

**ELASTOMER BUOYS** 

### **IALA GUIDELINE G1006**





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These buoys consist of a thick, flexible marine grade polyurethane elastomer skin enclosing a flexible closed cell foam core. They have the higher overall flexibility and resistance, compared to any other buoy technology.

The main performance advantage of elastomer buoys lies in its lightweight float of high elasticity, manufactured with closed-cell polyethylene solid foam sheet (no water absorption) and spray coated with an 8 - 20 mm thick layer of colored polyurethane elastomer.

Thanks to its solid construction, they are virtually unsinkable, even in case of a strong impact. Besides, they can withstand repeated collisions without deforming (recovery capacity). The elastomer polyurethane allows the application of an anti-fouling treatment.





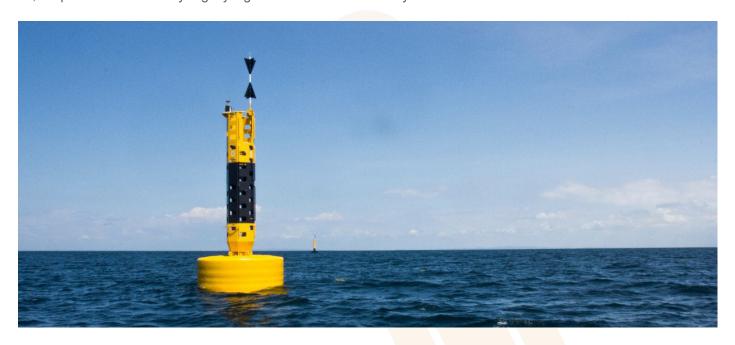


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These buoys have typically lower life cost, higher performance, and higher lifetime than any other buoy technology, more so, his purchase cost is only slightly higher than other similar buoys.





The manufacturing process of the elastomer buoy float is based on a solid rolled body of closed-cell polyethylene foam sheet and bound by heat. No chemical substance is involved in it.

The thickness of the polyurethane elastomer layer should be optimized to the size, the shape, the environmental conditions. The most common thickness range used is from 8 – 20 mm.

The rolled body is covered by a coating of elastomer polyurethane; thus, forming an elastic skin on an elastic core. So, the body buoy is solid, compact, extremely flexible, has a great recovering capacity and zero water absorption. The initial color of the body is given by the elastomer coating and is integrated through all the elastomer, thus preventing color change if the float is damaged. The elastomer surface also allows later painting.

The core of the elastomer buoys may be manufactured from material of varying density, which allows the adaptation to local needs depending on location, environmental conditions, or external influences.



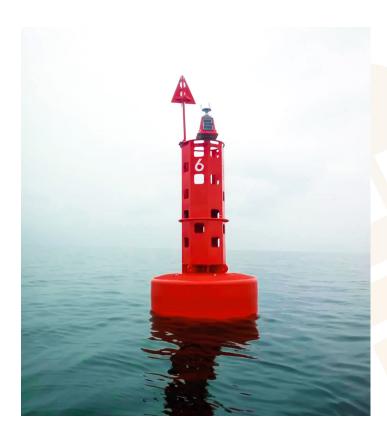




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On the upper area of the float a coating of silica granulation can be applied to provide a non-slip surface for maintenance staff.

The float of elastomer buoys is a solid part, never manufactured in modules. The process of manufacturing and materials used in the elastomer floats are the same as those used in fenders for vessel berthing in ports. They can withstand repeated strong collisions. Thus, the replacement of the float is not anticipated.

