

CATHODIC PROTECTION IN CONCRETE COURSE

for EN Certification according to EN 15257
Level 2 Concrete
Milan, Italy, October 23 - 27, 2017

Registration Form

Name _____

Family name _____

Company _____

Address _____

Zip Code _____ City _____

District _____ Country _____

Phone _____ Fax _____

e-mail _____

Signature _____

Notes _____

Invoice Header

Company _____

Address _____

Zip Code _____ City _____

District _____ Country _____

VAT number _____

Fiscal Code _____

VAT exempt _____

Registration form must be sent to:

PoliLaPP – CMIC Dept.

e-mail to polilapp-dcmc@polimi.it

AIM OF THE COURSE

APCE-PoliLaPP training courses are recognized for EN certification in compliance with EN 15257.

The training course offers every student a comprehensive career in cathodic protection for a professional development from level 1, 2 and 3 in the four sectors: soil, sea water, concrete and internal applications. Certification can be delivered after exams from CICIPND recognized authority (accredited by Accredia).

The CP level 2 – Cathodic Protection Technician course is an intensive 5-day course presenting CP technology, which prepares attendees for EN certification exams.

WHO SHOULD ATTEND

This course is designed for people with extensive CP field experience and a strong technical background in cathodic protection. Students should submit a preliminary application for certification at least 30 days in advance so prerequisites can be verified. Max number of attendees is 15.

PREREQUISITES FOR CERTIFICATION

EN 15257 standard specifies all prerequisites that must be met in order to register for the CP 2–Cathodic Protection Technician Course. A basic 40 h CP course, including the fundamentals of electricity, corrosion and coating, cathodic protection and measurement techniques, safety issues and applicable standard related to cathodic protection, is required. Two-year experience on CP in concrete is required. Proof documentation must be provided.

CERTIFICATION EXAMS

Certification exams will take place on **October 28th** for the level 2 concrete also for students attending the course, given previous application and possession of prerequisites.

Certification is managed by CICIPND, for details please contact info@cicpnd.it.

APCE

ASSOCIAZIONE PER LA PROTEZIONE
DALLE CORROSIONI ELETTROLITICHE



POLITECNICO
MILANO 1863



DE NORA

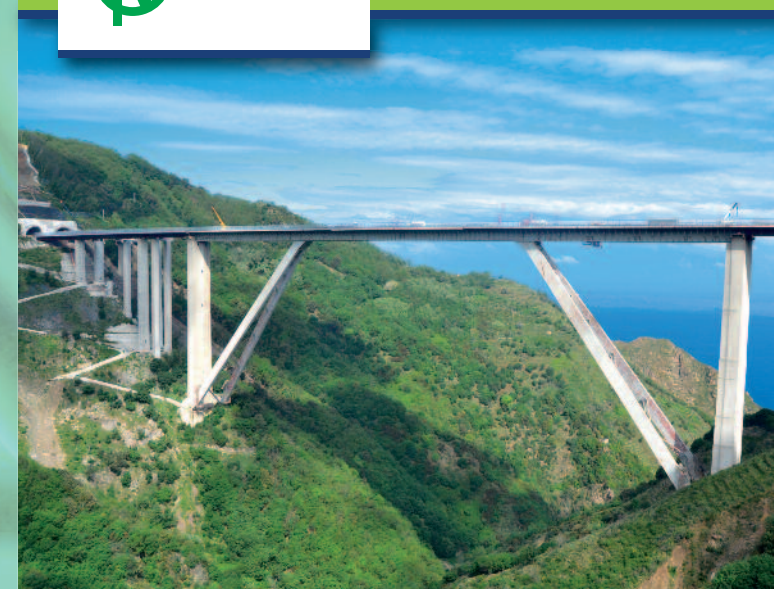
APCE
and

POLITECNICO DI MILANO
(PoliLaPP)

