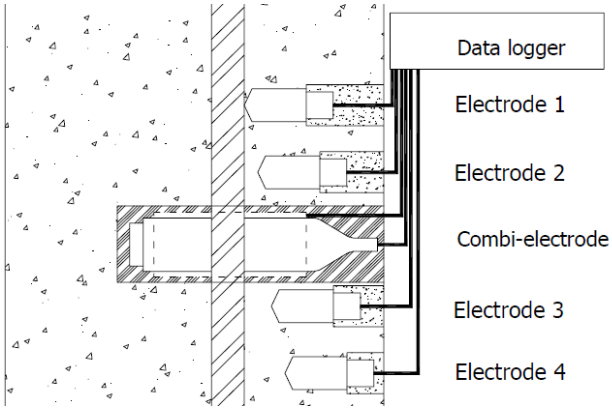
CorroRisk

The CorroRisk probe has been developed for corrosion monitoring on existing concrete structures. The chloride probe ensures that reinforcement corrosion can be predicted in good time before the actual initiation. The planning of the necessary maintenance can be optimised and the result is a lower cost of repair and fewer traffic obstructions. The CorroRisk probe is recommended to be used in all types of existing concrete structures, especially in aggressive corrosive environments and where visual inspection is difficult. CorroWatch is recommended for new structures. It is installed before casting the concrete.



Structure

The CorroRisk probe consists in the standard version of 4-8 measuring electrodes and 1 combi-electrode. The electrodes are made of the same material as the reinforcement. The combi-electrode consists of a titanium net and a reference electrode (ERE20), which has been developed earlier for use in concrete structures.

Measuring method

Initial corrosion is discovered when threshold values of the potentials or current have been exceeded. The potential of the equilibrium is measured between the combi-electrode and the individual electrodes in the concrete cover.

Installation

The CorroRisk is usually mounted in the cover layer between the concrete surface and the outer reinforcement layer. The electrodes are mounted in different but well-defined depths in the cover layer. All electrodes are mounted in a circle around the combi-electrode. The electrodes are supplied with a coaxial cable, which on the concrete surface is protected by a latticework. The cables are lead to a monitoring box, and e.g. a data logger

CorroZoa

The CorroZoa is a data logging Zero Ohm Ammeter designed for compatibility with Force's CorroWatch and CorroRisk chloride monitoring probe systems. The CorroZoa will measure half-cell potential, corrosion current, and temperature. The unit can either be used manually or automated and left as a data logger.

About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing

Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal

Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclinometers, Extensometers, Tiltmeters, Load Cells and Dataloggers