



# SIKA SOLUTION FOR CEMENT INDUSTRY

TM REFURBISHMENT

BUILDING TRUST

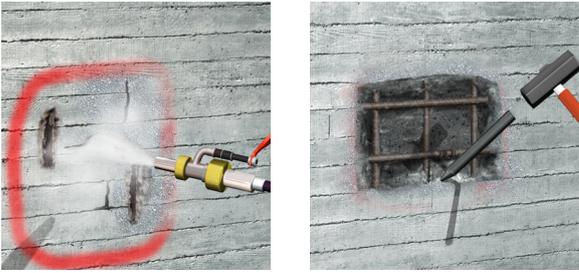


# SIKA SOLUTIONS FOR CONCRETE REPAIR

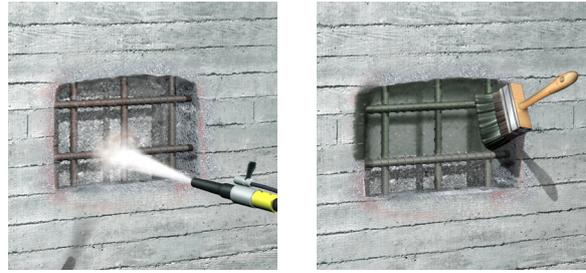
Concrete is the most commonly used building material around the world and it is often exposed to very harsh environments. Improving existing constructions to extend their life span has become a worldwide challenge and need. Sika dedicates itself to the sustainable solutions in repair, durable concrete protection and strengthening.

## Guidelines for Concrete Repair

### Step 1: Removal of Damage Concrete



### Step 2: Rust Removal of bars using Sika® Rustoff 100



### Step 3: Application of corrosion Protection layer Sika® Rustop/ SikaTop®-Armatec-108/ SikaTop®-Armatec-110 EpoCem®



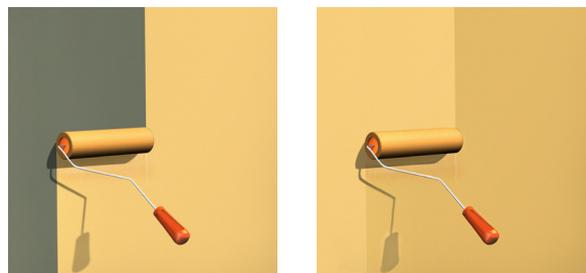
### Step 4: Application of Bonding Agent Sikadur® 32 LP/ Sika®-Hibond/ SikaTop®-Armatec-110 EpoCem®



### Step 5: Application of Repair Mortar Sika MonoTop® 122 F/ SikaTop®-122 HS/ SikaRep® Microcrete-3 UW/ SikaRep® Microcrete-4/ Sikadur® 41



### Step 4: Application of Concrete protection Solution Sikagard® XT/ Sikagard® 550 W Elastic/ Sikagard® PU UR



## Final Photos



# SIKA SOLUTIONS FOR STRENGTHENING

Over a period of time concrete structure require retrofitting and strengthening. The probable requirements are due to Corrosion of reinforcement, Increase in loads, Modification of codes, Modification of Structure Seismic Retrofitting and Excessive cracking of concrete. Sika® Carbodur® and SikaWrap® Composites are high strength materials bonded with structural epoxy resins and adhesive for strengthening purpose. They are available both as factory pul-truded plates (Sika® Carbodur®) and Fabric (SikaWrap®)

## Types of Strengthening with Sika® Carbodur® and SikaWrap®



**Flexural Strengthening**



**Shear Strengthening**



**Columns Strengthening  
(Confinement)**



**Sika® Wrap®**



**Sika® Carbodur®**

## Final Photos



# CRUSHING & GRINDING UNIT



## Problems

- Shearing of Bolts due to high impact during crushing
- Cracks in RCC structure due to heavy crushing impacts and vibrations

## Sika Solutions

- Bolt Grouting with Sikadur - 42 MP(IN)
- Crack repair of Column & Beam by Epoxy Injection Sikadur - 52 and Sikadur - 31
- Jacketing of Column & beam with SikaRep Microcrete - 4 over Epoxy Bonding Agent Sikadur - 32 LP

# REPAIR OF CLINKER SILO



## Problems

- Damage of RCC Surface due to high temperature and abrasion of Clinker on Silo internal surface during gravity falling

## Sika Solutions

- Rebaring & Corrosion protection treatment with Friazinc - R
- Recasting of internal Silo surface with Sika Grout - 214 TR to resist high temperature of Clinker and impact resistance

# PREHEATER BUILDING



## Problems

- Cracks in Column & beams of Preheater building due to very high load

## Sika Solutions

- Crack repair by Sikadur - 31 and Sikadur - 52
- Anti Corrosive Treatment with Sika RustOff - 100 and Fraizinc - R
- Patch Repair with Sika MonoTop-122F
- Column Jacketing with SikaRep Microcrete - 4
- Structural Strengthening of Column & Beam for Axial & Flexural Strengthening with Sika Wrap & Sika Carbodur

# CEMENT SILO



## Problems

- Crack in Silo Structure and Spalled concrete

## Sika Solutions

- Epoxy Injection with Sikadur - 52
- Anti Corrosive Treatment with Sika RustOff - 100 and Fraizinc - R
- Patch Repair with Sika MonoTop-122F
- Silo Strengthening with Sika Wrap & Sika Carbodur



## OH CRANES



### Problems

- Rail Track Damages
- Bolt Shearing off
- Crack in Girders

### Sika Solutions

- Grouting of Rail Track with Sikadur - 42 MP (IN)
- Epoxy Injection with Sikadur - 52
- Strengthening of Girders with Sika Wrap & Sika Carbodur

## OTHER STRUCTURES



### Problems

- Damaged Concrete

### Sika Solutions

- Sika Repair System

# ROAD AT CEMENT PLANT



## Problems

- Due to very high load truck movement, Cement Roads at Plant get damaged

## Sika Solutions

- Crack Repair with Sikadur-31
- Patch Repair with SikaTop 122-HS
- Recasting with SikaRep Microcrete-4
- Curing Compound during fresh construction

# TOWNSHIP - BUILDING REPAIR



## Problems

- Damaged RCC Building
- Leakage from Roof
- Poor Exterior due to Algae formation

## Sika Solutions

- Sika Repair System
- Exterior Crack repair with Sika Cracksil
- Exterior Coating with Sikagard - XT
- Roofing with Sika Cool Coat
- Waterproofing of Roof with Sika WP Shield

# OVERHEAD TANK



# Sika Solutions for Every Construction



Concrete



Waterproofing



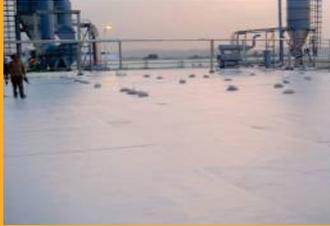
Refurbishment



Flooring



Sealing & Bonding



Roofing

## SIKA - THE CUSTOMISED SOLUTION PROVIDER

Sika's innovative ideas and expertise in evolving quality products has been a hallmark in the history of construction chemicals. For over hundred years Sika is consistently serving the construction industry with its pioneering technology and commitment.

### Sika India Pvt. Ltd.

501 & 502, B Wing,  
Lotus Corporate Park,  
Off. Western Express Highway,  
Goregaon East, Mumbai - 400063

### Contact

Tel: +91 22 6270 4038  
Fax: +91 22 6270 4039  
Email: [info.india@in.sika.com](mailto:info.india@in.sika.com)  
Website: [ind.sika.com](http://ind.sika.com)

**BUILDING TRUST**