Department of Chemistry,
Materials and Chemical
Engineering “Giulio Natta”
(CMIC)

in cooperation with

DE NORA



CATHODIC PROTECTION IN CONCRETE

4TH EDITION

for EN Certification according
to EN 15257, Level 2 Concrete

MILAN, ITALY, OCTOBER 23 - 27, 2017

at

Politecnico di Milano, Dept. CMIC “Giulio Natta”,
Via Mancinelli, 7 – 20131 Milan, Italy

DESCRIPTION

The Cathodic Protection in Concrete Course is an intensive 5-day course that focuses on the principles and procedures for CP in concrete. The course discusses the design factors, CP set-up, commissioning, monitoring and operating procedures. Topics of the course are in compliance with EN 12696 and NACE RP0290. The course involves lectures and in-class discussion and practice.

PROGRAM OF THE COURSE

Introduction

Aim of the course and planning

Metallic materials used in concrete

Properties of concrete (outline)

Metallic material used in reinforced and pre-stressed concrete structures

Corrosion of reinforcement in concrete

Carbonation-induced corrosion

Chloride-induced corrosion

Electrochemical aspects

Prevention of corrosion in concrete

Concrete quality

Additional protection methods

Electrochemical techniques

CP in concrete

Principles and types of CP systems in concrete

Preliminary investigations

Concrete visual inspection

Measurement of concrete parameters

Measurement of potential and potential mapping

CP Design

Selection of the CP system

Preparation of the design specification

Reporting and issuing of technical documents for the CP design

CP Set up

CP system components. Anode. Feeding systems.

Cables. Junction box. Power supplies.

Monitoring system: selection of reference electrodes

Operating of CP Systems

Welding

Electrical continuity check

Execution of electrical measurements

Data reporting

CP Testing and Commissioning

Initial energising

Initial performance assessment and adjusting

Preparation of the report

CP Monitoring

Reference electrodes in concrete

Intervals and procedures

Measurements: potential, potential decay, voltage

Preparation of the technical report

Maintenance of CP systems

Intervals and procedures

Verification of the efficiency of components of the CP systems

System review and technical report

TRAINERS

Experienced professors and technicians from university and industry. List of trainers will be available.

TEXTBOOK AND REFERENCES

- L. Lazzari, P. Pedefferri, *Cathodic Protection*, Polipress Ed., Milan (IT), 2005
- EN 15257 standard
- Presentation booklet

PAYMENT

Prepayment is required; nominations cannot be accepted.

Fees and registration form must be received 30 days prior the start date of course.

Confirmation will be sent when payment is received with your completed registration form.

COURSE REGISTRATION FEE:

APCE member: € 1.400,00

+ 22% VAT (only for Italian companies)

non APCE member: € 1.900,00

+ 22% VAT (only for Italian companies)

COURSE FEE PAYMENT

bank transfer to:

APCE Service S.r.l.

Via G. Gozzadini, 11

40124 Bologna - IT

IBAN: IT 15 0 05034 12113 0000 0000 0302

SWIFT: BAPPIT21C15

Specifying: NAME - CP in concrete 2017

CANCELLATION AND REFUND POLICY

In case of written cancellation before October 6th 2017, 70% of the paid course fee will be refunded. The retained 30% covers incurred administrative expenses. If cancellation is notified after October 6th 2017 or if participant will not attend the course, 100% of the course fee will be withheld.

CERTIFICATION EXAMINATION

Exams for certification can be taken after the course at CICIPND authority.

For details and payment please contact: CICIPND at info@cicpnd.it.

Certification fee: € 800,00

+ 22% VAT (only for Italian companies)

CERTIFICATION EXAM PAYMENT

bank transfer to:

CICIPND Servizi S.r.l.

Via C. Pisacane, 46

20025 Legnano MI

IBAN: IT24 L055 8420 2030 0000 0001 227

SWIFT: BPMIITMMXXX

Specifying: NAME – EXAM CP in concrete 2017