CATHODIC PROTECTION GRID SURVEY

A critical tool for your facility

Threat Assessment

Your facility is the heart of your business and keeping it free from shutdowns and high maintenance costs will increase profitability, the safety of your people and help secure your company’s future.

Because plant piping networks are a complex maze of interconnects, using typical pipeline cathodic protection survey techniques will not provide actionable data. Corrpro utilizes a unique grid survey method to evaluate the effectiveness of a plant facility cathodic protection system, which also helps locate unintentional shorts, grounds and process piping interconnects so you can plan remediation activities before they progress to larger problems.

Grid Survey

The process uses computer-based data collection to gather pipe-to-soil potentials referenced to a specific point in the facility. Measurements are taken in a grid pattern and integrated into a geographic information system (GIS) for display in the format of a heat map.

A plant facility uses a network of buried piping and other buried structures, and surface soil potentials represent an averaging effect of all influences near the measurement point. It would be extremely challenging to draw conclusions from this data while viewing it in numeric format. However, displaying it as a heat map makes spotting anomalies easy.
How does the cathodic protection grid survey work?

Your facility is subdivided into an appropriate set of panels to allow the work to be completed in stages. Each test panel’s location and orientation within the plant are documented. While panel sizes can be different for different facilities, spacing between data collection points is always the same. This enables reassembly of multiple panels into a large map for the entire facility.

The survey can be completed with the cathodic protection system on, off or interrupted, depending on which information is most important. Thresholds are set and assigned specific colors to enable fast detection.

Everything is then graphically displayed in an easy to understand heat map for analysis.

Major objectives and focus of the survey:

- Identify areas that do not demonstrate adequate cathodic protection
- Locate unintentional shorts, grounds and interconnects
- Select and prioritize plant locations for excavation and direct examination

Use data to help prevent corrosion before it starts

Once corrosion is detected on a pipeline, extensive remediation programs must be implemented to ensure the ongoing safety of your assets, employees, communities and the environment. This may include costly replacement or repair of corroded sections of pipeline, a reduction in maximum allowable operating pressure and throughput or an increase in required assessments of your pipeline.

Asset Integrity Portal

With Corrpro’s Asset Integrity Portal and FieldLine™ application, your results will be stored on a secure site, making it simple to download reports or upload data to your GIS system.

About Corrpro

With extensive crews and locations, Corrpro can deliver rapid turnaround on projects large and small. We mobilize from 11 offices throughout the U.S., and no project is too large or too small for us to tackle.

Safety

Our rigorous safety program consistently achieves superior industry results. Our emphasis on leading indicators helps prevent safety issues before they occur. We are focused companywide on giving frontline supervisors the authority and tools they need to operate a safe jobsite. This translates into some of the best safety performance statistics in the industry.

An ISO 9001:2015 Certified Company