

# Cathodic Protection



## INTRODUCTION

CP Masters, Inc., a Brand Energy & Infrastructure Services Company, provides clients with more than 25 years of unmatched experience and expertise installing and maintaining cathodic protection systems. Our repertoire of cutting-edge services and techniques help provide clients peace of mind, both monetarily and environmentally, by minimizing risk and maximizing asset lifecycles.

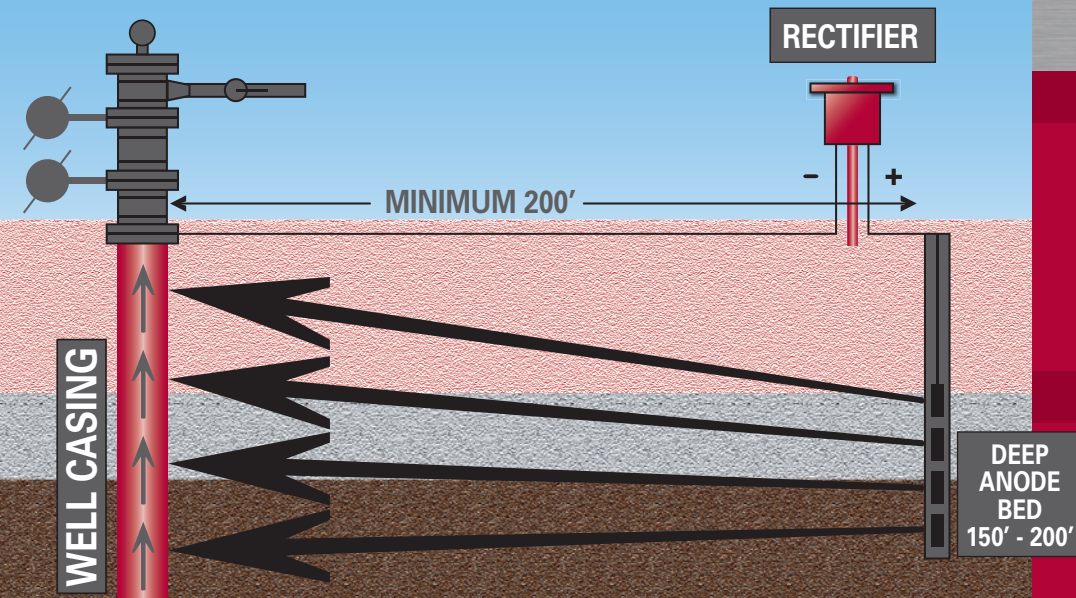
With strategically located operational facilities and a dedicated team of highly skilled professionals, including engineering staff, technical experts and industry knowledgeable technicians, CP Masters delivers innovative and cost effective solutions. Our team is trained and credentialed in a variety of areas, including NACE, DOT OQ and Asset Management. Their expertise coupled with a proven management approach allows CP Masters to safely achieve unparalleled results and save clients money through continuous improvement processes.

Our core services include consulting, design, installation and maintenance of Cathodic Protection and Corrosion Systems including, Augured and Horizontal Conventional Ground-beds, Deep Anode, Distributed Impressed Current and Sacrificial Systems. We consistently strive to expand our leading edge corrosion control technology services, which now include Under Tank CP Systems, Remote monitoring Systems, and Solar-Wind CP Power Systems, a DC power alternative that has proven reliable when AC is not available.

CP Masters is the proven and trusted leader in cathodic protection and corrosion control to the upstream, midstream and downstream markets in North America, providing owners and communities with assurance that the best practices and environmental stewardship opportunities are maximized.

## Cathodic Protection Service Offerings

- CP Consulting, Design, Installation and Maintenance, including: Augured and horizontal and conventional ground-beds, Deep Anode, Distributed Impressed Current and sacrificial Systems.
- Remote Monitoring
- Solar Systems
- Annual Test Point, Interference, Leak Detection, GPS, Plant and Refinery Surveys
- Periodic Rectifier Maintenance
- Electrical Surveys, including CI, DCVG, ACVG
- DOT Audits
- Full Line of Cathodic Protection Products



## CASE STUDIES

### WHAT IS CATHODIC PROTECTION?

Cathodic Protection technology uses impressed currents to prevent or reduce the corrosion of metal surfaces by transferring the corrosion from the protected structure to another known location, where the current-discharging anode(s) can be designed for maximum life and ease of replacement.

### MAJOR NATURAL GAS FIELD

#### United States

A leading North America energy producer was experiencing major well casing corrosion related failures at an average of one casing failure per month. They engaged CP Masters' dedicated team of corrosion engineers to investigate the frequency and depth of their casing failures and to determine a successful course of action.

Working alongside the owner company staff, the team collected data and determined that without the implementation of a cathodic protection system; the owner would continue to experience these failures more and more frequently, causing their maintenance costs to continue to increase exponentially.

CP Masters' engineers were on-site and utilizing the latest remote down-hole tools and technology to provide real-time data evaluation and recommendations, while installing three cathodic protection ground-beds on various well locations in order to determine the current requirement for each well. Once the requirements were determined, CP Masters designed a cathodic protection system that would solve the client's corrosion issues, taking into account the number of wells per pad, the field pipeline system and the facility equipment.

Upon completion of the design, an aggressive schedule to construct and install the cathodic protection system was developed in order to meet the client's expectations. During the two-year construction process, CP Masters utilized its superior turnkey installation capability, equipment capabilities and resources, and unmatched reputation for providing quality service, to exceed the client's objectives while staying on schedule and on budget.

CP Masters successfully and safely installed more than 800 ground-beds and protected more than 1,500 wells from further corrosion related casing failures, providing enhanced environmental risk mitigation and substantial asset lifecycle enhancement.



#### Corporate Headquarters

1325 Cobb Int. Dr, Ste A-1  
Kennesaw, Georgia  
USA 30152  
T 678.285.1400  
F 770.514.0285

#### Brand Energy Solutions

1830 Jasmine  
Pasadena, Texas  
USA 77503  
T 713.473.0022  
F 713.473.7982

#### Brand Energy Services (CAN)

304-69 Avenue NW  
Edmonton, Alberta  
Canada T6P 0C1  
T 780.440.1320  
F 780.440.2535

#### Infrastructure Services

55 Costa Road  
Toronto, Ontario  
Canada L4K 1M8  
T 905.669.5282  
F 905.660.8045

#### Turnaround Services

5730 FM 646 East  
Dickinson, Texas  
USA 77539  
T 832.226.5150  
F 281.339.5668

#### Industrial Specialty Services

10093 Rayco Sandres Rd  
Gonzales, LA  
USA 70737  
T 225.644.3227  
F 225.644.3288

#### CP Masters

1700 E Seward Rd  
Guthrie, OK  
USA 73044  
T 405.293.9777  
F 405.293.9779