**Purchase Specifications for a
1750mm diameter Ocean Buoy**

**Overview**

This specification is for a 1750mm diameter ocean buoy.

The buoy shall have a 1.75 meter float diameter.

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

The buoy shall be of modular design consisting of three (3) parts; floatation section, mid section and top section.

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

**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 3090mm (121⅝ inches).

The buoy shall have a total float volume of 1650 litres (436 US gallons).

The buoy shall have a nominal freeboard of 445mm (17½ inches).

The buoy shall have a nominal draft of 725mm (28½ inches).

The buoy shall have a reserve buoyancy of 600kgs (1323lbs).

The maximum mooring load of the buoy shall be 600kgs (1323lbs).

The buoy shall have a maximum draft of 970mm (38¼ inches).

The buoy shall have a minimum freeboard of 200mm (7⅞ inches).

The buoy shall have a safe working load of 2300kgs (5070lbs) at one (1) point and 3250kgs (7165lbs) for two (2) points.

The buoy shall have a submergence of 24.5kg/cm (137lb/inch).

The visual area of the buoy shall be 1.75m² (18.8ft²).

**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 16mm (⅝ inch).

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

The buoy shall have a ballast of internal concrete with a weight of 150kg (330lbs).

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

The buoy shall have a height of 3960mm (156 inches).

The buoy shall have a width of 1750mm (68⅞ inches).

The buoy shall have a mass of 436kgs (961lbs).

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.