



Over 5,000 km of soil resistivity survey completed in the last 10 years and more than 100 successfully completed projects

What do you do with the information?

Soil resistivity has a direct and indirect impact on almost everything within a cathodic protection system whether its impressed current or sacrificial anode type, it is a very large factor in determining the design of AC Mitigation systems. This information is used to anticipate CP system lifespan, structure CP current needs and AC Mitigation system requirements, size of the anode bed, anode bed spacing and power supply size.

And that's the short list.

Where is cathodic protection used?

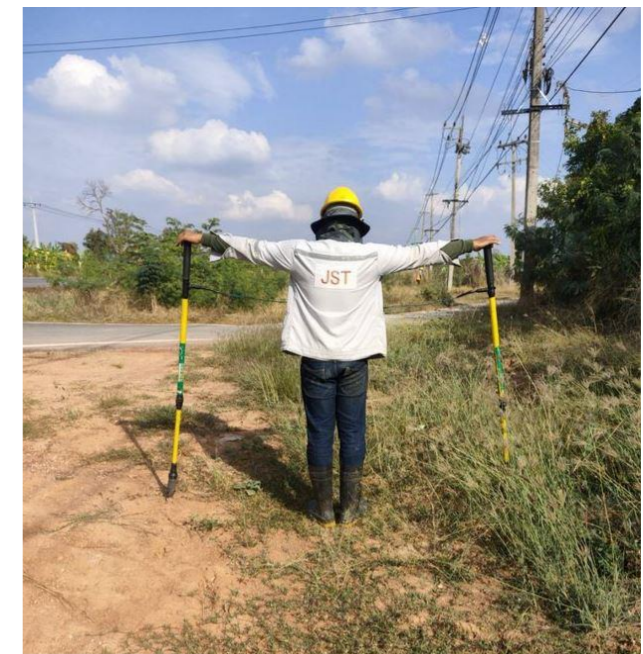
There are many diverse applications for cathodic protection. Many of them are happening all around, usually operating silently in the background. A few examples of these applications are:

How do we test the soil resistivity?

On the ground, in-situ resistivity testing is performed using the Wenner 4-Pin Method in accordance with ASTM G57. This test method uses four metallic pins driven into the soil in a straight line at equidistant spacing. A ground resistance tester is used to discharge current usually alternating into the soil from the two outer pins. As the electrical current flows between the two outer pins a voltage gradient is formed in the soil proportional to the average resistance of the soil. The voltage drop between the two inner pins is measured, and the average resistance of the soil down to a depth equal to the pin spacing is reported by the ground resistance tester. Performing multiple measurements at different surface spacings provides a relatively accurate indication of the soil strata.

What does this mean to you?

Taking soil resistivities to optimize the information for cathodic protection design will help mitigate the risk of rework. Making sure the necessary data is gathered will improve the chances of executing a successful project. At JST, we have ISO certified processes in place to ensure that all our team members follow the best international practices which guarantees that we don't make mistakes that cost our clients unnecessary cost and time.



JST uses and is proud to represent

