CASE STUDY

La Reunion Coastline

Client/Region:
Commission of Water/La Reunion, Indian Ocean

Project Name:
Signalisation Maritime

Product/Service Delivery:
Floatex Light Buoys Type 1214BL-3m, L-130 self-contained marine lantern

Tideland Signal (Tideland) was the preferred choice by the Commission of Water to provide aids to navigation (AtoN) solutions to mark sensitive areas around coral benches on Reunion Island with special marker buoys. The special marker buoys were to be installed approximately every 900m in order to materialize the zone. The requirement for the special marker buoys was to withstand challenging environmental conditions and frequent cyclones including 10m waves.

Tideland proposed a “jumper buoy” set up to compensate for the harsh conditions. The “jumper buoy” is a buoy that is installed between the sinker weight and the buoy and its intended purpose is to absorb the distress put onto the mooring line by the stormy conditions.

Commission of Water purchased 9 buoys, each buoy consisted of:

- One floating module, diameter 1200mm, height 1400mm, made in linear high strength virgin polyethylene which has great resistance to UV-rays and cold temperatures, mass-pigmented in yellow color, completely recyclable and filled with closed cell polyurethane foam, density 38 Kg/m³, for surface use. The color pigment is molded-in and consequently not added as a coating; this process ensures a greater life of

BENEFITS

- Jumper buoy designed specifically to withstand challenging environmental conditions that consists of frequent cyclones and 10m waves
- Extended warranty options available to client
- High vertical divergence of lanterns to compensate for rough waters
- Local supply and install which promotes open communication from project management to end user
the color and protects the environment as it never requires painting and therefore no toxic dispersions in the water. The polyurethane foam, being high quality closed-cell material, prevents water absorption, ensuring momentary unsinkability to the buoy.

- Day Mark signal composed by three (03) floats diameter 570mm, were placed on the top of the floating module to give greater visibility to the buoy. The day marks are made in linear high strength virgin polyethylene, completely recyclable and mass pigmented in yellow color. The linear material has the advantage that it can be melted and hence repaired by hot fusion welding.

- Central passing through steel tube, where are fitted floating modules, day mark signal and inner ballast. The metal part is sandblasted, galvanized with flame spray galvanization (Met. Co. system) and painted with marine grade polyurethane paint. Inner Ballast in the tail to ensure the correct stability.

- Jumper buoy installed between the sinker weight and the buoy and its intended purpose is to absorb the distress put onto the mooring line by the stormy conditions.

- Two (02) lifting eyes and one (01) mooring eye to facilitate the operation of maintenance, installation and mooring of the buoy.

- Saint Andrea Cross as Top Mark, in yellow colour in accordance with IALA recommendation.

- L-130 3NM self-contained lantern is lightweight and completely waterproof featuring UV-stabilized Lexan polycarbonate and stainless steel construction, easy to install, and will provide years of maintenance free operation.

- Height of the buoy above the water line is approx. 3,0 mt.

All Tideland products are manufactured in accordance with IALA recommendations.

**Project At A Glance**

- 1214BL buoy with 3000mm focal plane and L-130 3 NM lantern.
- 1214BL buoy with 3000mm focal plane following installation.
- 1214BL buoy with 3000mm focal plane marking sensitive areas.
- Setting the location for the 1214BL buoy and its “jumper buoy” mooring set-up.
- Setting the location for the 1214BL buoy and its “jumper buoy” mooring set-up.
- 1214BL buoy and its “jumper buoy” mooring set-up being lowered into its final location by crane.