Welkom to the Cathodic Protection presentation

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Speaker: Henk Roest

Agenda

- What is Cathodic Protection (CP)?
- Application of CP
- Types of CP
- Active CP for concrete
- Working of ICCP

What is Cathodic Protection (CP)?

- Cathodic Protection (CP) is a method to prevent corrosion and rests on the principle of lowering the current of the object subject to protection.

Application of CP

- Ships
- Tunnels & Viaducts
- Buildings
- Windmills
- Pipelines
- Tankparcs
- Quay walls
- Sheet piles
- Offshore platforms
- Etc.

Types of CP

- Galvanic cathodic protection
  - Passive
  - Sacrificial anodes

- Impressed Current Cathodic Protection
  - Active
  - Elektronic anodes

Galvanic cathodic protection

- Abbreviation (GCP)

- Advantages
  - Quick
  - Simple
  - Relative cheap

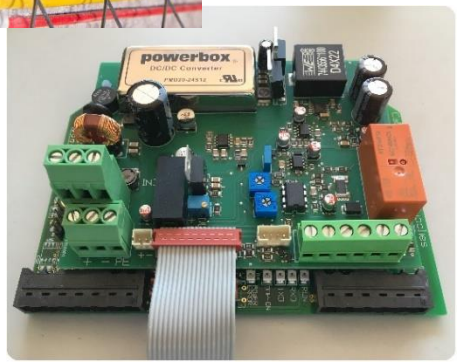
- Disadvantages
  - Uncontrollable
  - Maintenance

Impressed Current Cathodic Protection

- Abbreviation (ICCP)

- Advantages
  - Controllable
  - Feedback
  - Durable

- Disadvantages
  - Installation costs
  - Consumes energy
  - Wiring

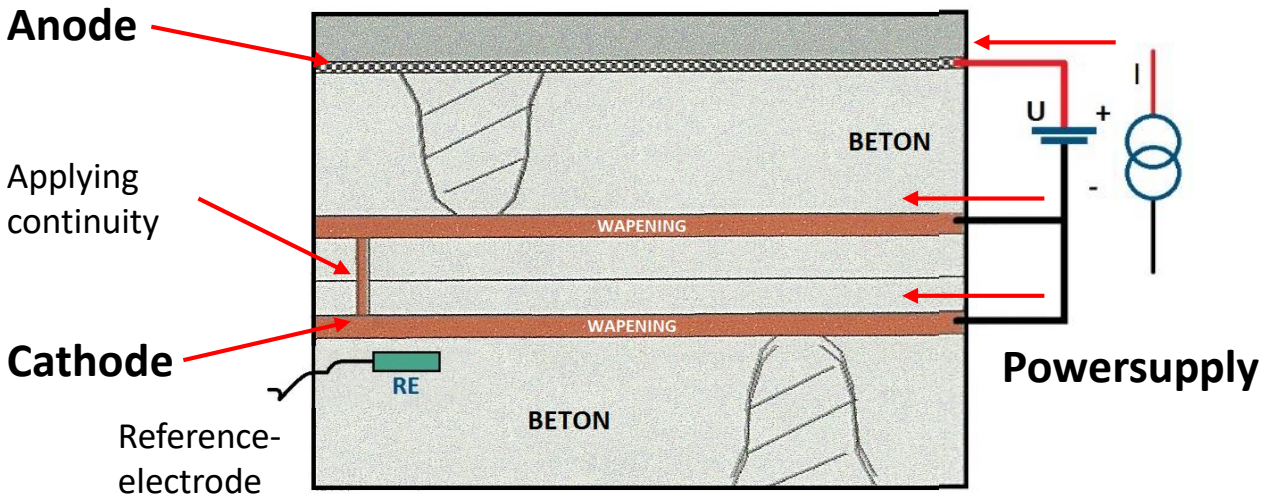


Active CP for concrete

- Stages of corrosion of rebar in concrete:
  - Brownish drops or pits in concrete
  - Red brown or dark stains on concrete
  - Cracks in croncete
  - Crumbled pieces of concrete
  - Visible rebar, often corroded or partially decayed

