**Purchase Specifications for a   
2600mm diameter Ocean Buoy**

**Overview**

This specification is for a 2600mm diameter ocean buoy.

The buoy shall have a 2.6 meter float diameter.

The buoy shall be rotationally-moulded using UV-stabilized, virgin polyethylene.

The buoy shall be of modular design with a three (3) part hull float section.

The hull section of the buoy will have detachable side panels enabling it to be transported in a standard shipping container.

The hull structure will have twin lifting and mooring eyes interconnected by stainless steel bars.

The buoy shall have conventional forklift access points to safely manoeuvre the buoy.

**1.0 General Characteristics**

The buoy shall be available in red, green, white or yellow as per IALA Recommendations.

The buoy shall have a focal plane height up to 4100mm (161⅜ inches).

The buoy shall have a total float volume of 5610 litres (1482 US gallons).

The buoy shall have a nominal freeboard of 780mm (30¾ inches).

The buoy shall have a nominal draft of 690mm (27¼ inches).

The buoy shall have a reserve buoyancy of 1475kgs (3252lbs).

The maximum mooring load of the buoy shall be 1475kgs (3252lbs).

The buoy shall have a maximum draft of 960mm (37¾ inches).

The buoy shall have a minimum freeboard of 510mm (20⅛ inches).

The buoy shall have a safe working load of 1950kgs (4300lbs) at one (1) point and 5200kgs (11460lbs) for two (2) points.

The buoy shall have a submergence of 54.7kg/cm (306lb/inch).

The visual area of the buoy shall be 4.0m² (13.1ft²).

**2.0 Physical Characteristics**

The buoy shall be rotationally-moulded using UV-stabilized, virgin polyethylene.

The float section of the buoy shall have a wall thickness of 18mm (¾ inch).

The buoy shall have 316-grade stainless steel internal tie bars, lifting and mooring eyes.

The buoy shall have a ballast of internal concrete with a weight of 400kg (882lbs).

The float section of the buoy shall be filled with closed-cell polyurethane foam.

The buoy shall be available in two (2) heights; the Standard Model shall be 4120mm (162¼ inches) and the model with the extended tower shall be 5020mm (197⅝ inches).

The buoy shall have a width of 2600mm (102⅜ inches).

The buoy shall have a mass of 970kgs (2138lbs).

The buoy shall come with a radar reflector.

The life expectancy of the buoy shall be >20 years.

**3.0 Options**

The buoy shall be offered with the following options available from the manufacturer:

* Mould-in graphics
* Day marks
* Top marks
* AIS monitoring system
* GSM monitoring system
* Suitable marine lanterns

**4.0 Certifications**

The manufacturer shall be ISO9001:2008 certified.

The manufacturer must be a current IALA Industrial Member.

The manufacturer must supply an independently certified Compliance Certificate complying with IALA Guidelines NO: 1006, on plastic Buoys.

**5.0 Warranty**

The buoy shall have a five (5) year warranty.