

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 (121 $\frac{5}{8}$ inches).

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

The buoy shall have a nominal freeboard of 445mm (17 $\frac{1}{2}$ inches).

The buoy shall have a nominal draft of 725mm (28 $\frac{1}{2}$ 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 (38 $\frac{1}{4}$ inches).

The buoy shall have a minimum freeboard of 200mm (7 $\frac{7}{8}$ 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 ($\frac{5}{8}$ 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 (68¾ 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.