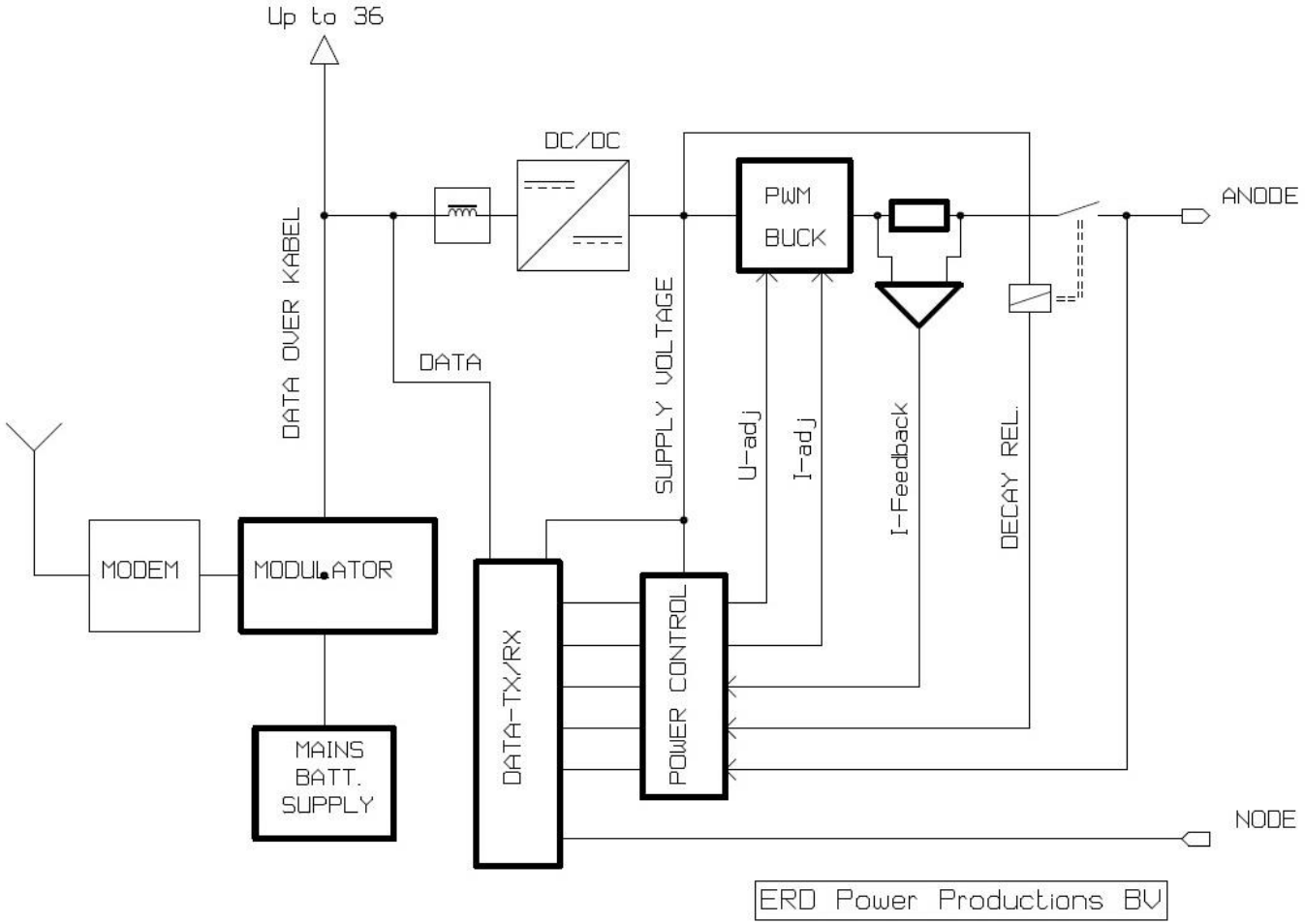
Working of ICCP

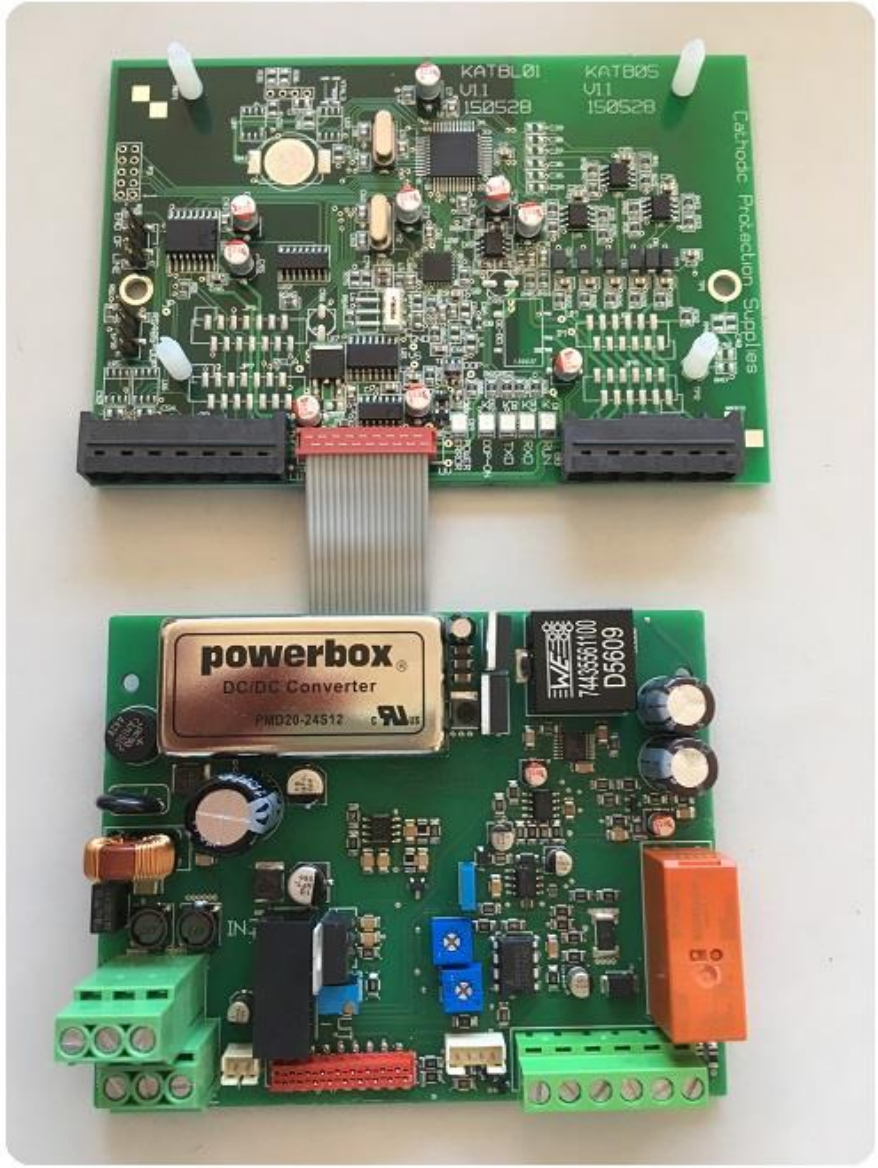
- Working of ICCP on concrete structures



Principe KB-installatie

Working of ICCP





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