

2021 / Case Study

Puerto Mamonal Enhances Vessel Safety with Additional Sealite Aids to Navigation

Puerto Mamonal, Cartagena Bay, Colombia



"We Believe Technology Improves Navigation."

“The new Sealite AtoNs enable safe access to Puerto Mamonal S.A. and comply with the international standards of both IALA and DIMAR. We are proud to deliver another Sealite Aids to Navigation lighting solution to enhance the port’s AtoN infrastructure.”

Jairo Arteta

General Manager
Ingeniería Naval &
Señalización Marítima S.A.S.

Product Overview

Application: Access Channel

Date: 2021

Products:

- SL-B2200 Nautilus, Ocean Buoy
- SL-C510 AIS-Enabled Solar Marine Lantern

Puerto Mamonal Enhances Vessel Safety with Additional Sealite Aids to Navigation

Industry

Maritime Port

Location

Puerto Mamonal, Colombia

Founded In

1990

Background

Cartagena Port, located in Colombia, is one of the world’s top 100 busiest ports. One of its inland ports, Puerto Mamonal, continues to have significant growth in cargo activity. The development has been a crucial priority in the Cartagena port area to assist in the increased traffic.

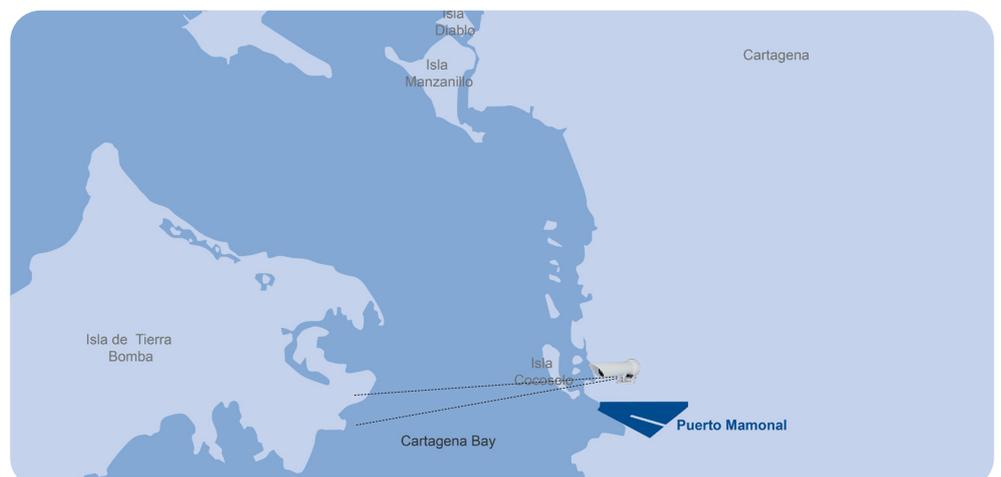
In 2018, a leading tower equipped with Sealite’s Port Entry Light ([SL-PEL-10](#)) was installed at Puerto Mamonal to enhance the safety of vessel traffic approaching the port from the north channel.



The Challenge

Since the installation of Sealite’s Port Entry Light in 2018, it has helped Puerto Mamonal increase the number of large visiting vessels and provided safer operations on approach to the port.

However, the north and south channels were in need of additional Aids to Navigation (AtoNs) for safer passage.



