.

SikaCircle

- Design of lean (resource efficient), reusable (modular), repairable and durable concrete.

- Aiming for energy-saving production with minimal quality variations, while avoiding rejects and returns.

- Lower raw material consumption and waste generation.

Impact

More predictable production, reduced delays, improved asset utilization, and lower energy costs.

Fewer cosmetic repairs, less grinding and patching, less rejections and improved client satisfaction.

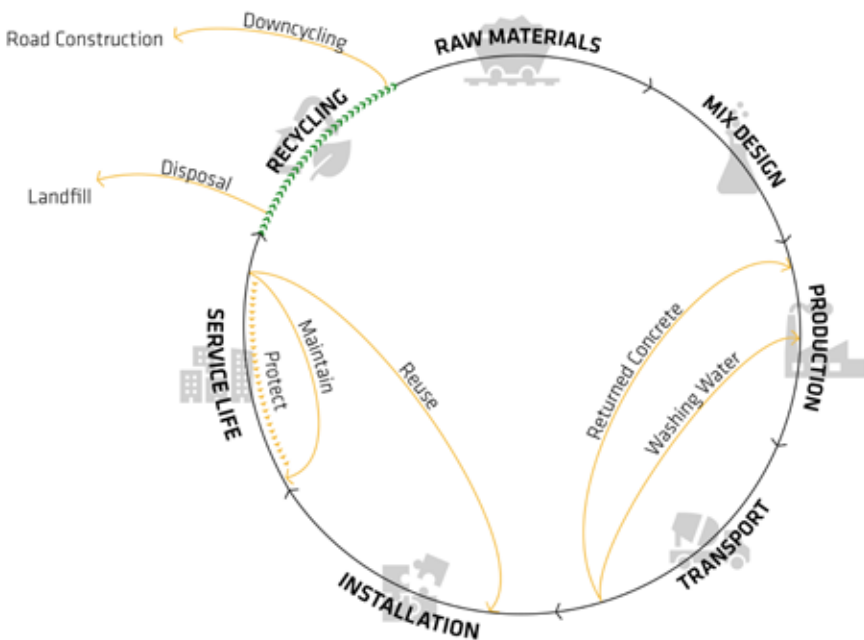
Lower material costs, streamlined reinforcement, and labor savings.

Achieve CO₂ reduction, avoid curing energy spikes, and win tenders with credible sustainability documentation.

SUSTAINABLY CIRCULAR

SikaCircle

At Sika, we are sustainably committed, innovative, impactful, and growing. Circularity has become essential throughout the entire lifecycle of concrete to meet sustainability goals. That's why we've developed SikaCircle – a holistic approach offering solutions that are circular, durable, low in greenhouse gas emissions, material resource- and energy-efficient, contributing to reuse and recycling of materials. It is smart, tailored specifically for our concrete producer customers. It covers the entire value chain of precast concrete.



For more information, please visit our webpage "Enable Circularity – Make Concrete More Resource Efficient"

SOLUTIONS FOR THE ENTIRE VALUE CHAIN OF CONCRETE

- Raw materials**
The processing of raw materials should be minimized as much as possible and the use of non-renewable raw materials should be avoided.
- Mix design**
Design of fit-for-purpose concrete with focus on long durability, low-carbon foot-print and minimizing water need.
- Production**
Aiming for energy-saving production with minimal quality variations, while avoiding rejects and returns.

- Transport**
Adjustment of fresh concrete properties to temperature conditions and transport distances to minimize returns.
- Installation**
Industrialization of concrete processing to increase productivity or efficiency.
- Service life**
The most important success factor for the circular economy is to keep products and resources in use for as long as possible. This leads to lower raw material consumption and waste generation.

Recycling
Recycling requires a lot of energy, so it should only be used if the concrete can neither be repaired nor reused. And only as a last option should concrete be removed from the circular economy for downcycling or disposal.



SikaCircle unites all our circularity-focused initiatives, encompassing not only cutting-edge admixture technologies, but also services, tools and equipment, digital apps, and more - supporting our shared sustainability objectives.

DRIVING DIGITALIZATION

IN PRECAST CONCRETE PRODUCTION

Digital transformation is reshaping precast concrete production. Sika supports this evolution with a comprehensive portfolio of advanced digital tools through SikaVision® – helping you monitor, collaborate, optimize, and predict key aspects of your precast concrete production.

Sika understands the complexity of decision-making across the precast concrete lifecycle and the importance of minimizing risk at every stage. Our technologies and experts provide reliable data for your business, enabling smarter collaboration and informed decisions.

SikaVision® represents our commitment to the future of construction. By integrating these digital tools and products, you can:

- **Enhance efficiency:** Streamline processes and accelerate product delivery
- **Make informed decisions:** Use reliable data for production
- **Maximize product performance:** Get the most out of your Sika solutions

Discover each of our digital tools and products in detail by exploring their dedicated webpages.



SikaVision® DIGITAL PRODUCTS & TOOLS



A GLOBAL COMPANY BUT A LOCAL PARTNER



FOR MORE INFORMATION ABOUT SIKA SOLUTIONS FOR PROJECTS:



WE ARE SIKA

Sika is a specialty chemicals company with a globally leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protection in the building sector and industrial manufacturing. Sika has subsidiaries around the world and develops innovative technologies for customers worldwide. In doing so, it plays a crucial role in enabling the transformation of the construction and transportation sector toward greater environmental compatibility.

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

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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