



REINFORCEKIT® BEAM



COMPOSITE REPAIR FOR DAMAGED BEAM



No size limitation

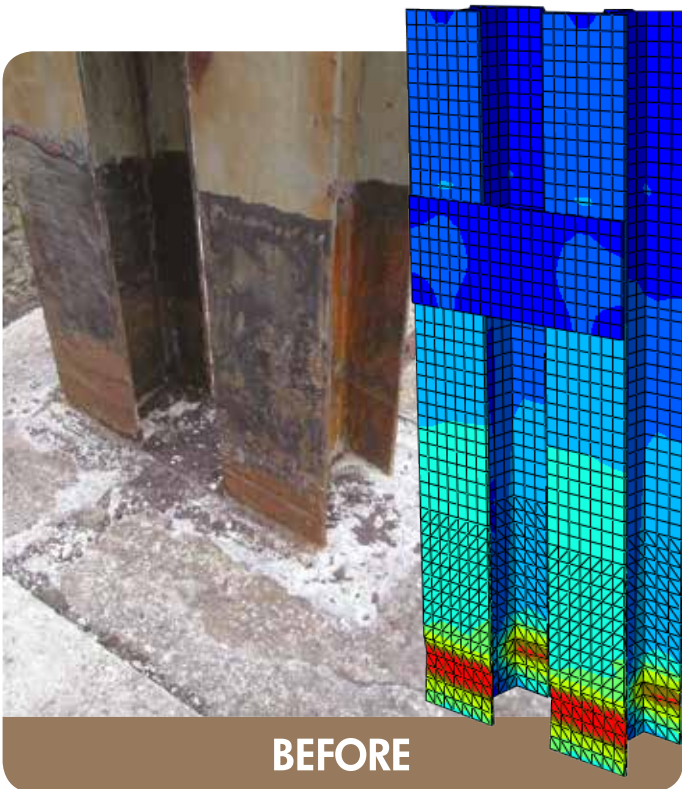


All structure designs

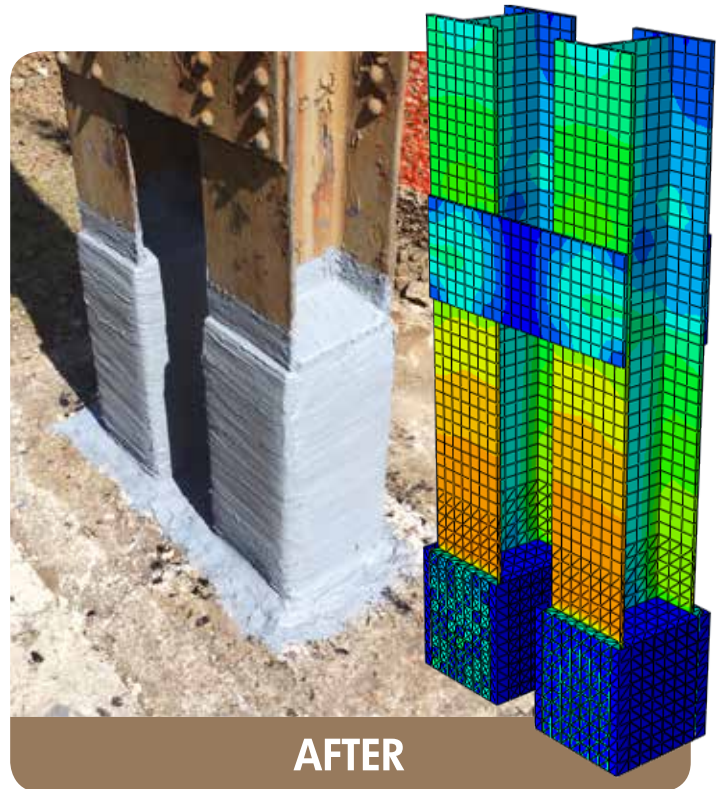


Onshore

REINFORCEKIT® BEAM design is performed using Finite Element Simulation



BEFORE



AFTER



INNOVATIVE REPAIR SOLUTIONS FOR YOUR INSTALLATIONS



REINFORCEKIT® BEAM is a product recommended to reinforce corroded structures. Designed for lasting 20 years minimum, this product can renovate a structure suffering from severe corrosion (up to 80% of corrosion).

REINFORCEKIT® BEAM is made of very high performance materials. Metal inserts are integrated on the defected structure by cold welding to give back the original mechanical resistance. Then the structure is wrapped with Kevlar® tape and 3X epoxy resin and recovered with specific anti-UV & impact protective coating.

REINFORCEKIT® BEAM HISTORY



Initially co-developed in partnership with SNCF (French National Railway Company) for Railway Industry to reinforce catenary supports, **REINFORCEKIT® BEAM** is suitable for all structure designs.

Since 2011 and after 2 years of testing (decohesion and mechanical tests ...), over a thousand of supports have been renovated successfully thanks to this original product.



USES

- Repair and reinforce structures
- Stop and renovate up to 80% of corrosion
- Restore structures integrity



APPLICATIONS

- Structures highly corroded
- All structure designs (beam, pole ...)
- All structure sizes



BENEFITS

- Installation without stopping traffic or production
- Long-term repair (20 years minimum)
- Cost-effective installation

REINFORCEKIT® BEAM IMPLEMENTATION STEPS



1

Surface preparation
Sa2½ / St3 and
roughness Rz > 60 µm



2

Metal inserts
preparation



3

Metal inserts
application



4

Kevlar® and epoxy
resin wrap



5

Impacts &
UV protection



TO GUARANTEE THE EFFECTIVENESS AND SUSTAINABILITY OF THE PRODUCT, THE INSTALLATION MUST BE PERFORMED BY 3X SPECIALISTS

3X ENGINEERING : 9, avenue Albert 2 - 98 000 MONACO
Phone : + 377 92 05 79 81 - Fax : + 377 92 05 72 71 - www.3xeng.com - info@3xeng.com