

**CORROSION**

# ICCP Maintenance

Sustainable Protection and Service



IN DEPTH  
**Offshore Wind**



# ICCP Maintenance 3 questions answered

1. Onshore inspection

2. Offshore commissioning

3. O&M Services

## Introduction

CORROSION's ICCP systems provide sustainable protection to a wide variety of vital and valuable equipment, vessels and structures. Onshore and offshore.



# ICCP Maintenance

3 questions answered

## What is it?

Impressed current cathodic protection (ICCP) is a corrosion protection system that consists of Mixed Metal Oxide (MMO) coated titanium anodes connected to an external power source. This power source provides the current that leads to the electrochemical reaction required for cathodic protection to take place.

## Why do you need it?

CORROSION's highly sophisticated Impressed Current Cathodic Protection (ICCP) offshore wind system is the most cost-effective, easy-to-maintain and environmentally friendly solution on the market for the protection of offshore wind turbine foundations against corrosion.

## Why CORROSION?

CORROSION is the founder of ICCP for Offshore Wind and global market leader in protecting wind turbine foundations in an environmentally friendly way by using ICCP. Since 2008 we protected more than 2.500 foundations and installed more than 3.200 systems.

## 1. Onshore inspection

CORROSION's ICCP systems are often installed by the yard or another third party. Onshore inspections are therefore essential to ensure correct installation before the equipment is installed offshore and is no longer accessible or difficult to access afterwards. By having a trained CORROSION Engineer carry out the inspection, the customer can be sure that the installation has been done correctly and that it is under guaranteed performance.







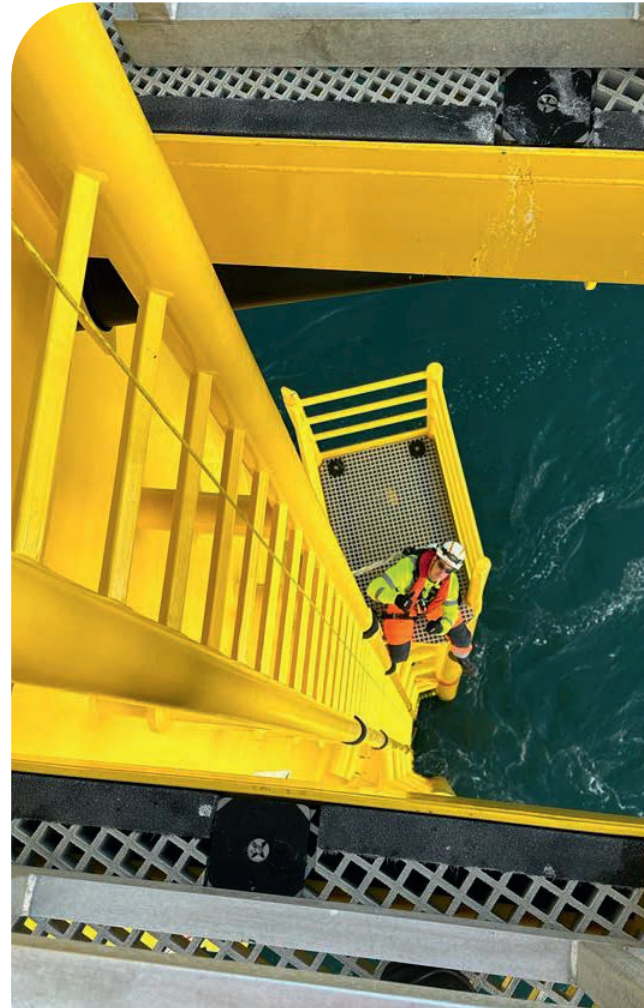
CORROSION is the global market leader in protecting wind turbine foundations in an environmentally friendly way by using ICCP.

## 2. Offshore commissioning

To ensure proper operation and calibration of the installed ICCP components, the final commissioning will be carried out Offshore.

Work performed during offshore commissioning usually consists of:

- » Installation and functionality checks
- » Installation of system components offshore (internal anodes, cable routing and termination)
- » Calibration of systems before switching on
- » Delivery of signed protocols upon delivery after successful commissioning







### 3. O&M Services

CORROSION can provide a service engineer to join the customer's O&M team to support and instruct the technicians for future reference.

Scada maintenance is possible at an already active wind farm. Troubleshooting and support can usually be done remotely. If necessary, our engineers can also visit a wind farm to carry out maintenance. Our technicians are highly trained and always in possession of the necessary certificates and diplomas.

