# Advanced Concrete Testing Technologies™

GIATEC SCIENTIFIC

# Giatec RCON™ – Quality Control of Concrete

RCON™ provides a reliable method based on electrical resistivity measurement for the quality control of concrete. The electrical resistivity is correlated well with important durability parameters such as permeability, diffusivity and, in general, the micro-structure characteristics of concrete. RCON™ is a unique device that utilizes variable frequency technique for investigating the micro-structural properties of concrete including the chloride diffusion, crack detection, setting time of fresh concrete, moisture transfer, and corrosion of steel reinforcement.


## RCON™ – Competitive Advantages

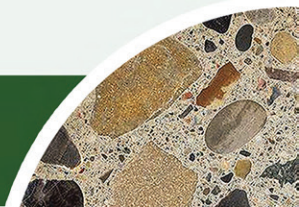
- Fast (<5 Seconds)
- AC measurement (1Hz - 30 kHz)
- Continuous measurement
- Adjustable sample holders
- Accurate
- Phase detection (0-180 degree)
- Stand-alone operation
- User-friendly software

## RCON™

... significantly increases the service life of new concrete infrastructure.

## Accessory – Fresh Concrete Probe

- Monitoring pore structure development with time
- Detection of concrete setting time
- Monitoring moisture and ionic transfer in concrete
- Real-time frequency sweep option



# Perma™ – Rapid Chloride Penetrability Test

Perma™ is a laboratory test device for measuring the electrical resistance of concrete against chloride penetration according to the standards such as ASTM C1202 (RCPT), AASHTO T277 and ASTM C1760. The measurement data can be used to estimate the chloride diffusion coefficient of concrete for the service life prediction and design of concrete structures as well as the durability-based quality control of concrete.


## Perma™ – Competitive Advantages

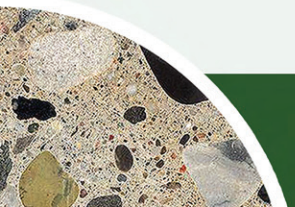
- Stand-alone operation
- Easy-to-assemble
- Accurate (±0.1 mA)
- Logging interval time: 1-10 min
- Automatic temperature control
- USB connection (optional)

## Perma™ – Compliance

- The only RCPT device in the market that meets the specifications of ASTM and AASHTO standard for sample cell.
- Perma™ has electrical safety certification for use in concrete laboratories.

## Perma™

... is an accurate device for testing the quality of concrete based on ASTM and AASHTO standards.



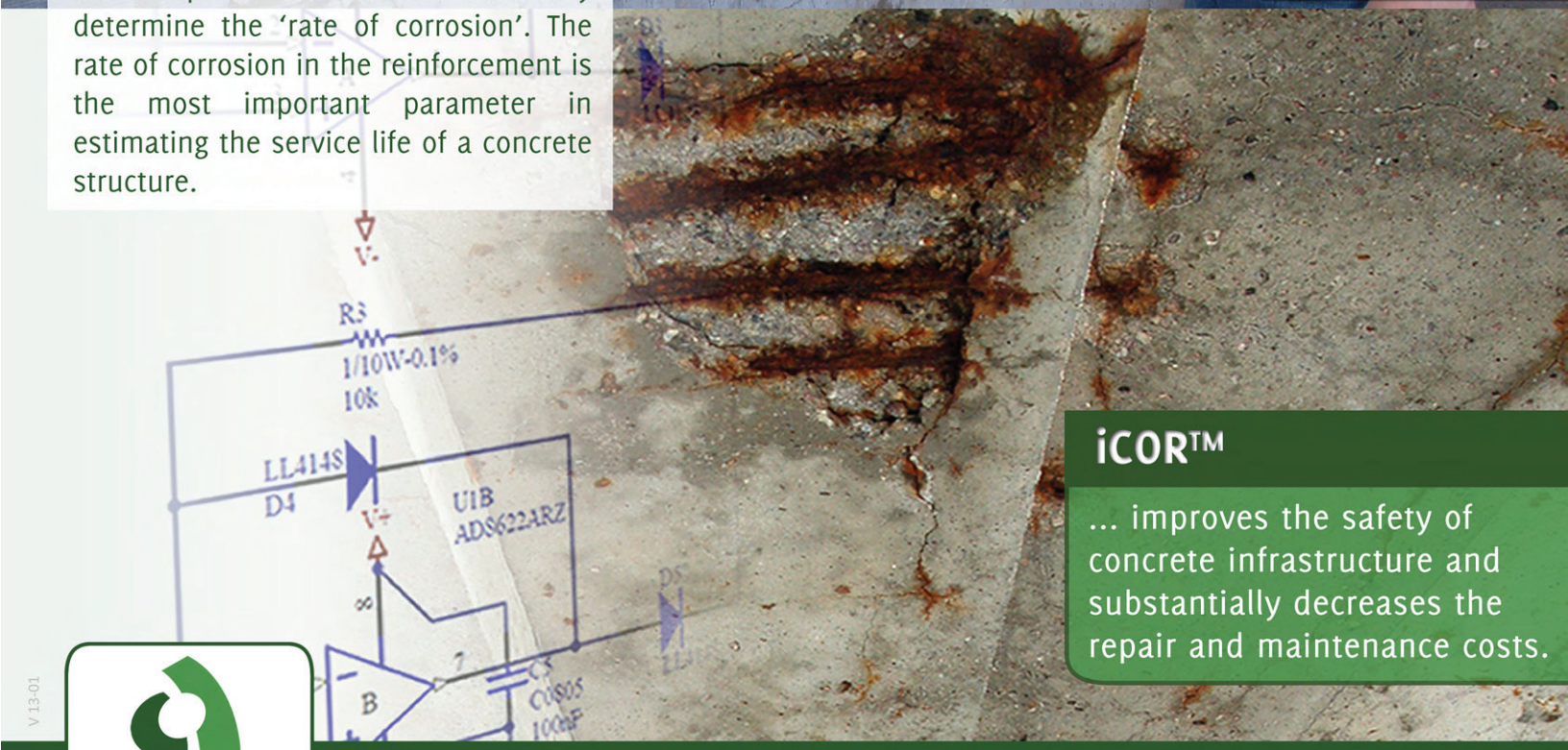
# iCOR™ – Accurate Condition Assessment

Giatec offers an innovative technology for fast, accurate and non-destructive corrosion detection in reinforced concrete structures. It can decrease infrastructure repair costs by the early detection of durability problems. iCOR™ is a revolutionary tool that can help the infrastructure inspectors better evaluate the state of deteriorations by obtaining accurate information about the rebar corrosion in concrete – the main cause of deteriorations in concrete structures.

Patent Pending

## Competitive Advantages

iCOR™ is a hand-held device that measures several parameters from the surface of concrete and then analyzes them using advanced inverse-modeling algorithms embedded in the device. These quick calculations accurately determine the 'rate of corrosion'. The rate of corrosion in the reinforcement is the most important parameter in estimating the service life of a concrete structure.




## iCOR™

... improves the safety of concrete infrastructure and substantially decreases the repair and maintenance costs.

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