

100 % PLASTIC LIGHTBUOY D2600



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REALIZATION OF A 100 % PLASTIC LIGHTBUOY D2600

To reduce the maintenance of plastic buoys it is necessary to eliminate the steel parts and specially the steel core. A first small plastic lightbuoy with a steel core was modified in 2002 to a 100% plastic skirt buoy with a diameter of 1,80 m. After a field test of almost 2 years with positive results, the decision was made to develop a 100% plastic lightbuoy with a diameter of 2,60 m for use in large inland waterways and sheltered approach channels.

The buoy consists of 4 plastic floats, a plastic core and a plastic solarbox. The only steel parts are the counterweight, the lifting/mooring eyes and the aluminium radarreflector.

Main characteristics:

Diameter	2,60 m
Vocal height	3,40 m
Draft	1,60 m
Total height	5,00 m
Weight incl. ballast	1750 kg
Metacentric height	0,95 m

Plastic core with radarreflector



Floats



Assembly



Test prototype January 2005



Lifting eye



Mooring eye



Counterweight



Rope mooring



Solarbox 4 x 20 W incl. battery and lantern



Comparison steel / plastic



Field test March 2005



First inspection April 2005



Second inspection July 2005

Marine growth after 4 months Change of rope bridle



Detail buoy-top

