PERMANENT REFERENCE ELECTRODES Polarisation Probes / Test Coupons

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German Cathodic Protection



Polarisation Probes

General

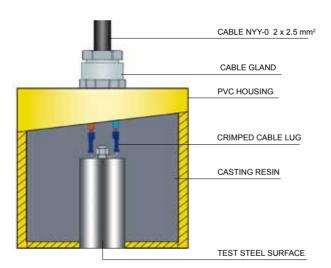
The polarization probe is used where an appreciable voltage drop (IR - drop) in the soil is present. This is due to the flow of current in interconnected, protected pipelines or objects or due to galvanic currents or stray currents, because of contacts between steel/concrete and steel/soil in industrial plants.

The probe is buried close to a pipeline, in the same soil and connected to a test station.

Type: GCP-PB 1.0 Test surface area: 1.0 cm² For protective objects with very small areas of coating damages like: well coated pipelines

Type: GCP-PB 10.0 Test surface area: 10.0 cm² For protective objects with small areas of coating damages like: bad coated pipelines or plant areas etc.

Type: GCP-PB 72.0 Test surface area: 72.0 cm² For protective objects with large areas of coating damages like: very bad coated pipelines or plant areas etc.



Type: GCP-TC 1.0 Test surface area: 1.0 cm² For protective objects with very small areas of coating damages like: well coated pipelines

Type: GCP-TC 5.0 Test surface area: 5.0 cm² For protective objects with small areas of coating damages like: bad coated pipelines or plant areas etc.

Type: GCP-TC 10.0 Test surface area: 10.0 cm² For protective objects with large areas of coating damages like: very bad coated pipelines or plant areas etc.

Housing	PVC
Temperature range	0° C to 55° C
Test surface material	Steel
Connecting cable	NYY-0 2 x 2.5 mm ²



Housing	PVC
Reference electrode	Zn 99.99 %
Potential refering to H ₂ - electrode	-0.77 V
Temperature range	0° C to 55° C
Test surface material	Steel
Connecting cable	NYY-0 4 x 2.5 mm ²

Test Coupons

General

Coupons are one of a valuable tool in determining the effectiveness of cathodic protection. Cathodic protection adequacy can be obtained by using coupons of the same metal as that of the protected structure. These are electrically connected to the protected structure. The coupons should be placed where they can receive the same exposure to cathodic protection current as does the structure. In connection with a permanent reference electrode installed close to the test coupon the real polarisation potential of the defined test surface can be determined.

