

GROUTING & CONCRETE REPAIR SOLUTIONS FOR INDUSTRIAL AND POWER APPLICATIONS



BUILDING TRUST

PRODUCTS, SERVICE AND SUPPORT ON EVERY CONTINENT

Sika is a leading supplier to power and industrial construction, rehabilitation and upgrade projects – power plants: coal fired and natural gas, nuclear, hydro and wind – as well as all types of industries, including chemical processing, petroleum and natural gas refining, processing, distribution and steel manufacturing.

Whether the need is grout for support and alignment of precision equipment, repair or strengthening of concrete, control and prevention of deterioration due to corrosion, heavy service flooring, waterproofing or large scale concrete placement in new construction or repair applications, the Sika experts and products support the industry's requirements cost effectively, reliably and sustainably. Because downtime is critical in shutdown applications, Sika offers a full range of products that enable fast return to service, without sacrificing performance. Sika is available globally, and we work to ensure that you will have local support, regardless of project location. An organized, dedicated, networked team of professionals make it easy to find solutions on every continent.















GROUTING SOLUTIONS

A balance of key physical properties in precision and industrial grouting materials is critical to effectively handling tensile, shear, compressive and dynamic loads for rotating equipment. This ensures effective load distribution when grouting base plates and machinery bases. The right grouting material for the application minimizes vibration, increases reliability and reduces maintenance, helping maintain your equipment's critical alignment.

TECHNOLOGIES

- Cementitious grouts with metallic or mineral aggregate. Specifically engineered to be highly fluid, nonbleed, non-shrink, with extended working times.
- Epoxy grouts designed for improved chemical resistance and high dynamic load capability.

APPLICATIONS

VOID AND DUCT GROUTING Segmental Bridges

- Segmental Bridges
 Collular Transmission 1
- Cellular Transmission Towers
 Precast Post Tensioned Structural Members

CHEMICAL ANCHORING

- Foundations
- Slabs
- Structural Components (precast or cast-in-place)
 PRECISION MACHINERY
 AND ELEMENT ALIGNMENT
- Industrial Facilities
- Transportation Infrastructure
- Commercial Buildings

* Approved for use in Nuclear Safety Related applications, Compliant with ASME NQA-1 and US NRC 10CFR50 Appendix B

PRECISION CEMENTITIOUS EQUIPMENT GROUTS

SikaGrout[®] 928 Extended Working Time Grout

A hydraulic cement-based mineral aggregwate non-shrink grout with extended working time. It is ideally suited for grouting machines or plates requiring precision loadbearing support. It can be placed from fluid to damp pack over a temperature range of 45 to 90° F (7 to 32° C). (Approved: NSF/ ANSI 61 Std for use with potable water)

SikaGrout® 885 Metallic-Aggregate Grout

A cement-based metallic aggregate grout with extended working time. It is ideally suited for grouting machines or plates requiring optimum toughness and precision loadbearing support, including machine bases subject to thermal movement.

SikaGrout[®] 713 high-Precision Grout

A cement-based grout specially formulated for early strength gain to allow for faster form stripping. Featuring specially graded mineral aggregates, it can be used at any consistency from fluid to damp pack for applications requiring precision support.

SikaGrout[®] 212

A ready to mix, free flowing, non-shrink, general purpose, cementitious grout with a unique 2-stage shrinkage compensating mechanism.

HYBRID PERFORMANCE EQUIPMENT GROUT

SikaGrout® 4316 High-Performance Grout

A unique grout that provides high early and ultimate compressive strengths over a wide variety of application and service temperatures. The superior performance of SikaGrout® 4316 lies in its novel hydraulic cement binder with applied nanotechnology and premium mineral aggregates which, when mixed with water, produces a flowable and pumpable grout that can be installed in temperatures ranging from 35 to 100° F (2 to 38° C).





PRECISION EPOXY EQUIPMENT GROUTS

SikaFlow[®] 648 High-Flow Grout

A high-strength, high-flow, low dust epoxy grout providing superior physical properties in high temperature applications. It offers high early and 7-day strengths for applications requiring fast turnaround, good chemical and crack resistance, outstanding flow characteristics and versatility of fill rates.

SikaFlow[®] 678 Deep-Pour Grout

A low exotherm, low dust, deep-pour epoxy grout. Can be placed in depths of up to 18" without extension or lifts.

SikaFlow[®] 649 High Performance

A high performance epoxy grouting material for support of heavy equipment. It ensures the proper transmission of static and dynamic loads to the equipment foundation.

SikaFlow[®] 668 Chock Grout

A three-component modified epoxy-resin based grout. It is used where high performance properties are required in less accessible spaces subject to thermal shock and high vibrations. It can be placed from 1/2-3" (12.5-76 mm) thick on a base-grout pour, directly to the concrete or steel to steel.

PRECISION EPOXY REPAIR GROUT

SikaFlow[®] 647 Machinery Grout

A modified epoxy resin grout, specially formulated for grouting structures and machinery where moisture and oil contamination are present. Suitable for pressure injection of grouted baseplates beneath compressors, cement mills, and other vibrating and rotating machinery. Can also be use as a binder to create a high strength epoxy mortar.

EPOXY GROUT IS USED TO SUPPORT:

- Compressors, generators, turbines, engines, pumps, fans, blowers and motors
- Rolling, stamping, grinding, crushing, boring, drawing, extruding and finishing mills and presses
- Crane rails, conveyors, gear and flued drives, sole plates
- Mixers, shredders, clarifiers, evaporators









CONCRETE REPAIR SOLUTIONS LONG-TERM INTEGRITY AND DURABILITY

Over time, corrosion and aggressive environmental influences can compromise durability and negatively affect the service life of concrete in power and industrial

facilities. Technologies from Sika are available to repair, protect and strengthen concrete in these harsh environments.



