

Corrosion Coupon

This coupon is a metal specimen with a known surface area and material composition. It is electrically connected to the protected structure, such as a pipeline, via a test station. By simulating a coating defect (exposed iron) on the pipeline, it allows technicians to measure the instant-off potential without disrupting the operation of the main structure. This eliminates IR drop errors in the soil and yields accurate true protection potential data.

KEY FEATURES

1. Eliminates IR drop error
2. Realistic coating holiday simulation
3. Easy installation & maintenance
4. Multi-functional
5. High sensitivity



PRODUCT SPECIFICATIONS

Parameter	Typical Options	Remarks
Material	Q235/Q345/X52/X60/X65/X70	Can be customized
Exposed Area	1cm ² (AC stray current) 6.5cm ² /10cm ² (general DC) 100mm×50mm (weight loss)	Area accuracy directly affects current density calculation
Shape	Circular/square	Concentric design minimizes measurement distance, eliminates IR drop
Common Plate Size	30×50mm, 40×60mm, 50×80mm, 60×100mm	Rectangular plate
Thickness	2mm/3mm/4mm/5mm	Ensures mechanical strength and durability
Overall Encapsulated Component	Cable: Copper core, PVC, 1.5-4mm ² Enclosure: PVC Sealing: Epoxy resin	Integrated structure with housing and lead wire

PRODUCT SPECIFICATIONS

1. Evaluation of cathodic protection performance on pipelines
2. Online corrosion rate monitoring
3. Electrochemical testing (e.g., polarization curves, LPR, EIS)
4. Oil & gas, chemical, water treatment industries
5. Offshore and buried pipeline structural health monitoring