

# LIDA<sup>®</sup> TSA<sup>™</sup> Anodes

**LIDA<sup>®</sup> TSA<sup>™</sup> Anodes** - a mixed metal oxide (MMO) on titanium anode material configured

**A tension string anode structure:**

- Multiple LIDA<sup>®</sup> anodes and cable are assembled on a supporting rope.
- Spacers insure the anode is in complete contact with seawater.
- The LIDA TSA<sup>™</sup> is connected from the platform to a dead weight on the sea floor.

**Performance advantages**

- Fewer anodes required with higher current density
- Current output is easily adjusted
- Ease of installation reduces cost of cathodic protection system
- Greater savings in deep water installations
- A twenty year history of successful cathodic protection in platforms from 15 to 120 meters in depth

**Case Study:**

Loango Field Platforms operated by Agip Recherches Congo retrofit a LIDA TSA<sup>™</sup> system over a poor performing galvanic system.

The LIDA TSA<sup>™</sup> operated successfully from 1987 to 2005 when it was replaced with a new system to coincide with the 20 year extension in the platforms planned operating life.



Loango Platform

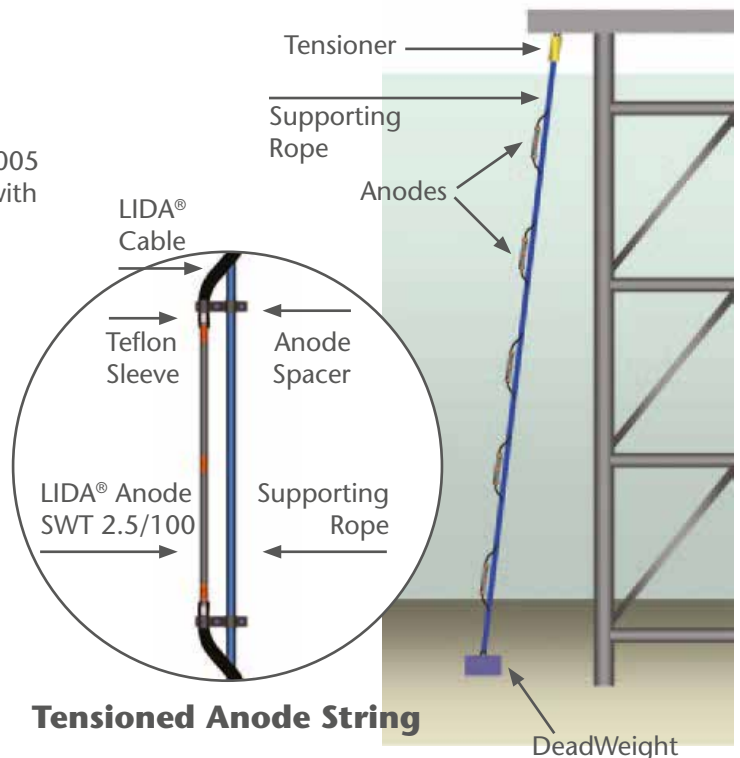


Platform



TSA<sup>™</sup> Anode

**Tensioned Anode String Installed on a Steel Jacket**



ELECTROCHEMISTRY AT YOUR SERVICE<sup>™</sup>

SPECIALTIES & NEW APPLICATIONS

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