APPLICATIONS

- Sulfur Pit Repairs
- Secondary Containment Bays
- Equipment and Vessel Foundations
- Sump and Retention Basin Repairs
- Hyperbolic Cooling Tower Repair
- Clarifier Tank Repairs

TECHNOLOGIES

- Cementitious repair products which can be wet or dry spray applied, formed and poured or hand troweled that contain integral corrosion inhibitors
- Embedded galvanic anodes for corrosion control/mitigation
- Liquid, surface applied migrating corrosion inhibitors
- Latex and epoxy-modified anticorrosion coatings for rebar
- Methacrylate and epoxy binder resins for overlays, mortars and crack sealing

REBAR CORROSION PROTECTION AND SURFACE PREPARATION

Sikagard[®] P 8100 AP Resin and Primer

A single-component epoxy resin and metallic zinc rebar primer that actively resists corrosion by reducing anodic generation adjacent to the reinforcing steel.

Sika® Armatec®-110 EpoCem Bonding Primer

A cementitious epoxy resin compensated 3-component, solvent-free, coating material with corrosion inhibitor, used as bonding primer and reinforcement corrosion protection.

Sika® Ferrogard® 650/670/675

Embedded galvanic anodes added to reinforcing steel in structural repairs, will corrode sacrificially to mitigate corrosion in surrounding reinforcing steel.

FORM AND POUR REPAIR

SikaEmaco[®] S 466

One-component flowable, shrinkage compensated structural repair concrete with integral corrosion inhibitor recommended for pump and pour, horizontal, or formed vertical and overhead concrete repairs.

VERTICAL AND OVERHEAD SURFACE REPAIR

SikaEmaco[®] 488 CI Repair Mortar

Hand-applied or wet sprayed, shrinkagecompensated, fiber-reinforced structural repair mortar with integral corrosion inhibitor recommended for vertical and overhead repair of concrete and masonry, and repairs in federally inspected meat and poultry plants. It provides high early and ultimate compressive, flexural, and bond strengths, and is sulfate-resistant and freeze-thaw durable. (Approved: NSF/ANSI 61 Std for use with potable water)

RAPID FOUNDATION REBUILD

SikaQuick® Set 45 and SikaQuick Set 45 HT

One-component concrete and anchoring mortars available in two formulations: Set 45 for use in ambient temperatures below 85 °F (29°C); and Set 45 HT for use in ambient temperatures ranging from 85 to 100 °F (29 – 38 °C). Both formulations provide rapid high early strength and superior bonding with virtually no drying shrinkage. They are resistant to freezethaw cycles and de-icing chemicals. Material will not freeze at temperatures above -20° F (-29° C) when appropriate precautions are taken. Epoxy grout should not be used over the top of this surface.

CHEMICAL RESISTANT REPAIR

Sikagard® 170 CR

High-build, 100% solids novolac epoxy coating, with resistance to harsh chemicals, including 98% sulfuric acid. It can be applied by brush or roller as a topcoat over epoxy and polyurethane coatings or as a protective coating to untreated concrete and cementitious grouts.



CRACK REPAIR AND BONDING

Sikadur® 31 Hi Mod LPL

High-modulus, high-strength, structural, epoxy paste adhesive with extended pot life.

Sikadur[®] 32 Hi-Mod

A multi-purpose, 2-component, 100% solids, moisture-tolerant structural epoxy adhesive.

Sikadur® 32 Hi-Mod LP

A multi-purpose, 2-component, 100% solids, moisture-tolerant structural epoxy adhesive, offering a long pot life and contact time even at 100°F. (37.8°C)

Sikadur[®] 35 Hi-Mod LV

A high modulus, low viscosity, high strength, multipurpose epoxy grouting/ sealing/binder adhesive.

Sikadur® 52

2-component, 100% solids, moisturetolerant, epoxy adhesive. It is a lowviscosity, high-strength adhesive formulated specifically for grouting both dry and damp cracks.

Sikadur[®] Crack Repair Kit

Sikadur Crack Repair Kit is a two multicomponent, low viscosity, fast curing, easy to use, epoxy sealing system for the repair of cracks that occur in solid concrete and solid masonry substrates.



ADVANCED PILE ENCAPSULATION

SikaFlow[®] 6000 UW

A specially blended, three-component, 100% solids epoxy system, specifically designed for encapsulation, in both land and subsea applications.

SikaFlow[®] 6060FR Translucent Jackets

Marine grade FRP laminates, constructed of layers of E-glass woven roving and mat, that are custom molded to closely fit the element being protected. The jackets are translucent and UV stable so the progress of the grout installation can be monitored, yet they are not effected by the sun. The jackets remain in place as part of the all-polymer composite repair.

SikaFlow[®] Epoxy Pastes

Special two-component, underwater curing epoxy compounds for bonding FRP jacket seams and seals and for non-sag applications, such as topping-off encapsulations and underwater repairs.

Grout Handling Unit

A completely self-contained, air driven unit for batching, mixing and pumping SikaFlow 6000 UW Grout by the plural component method.

Benefits of the A-P-E process:

- Extremely durable
- Lightweight
- High strength
- UV and Chloride Resistant
- Custom Molded to Most Shapes
- Aesthetically Pleasing





GLOBAL BUT LOCAL PARTNERSHIP



WE ARE SIKA

With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has offices in 103 countries with over 400 manufacturing facilities and more than 33,000 employees worldwide. With annual sales of CHF 11.24 billion in 2023, our commitment to quality, innovation, and the environment as well as putting our customer's needs first, encompasses why Sika is the global leader in our industries.



Our most current General Sales Conditions shall apply. Please consult the Data Sheet prior to any use and processing © 2024 Sika Corporation, 14000488 rev 01/2024

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