



XCell™

NDT Device for Half-Cell Corrosion Mapping



Non-Invasive
Wireless
Technology



Accurate
Real-Time Data in
Seconds



Simple
&
Easy-To-Use

Overview

XCell is a non-destructive testing device for fast, reliable, and accurate detection and analysis of corrosion in reinforced concrete structures.

A probe is used outside the concrete to detect the location of corroded rebar. The probe then wirelessly communicates with the tablet provided and generates half-cell contour plots that illustrate the presence of rebar corrosion within the concrete structure.

This device is highly accurate, easy-to-use, and provides information in real-time within seconds. Data is collected, analyzed, and stored wirelessly within the mobile app on the tablet provided where it can easily be shared with team members.

Features

Software

- Real-time contour mapping of corrosion potential
- Automated temperature correction
- Fast data assignment to grid points
- Easy reporting and data exporting

Hardware

- Non-destructive and non-invasive wireless technology
- Single-person operation device
- Measurements obtained and evaluated within seconds
- Simple and easy-to-use with minimal training required
- Tablet included with free Android app
- Verification kit included

Data Interpretation

Measured Potential (mV)	Probability of Steel Corrosion Activity
> -200 mV	Less than 10%
-200 mV to -350 mV	Uncertain
< -350 mV	More than 90%



Applications

- Efficient and accurate detection of corrosion in reinforcement
- Evaluation of corrosion potential of rebar
- Rehabilitation and repair of concrete structures

Technical Specifications

Voltage Measurement Range

-750 to +250 mV / CSE

Measurement Resolution

0.1 mV

Sampling Rate

1s

Temperature Measurement Range

32 - 122°F (0 - 50°C)

Temperature Measurement Accuracy

0.9°F (0.5°C)

Standard

ASTM C876
RILEM TC 154-EMC

Data Communication and Analysis

Android app