SEGCORR
Corrosion & CP Specialists

JOHN PAUL MARIA SEGERS

Chartered Engineer (CEng) | Corrosion & Cathodic Protection Specialist

PROFESSIONAL SUMMARY

Distinguished Chartered Engineer and BS EN ISO 15257 Level 5 Cathodic Protection Expert with 29 years of global experience driving infrastructure rehabilitation, asset life-extension, and comprehensive engineering design.

An international authority in the diagnosis, detailed design, and electrochemical remediation of corrosion-related deterioration in steel-in-concrete, buried pipelines, and immersed infrastructure.

Possesses a proven track record of producing complete Front-End Engineering Designs (FEED) and detailed project designs, as well as providing authoritative third-party verification of designs executed by other engineering firms.

Leveraging this extensive technical tenure and contributions to British and international standards committees (BSI GEL 603) to expand into independent dispute resolution, technical auditing, and emerging expert witness services.

CORE TECHNICAL CAPABILITIES FOR DISPUTE RESOLUTION

- Detailed Design Production & Front-End Engineering Design (FEED)
- Third-Party Design Verification & External Compliance Auditing
- Forensic Engineering & Structural Deterioration Diagnosis
- Impressed Current (ICCP) & Galvanic Cathodic Protection (GACP) Systems
- DC Transit Stray Current Interaction & Control Engineering
- Regulatory Compliance & International Standards Interpretation

PROFESSIONAL REGISTRATIONS & CREDENTIALS

- BS EN ISO 15257 Level 5 Cathodic Protection Expert (Reinforced Concrete)
- BS EN ISO 15257 Level 4 Cathodic Protection Specialist (All Sectors)
- Chartered Engineer (CEng) | Engineering Council UK
- Fellow (FICorr) | Institute of Corrosion
- Fellow (FIMMM) | Institute of Materials, Minerals and Mining
- AMPP NACE Corrosion Specialist & Cathodic Protection Specialist

PROFESSIONAL EXPERIENCE

Director & Principal Consultant | SegCorr Ltd, UK | 2016 – Present

- Produce comprehensive, detailed designs and Front-End Engineering Designs (FEED) alongside complex diagnostic assessments for global impressed current and galvanic CP systems.
- Deliver authoritative third-party verification, structural compliance auditing, and independent technical reviews of CP system designs generated by external engineering firms.
- Formally expanding corporate capabilities to offer independent expert witness services, technical litigation support, and third-party authority reviews for construction disputes.
- Conduct rigorous independent investigations into materials compliance, failures, and installation deficiencies.
- Consulted on landmark engineering projects, including complex DC Metro stray current interaction control for atmospherically exposed concrete abutments.
- Author and deliver CPD-accredited training on the design and fundamentals of cathodic protection for steel in concrete.

Technical Specialist – Corrosion & Cathodic Protection | Halcrow / CH2M, UK | 2006 – 2016

- Led forensic engineering investigations into structural deterioration across high-value marine, transit, and highway infrastructure.
- Formulated detailed designs and verified sustainable, long-term life-extension systems using impressed current CP for deteriorating M1 motorway bridge half-joints.
- Managed full-lifecycle specifications, materials validation, installation audits, and pre-commissioning assessments for nationwide asset owners.
- Chaired the Midland Branch of the Institute of Corrosion, setting industry benchmarks for professional development and compliance.

Project Engineer | BAC Corrosion Control Ltd, UK | 2003 – 2006

- Executed engineering detailed designs and supervised site construction for advanced cathodic protection installations across buried, marine immersed, and reinforced concrete (RC) infrastructure.
- Formulated strict project method statements, diagnostic site-testing protocols, and rigorous quality assurance workflows to streamline complex project deliveries.

Project Engineer | Corrosion Control Services Limited, UK | 2001 – 2003

- Developed detailed designs for cathodic protection and corrosion mitigation systems for marine assets and RC structures.
- Conducted performance verification, regulatory baseline logging, and targeted engineering monitoring of operational corrosion management assets.

Site Project Manager | Corrosion Service Company, Dubai, UAE | 1999 – 2000

- Directed on-site engineering crews executing corrosion control operations under harsh environmental parameters and accelerated timelines.

Junior Engineer | Craig Stevenson and Associates, Cape Town, South Africa | 1997 – 1999

- Supported diagnostic site testing, data collection, and baseline reporting for senior consulting corrosion experts.

EDUCATION & ACADEMIC APPOINTMENTS

- MSc in Corrosion Control Engineering | University of Manchester, UK
- National Diploma in Metallurgical Engineering | Technikon of Witwatersrand, South Africa
- Visiting Lecturer | University of Leeds & University of Birmingham (2010 – Present). Delivers advanced curriculum on the electrochemical treatment and CP of steel in concrete for MSc and MEng Civil Engineering programs.
- Historical Course Instructor & Examiner | Institute of Corrosion (ICorr) for BS EN ISO 15257 professional qualifications.

COMMITTEES & KEY PUBLICATIONS

- BSI Subcommittee GEL 603: Active Member driving the review and formulation of British and International CP standards.
- Corrosion Prevention Association (CPA): Technical Committee Member reviewing standard code revisions.
- Key Publication: “Sustainable Life extension of deteriorating M1 motorway bridge half joints using impressed current cathodic protection” – European Bridge Conference (2015).
- Key Publication: “DC Metro Interaction Control of Atmospherically Exposed Reinforced Concrete Abutments Using Embedded Galvanic Anodes” – Ceocor Conference (2018).