WebCorr
CORROSION CONSULTING
SERVICES

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• Consulting • Training • Expert Witness • Failure Analysis • Design Review • Corrosion Test • Modeling • Coatings • Materials • Cathodic Protection

WebCorr Corrosion Consulting Services Presents

Emerging Corrosion Control Technologies for the Repair and Rehabilitation of Concrete Structures

Date: As published on website Venue: As published on website

Course Overview

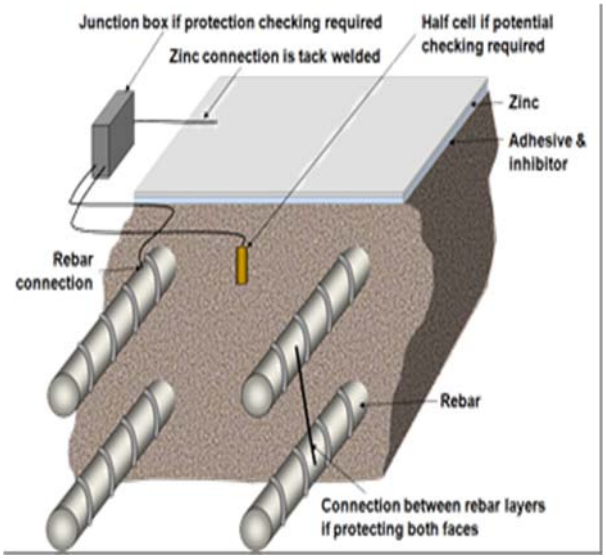
Technology always advances faster than the development of codes, specifications, and standards. Recent innovations in materials and corrosion control technologies have enabled designers and architects to meet performance-based specifications at lower life cycle cost. This one-day corrosion short course focuses on use of the state-of-the-art emerging technologies for repair and rehabilitation of bridges and other concrete structures. These technologies include: conductive concrete, press-on zinc hydrogel anode CP system, snap-on zinc mesh anode CP system, electrochemical chloride extraction, electrochemical realkalisation, cathodic protection, duplex stainless steels and alloys reinforcements. Most of these emerging technologies are also increasingly used for corrosion prevention in new concrete structures. Application examples and case studies will be presented to demonstrate the potentials of these promising technologies in the new millennium.

Who Should Attend

- Engineers, architects and designer who are concerned with corrosion of reinforced concrete structures;
- Building inspectors and surveyors who are interested in corrosion damages in concrete structures;
- Technicians and maintenance personnel who deal with repair and rehab of reinforced concrete structures;
- Facility owners and users who are concerned with corrosion and method of mitigation

Course Outline

1. Innovative Cathodic Protection Systems for Concrete Repair and Rehabilitation
   - 1.1 Sacrificial anode CP
   - 1.2 Pressure-sensitive Zinc-Hydrogel anode
   - 1.3 Snap-on zinc mesh anode CP system
   - 1.4 Impressed current CP
   - 1.5 Anode design
   - 1.6 Electrodes selection
   - 1.8 Installation
   - 1.9 Life expectancy
   - 1.10 Case study & Applications



2. Electrochemical Treatment Methods For Concrete Repair and Rehabilitation
   - 2.1 Principles of Electrochemical Treatments
   - 2.2 Reactions on the Anode
   - 2.3 Reactions on the Cathode
   - 2.4 Electrochemical Chloride Extraction (CE)
   - 2.5 Electrochemical Realkalisation (ER)
   - 2.6 Anode and Electrolyte Selection
   - 2.7 Time Required for CE and ER Treatments
   - 2.8 Lab and Field Results
   - 2.9 Comparison of Treatment Methods
3. Conductive Concrete
4. Stainless Steels and Alloys Reinforcements
   - 4.1 The fundamental difference between black rebar and stainless steel rebar
   - 4.2 Type of stainless steels and alloys
   - 4.3 Mechanical properties of stainless steels and alloys
   - 4.4 Corrosion resistance of stainless steels and alloys
   - 4.5 Cost comparison
   - 4.6 Case studies
   - 4.7 Applications
5. Ranking of the Emerging Technologies for Corrosion Control in Concrete Structures
6. Concrete-Compass: Software Tool for Corrosion Modeling and Life Prediction of Reinforced Concrete Structures

Course Registration

Please register online at www.corrosionclinic.com
Or use the form below (photocopies of this form may be used for multiple bookings).

Dr/Mr/Ms _____

Organization _____

_____

Contact Person _____

Contact Dept _____

Telephone _____ Fax _____

Email _____

Payment should be made by TT or online banking. Currencies in Australian Dollar, Canadian Dollar, US Dollar, Euro and Sterling Pound can be transferred directly without conversion. Our bank details can be found at the link below:

https://www.corrosionclinic.com/payment.html

Course Fee and Discount

Standard: $2,500 **Discount**: $2,250

The fee includes a hardcopy of course note, certificate, light lunch, coffee breaks each day during the course.

Discount applies to a group of 3 or more persons from the same organization registering at the same time, or early-birds making payment at least 8 weeks before the course commencing date.

Cancellation and Refunds

Cancellation or replacement should be conveyed to WebCorr in writing (email or fax). An administration charge of 50% of the course fee will be levied if the cancellation notice is received from 14 to 7 days before the course commencing date. No refund will be made for cancellation notice received 6 days and less. No refunds will be given for no-shows. Should WebCorr find it necessary to cancel a course, paid registrants will receive full refund. Refund of fees is the full extent of WebCorr's liability in these circumstances.

WebCorr has NACE certified Corrosion Specialist (#5047) providing customized in-house training, online and distance learning corrosion courses, corrosion seminars and workshops on corrosion, materials, metallurgy, paints and metallic coatings. Our corrosion courses are developed and taught by NACE certified Corrosion Specialist with over 30 years of practical experience in the field. Our training success is measured by your learning outcome.