

OmniSTAR Application Note

Cathodic Protection



Application: Cathodic Protection

Customer: Rawabi Corrosion Technology Co. Kuwait

“Cathodic Protection (CP) is a technique used to control the corrosion of buried and submerged metal structures. It utilizes a DC current either from a rectified AC (Impressed Current CP) or a current driven by the potential difference between dissimilar metals (Sacrificial CP). Examples of such industrial assets are aboveground storage tank bottoms, offshore platforms, oil wells and buried pipelines.

The demand for precise mapping of CP equipment on the design stage as well as during the maintenance is on the increase. Most asset owners are implementing global GIS database models for their facilities and CP assets are an integral part of it.

Underground communications (cables, piping, earthlings) are often very congested and frequently maintained by different teams. Therefore in order to bring co-ordination precise mapping is essential.

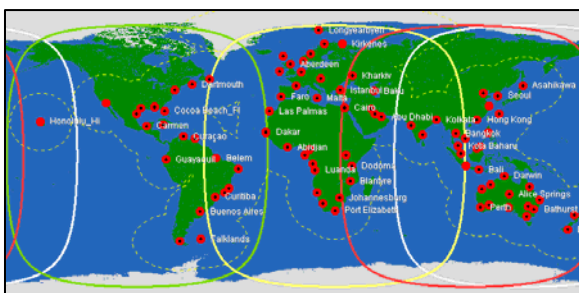
For a CP Service contractor it is important to identify and plot with high accuracy all objects in certain areas in order to insure there is no undesired interference, which in some cases might cause catastrophic failures. Disturbance and damages to the existing invisible assets can be avoided with precise navigation prior to the commencement of field works.

Where precise positioning with OmniSTAR is most important for us is sub meter georeferencing of pipeline surveys. As part of the ECDA (External Corrosion Direct Assessment) program, we are conducting extensive IDI (InDirect Investigation). This non-destructive surveying technique is highly intensive (over each meter) and enables identification of anomalies in the pipeline coating and the CP efficiency along the whole pipeline route. All findings need to be recorded, evaluated and classified. On this basis, assessment about the pipelines' fitness for service is determined. Many of the anomalies are addressed with corrective actions or further investigations. In this regard, sub meter accuracy positioning is the only way to align the multiple runs and surveys as well as to point the remedial efforts to the correct spot”.

OmniSTAR BV, headquartered in Leidschendam near The Hague in the Netherlands, provides satellite delivered sub-meter and sub-decimeter DGPS positioning services for operation on land and in the air. OmniSTAR positioning services have world-wide coverage, do not require the use of a local reference station and are available around the clock.

For further information regarding Rawabi Corrosion Technology Co. please refer to www.rawabiacorrosion.com or contact by phone (+966 3 8142397) or by email (info@rawabicorr.com).

For further information regarding **OmniSTAR**, please refer to www.omnistar.nl or contact OmniSTAR by phone (+31 70 317 0900) or by email (info@omnistar.nl).



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