- » GWO Working at Heights
- » GWO First Aid
- » GWO Fire Awareness
- » GWO Manual Handling
- » GWO Sea Survival





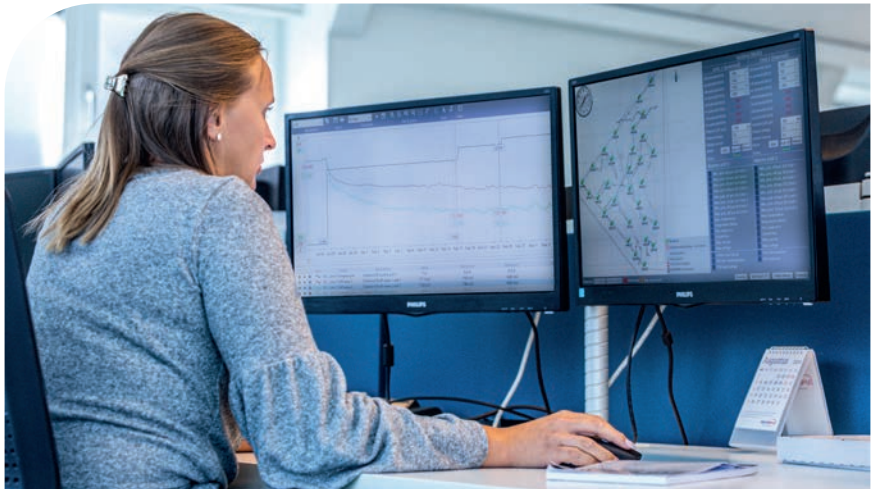
## SCADA Remote Monitoring

A solution to the offshore accessibility problem

CORROSION ICCP systems have been designed to be SMART. The corrosion protection performance of each wind turbine can be tracked from wherever you are, while data readings and adjustments can be achieved at the click of a mouse.

SCADA systems are able to monitor and provide remote control of wind farms spread over a large geographical area for which organizations do not have sufficient personnel to cover. Reliable communication and operability of these areas or sites is critical to operational reliability.

SCADA is an essential part of ICCP systems for Offshore projects and is specifically designed and set up according to your project's individual design specifications.



## Laboratory

An arena for applied science

CORROSION is unique in many ways. One of the things that makes us different is our on-site research laboratory. This is the place where we build on our many years of experience and expertise. And while we have a sound reputation and proven products, we want to continue bringing you new developments. CORROSION strives to pioneer in ways that go beyond theory and ideas. Our lab is an ideal place to continue our mission to bring you the most sophisticated, high-quality products and services available in cathodic protection and anti-fouling technologies. It adds specialized services to our already strong reputation for product reliability and performance. And because the environment is an ever-growing concern, our lab also allows us to look into more sustainable solutions and improvements. The best products, with an eye on our surroundings whenever it's possible.



IN DEPTH Offshore Wind



CORROSION has been in the business of **protecting** offshore wind farms, vessels and onshore applications since 1993.



## Spares

High performance equipment requires the highest quality spares and parts

We not only manufacture and supply the best anti-fouling and anticorrosion systems in the industry, but we are certified specialists you can call on for maintenance and replacement parts. Spares is here for state-of-the-art replacement parts, software, and service, designed to work together to give you continual solutions and ensure optimum performance.

We have everything you need for ICAF and ICCP systems and our service-oriented team of experts can be counted on to ensure that problems are avoided, unburdening you and saving you money. CORROSION goes a step further to give you the best value for your money. All of our parts come with OEM mounting materials, making the work faster and easier. And, in addition to the mounting materials, CORROSION also provides new inserts for the glands.



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With offices and agents in over 30 countries around the world, it doesn't matter where you are or what you want to know, our specialists are already ready to help.

# About CORROSION

CORROSION has been in the business of protecting offshore wind farms, vessels and onshore applications since 1993. From our humble beginnings in the small town of Moerkapelle in the Netherlands, we've grown into an internationally recognized leader in creative, sustainable, state-of-the-art solutions in corrosion and cathodic protection.

Our highly sophisticated ICCP and ICAF systems are utilized by companies large and small around the world, protecting their valuable assets and equipment in even the toughest and most demanding conditions.

We're proud of the quality of the products we offer and the level of service we provide. Excellence is born of experience and expertise, and our unique research laboratory at our global headquarters in Moerkapelle is the beating heart of our company. It's where we test and develop new products and services, enabling us to lead the way in creating innovative anti-fouling and corrosion solutions.

Over the last three decades, we've expanded not just in terms of what we do, becoming a major global player in anti-fouling and maritime protection, but also geographically, with successful subsidiaries everywhere from Germany and France, to China and Vietnam.



# CORROSION

## Contact us

We hope that this in-depth guide has been of interest to you. We would be very happy to answer any questions you may have or look at your specific ICCP maintenance needs.

Check out our website [corrosion.nl](https://corrosion.nl) for more information. You can also reach us by telephone at: +31 (0) 79 593 1295.

## More info?

Scan the QR code or visit [CORROSION.nl](https://CORROSION.nl)

