**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 constructed using a four (4) quadrant hull section.

The tower assembly of the buoy shall be constructed using rotationally-moulded using UV-stabilised, virgin polyethylene.

The buoys shall be available in standard and compact models.

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

**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 height up to 5 metres.

The buoy shall have a total float volume of up to 6710 litres (1772 US gallons).

The buoy shall have a nominal freeboard of 865mm (34 inches).

The buoy shall have a nominal draft of 1325mm (52⅛ inches).

The buoy shall have a reserve buoyancy of 2000kgs (4409lbs).

The maximum mooring load of the buoy shall be 2000kgs (4409lbs).

The buoy shall have a maximum draft of 1690mm (66½ inches).

The buoy shall have a minimum freeboard of 500mm (19⅝ inches).

The buoy shall have a safe working load of 5500kgs (12125lbs) at one (1) point and 11000kgs (24250lbs) for two (2) points.

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

The visual area of the buoy shall be up to 4.7m² (50.6ft²) without daymark and up to 6.0m² (64.5ft²) without daymark .

The water area of the buoy shall be 1.7m² (18.3ft²).

**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 fixtures.

The buoy shall have a ballast of external steel with a weight of 672kg (1482lbs).

The buoy shall have a height of 6240mm (245⅝ inches).

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

The buoy shall have a mass of 2340kgs (5159lbs) depending on payload.

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
* AIS monitoring system
* GSM monitoring system
* Closed-cell polyurethane foam filled float section
* Name Plate
* Aluminium Tower Assembly
* Galvanised or stainless steel mooring post
* Tail tube mooring post
* 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.