Rapid-Check Test Station NEW



for Cathodic Protection Testing

by Farwest Corrosion Control Company



Cathodic protection test stations come in a large variety of sizes, materials, shapes, colors and uses. Typically, an installed test station (TS) consists of one or more wires connected to a buried structure, such as a pipeline, which are routed above ground where the cables are terminated in an enclosure that can be easily accessed by a cathodic protection (CP) technician. This allows the technician a direct connection to the pipeline, in a specific location, for needed CP measurements.

The Farwest "Rapid-Check" test station is designed to provide the ability to obtain the most popular CP readings, (see "Applications" on page 2) to be user friendly, safe to operate and minimize installation costs.

Test Station Components

The Rapid-Check comes standard with the following components, which ensure easy installation.

- 1 Lexan Test Station Body, 3" Diameter
- 2 Pipeline Connection Terminals (black)
- 1 Stationary Copper Sulfate Reference Electrode Terminal (yellow)
- 1 Native Coupon Terminal Isolated from all Structures (white)
- 1 AC/DC Coupon Terminal (green) with Momentary Disconnect Switch
- 1 0.1 Ohm Shunt
- 1 Printed Nameplate
- 1 "Dead" Front Panel with Pre-Wired Banana Jacks
- 1 Rear Shock-Guard Safety Cover
- 1 3" x 6' Long PE Standpipe
- 1 Quick-Connect Terminal Strip with Cable Connection Guide
- 1 Test Station Schematic Drawing

Normally, field wiring a new test station can be time consuming and wiring details are sometimes unclear to the installer. To minimize the possibility of an improperly wired test station and to expedite the installation process, each test station assembly is prewired at the factory. A clearly labeled terminal block, that can accept up to #8 AWG cable, is built into the assembly. Simply attach the appropriate wire to the specified terminal position and the field wiring is complete.



Product Advantages

• Simple to install. The Quick-Connect terminal strip allows the CP technician to quickly install the necessary wiring to the easily accessed terminal strip.

• The "dead" front panel and shock guard prevents human contact with "hot" wires and terminals.

• The AC/DC Coupon Terminal is electrically connected to the Pipeline Terminal for measuring AC and DC pipe potentials as well as measuring a "Coupon Disconnect" reading by using the installed momentary toggle switch, which disconnects the coupon from the pipeline.

• The provided shunt is wired in-line with the AC/DC coupon to measure AC current density. In addition, a direct AC current density can also be measured by connecting a digital multimeter to the appropriate terminals. Note: 10cm² coupons are preferred due to their ease of converting the measured value to amperes per meter squared (A/M²).



Applications

The Rapid-Check test station is purposely built to allow specific CP test measurements that include, but are not limited to, the following:

- Pipe-to-soil potentials using a portable or stationary reference electrode. This tests the effectiveness of the CP system and/or detects the presence of cathodic interference.
- Coupon measurements, which can provide the following:
 - 1. "Native" structure-to-soil potential.
 - 2. CP "ON" potential.
 - 3. Coupon "disconnect" potential (emulating an instant CP Off potential).
 - 4. AC current density for pipelines installed in AC power transmission corridors. NOTE: Induced AC voltages and associated AC currents can be both a personnel shock hazard or, in some cases be a threat to the pipeline integrity from AC corrosion.

Ordering Information & Options

- Specify test station color.
- Confirm that the standard test station configuration meets your needs.
- Your need for optional equipment such as coupons, a reference electrode, wiring, etc.

Many CP operators are installing Remote Monitoring Units (RMUs) to obtain real-time field data. **The Rapid-Check test station can interface with many popular RMU products** and the RMU can be installed adjacent to the Rapid-Check unit.

> 9 Locations Nationwide Phone: 1-888-532-7937 FARWEST CORROSION CONTROL COMPANY

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