Solution

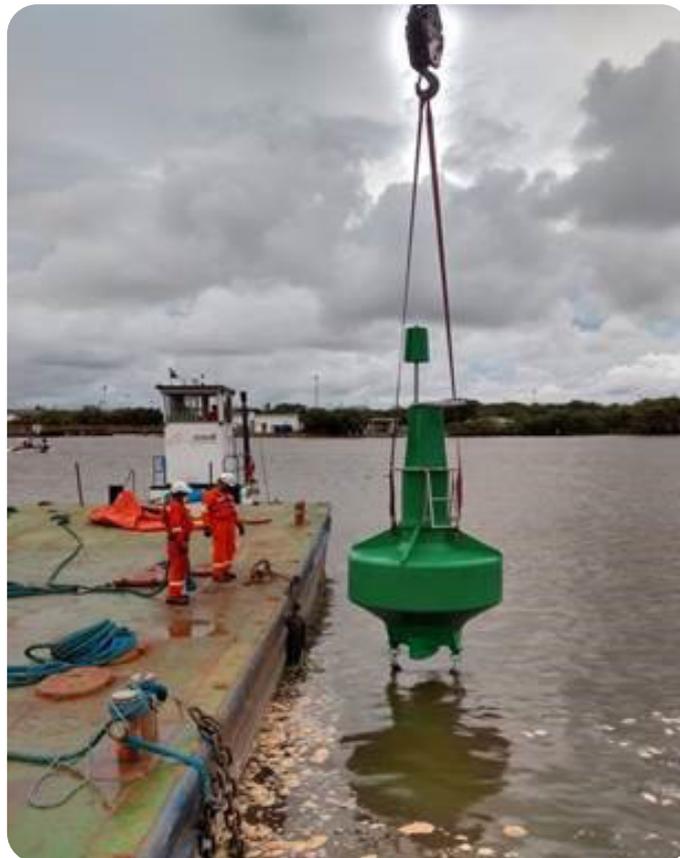
Puerto Mamonal's port owners, with the help of Ingeniería Naval & Señalización Marítima S.A.S., installed Sealite buoys: six SL-B2200 Nautilus Ocean Buoys in Region B channel configurations.

The SL-B2200 Nautilus is rotationally molded using UV-stabilized virgin polyethylene to prevent discoloration from the sun's UV rays. This is especially important in hotter climates. Each buoy is foam filled with closed-cell polyurethane which prevents water logging in the event of collision.

The buoy's lightweight and 2-piece modular design makes it easy to transport and assemble. Its strength lies in the stainless steel tie bars in the hull structure connecting the lifting and mooring eyes. This ensures even lifting and mooring stresses at major stress points.

To complete the AtoN, the buoys were installed with Sealite's SL-C510, 5-9NM Solar LED Marine Lantern with integrated AIS Type 1. The lantern transmits data via AIS so its exact location is visible to mariners. GPS synchronization allows all lights to flash in unison. The highly vibrant red and green color of the buoys will aid incoming mariners during the day, while the flashing red and green lights indicate safe passage at night.

Bluetooth® connectivity comes standard in the SL-C510 Solar Marine Lanterns. Maintenance technicians can monitor lanterns up to 50 meters away. With a Satellite-enabled SL-C510, real-time diagnostics and alerts are available instantly and on any mobile device.



Outcome

Puerto Mamonal has been making strides in modernizing its port since construction in 2018. Sealite's PEL helped to increase the number of large visiting vessels and expand trade into the area. Now, with the newly installed AtoNs, the port provides safer operations with precise navigation through its channels.

The port is now running successfully and is one of the most modern ports in Cartagena.

To find out more about Sealite's range of large ocean buoys and solar marine lanterns, visit the product pages on our [website](#).



Contact Us

Sealite's solutions are easy-to-install and scalable. We have a solution for every budget.



Sealite Head Office

11 Industrial Drive, Somerville
Victoria, Australia 3912
T: +61 (0)3 5977 6128
F: +61 (0)3 5977 6124

Sealite Asia

8 Wilkie Road, #03-01
Wilkie Edge, Singapore 228095
T: +65 9119 8770

Sealite USA

61 Business Park Drive, Tilton
New Hampshire, USA 03276
T: +1 (603) 737 1311
F: +1 (603) 737 1320

@ info@sealite.com

www.sealite.com

www.star2m.com

Sealite UK

11 Pinbush Road, Lowestoft,
Suffolk, NR33 7NL, UK
T: +44 (0)1502 588026



*"We Believe Technology
Improves Navigation."*