

# CorroWatch

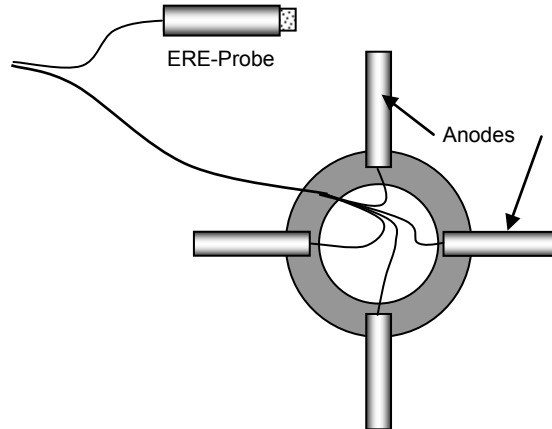
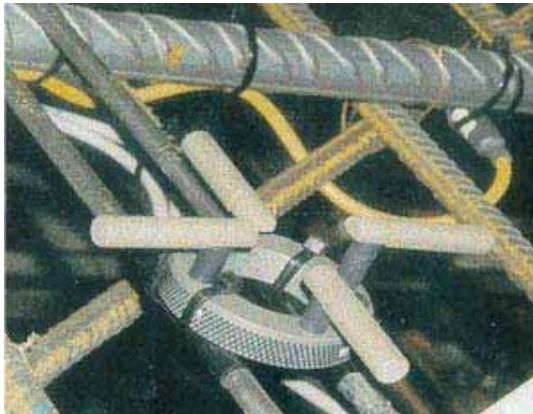
## Purpose

**CorroWatch** is a monitoring system for early warning of the onset reinforcement corrosion. It can also be used to estimate the time before corrosion of reinforcement begins so that corrective measures may be taken early enough to minimize repair costs.

## Principle

The **CorroWatch** is a multi-probe device consisting of four black steel bars acting as anodes and a noble metal as the cathode. The bars are positioned at different elevations and when cast into concrete, **CorroWatch** allows determination of corrosion activity as a function of cover distance.

In addition, the **ERE-Probe** (pg. 58) may be cast into the concrete for monitoring the potentials of the four black steel anodes of the **CorroWatch**.

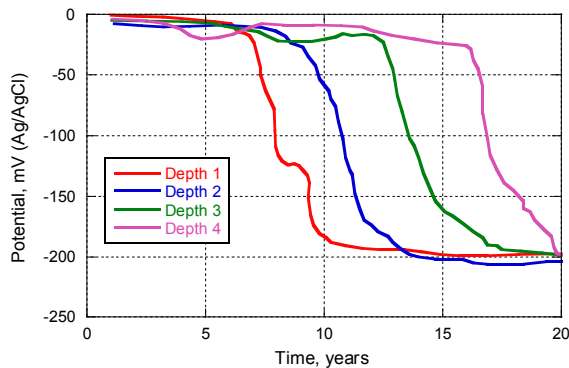


By monitoring the potential drop of the four anodes as a function of time, the gradual penetration of the depassivation front can be tracked and the service life can be estimated reliably, based on the actual depth of the reinforcement.

## Accuracy

In terms of measuring the ingress of the depassivation front, the **CorroWatch** is just as accurate as if the penetration were monitored using normal black-steel reinforcement.

## Testing Example



**CorroWatch** measurements from a marine structure showing the advancement of the depassivation front

## CorroWatch Ordering Numbers

| Item                                   | Order # |
|--|---------|
| <b>CorroWatch</b> with 3 meter cables  | CW-3    |
| <b>CorroWatch</b> with 5 meter cables  | CW-5    |
| <b>CorroWatch</b> with 10 meter cables | CW-10   |