

# CONTENT



#### **BENEFITS**

- Cost-effective
- Environment-friendly
- Versatile



## DESIGN / MANUFACTURING

- Normative Referential
- Floats
- Structure
- Option
- Mooring link
- Anchoring



#### **RANGE**

- MB-1250
- MB-1400-0.7 & 1.5
- MB-2000
- MB-2500
- MB-3000



# Extend harbours facilities into deep water Reduce the impact on marine environment



#### - - - - ● Safe and cost-effective

No need to extend quayside facilities

Temporary or permanent

Low maintenance

#### ---- Environment-friendly

No hard construction

No need for dredging

No need for using anchors

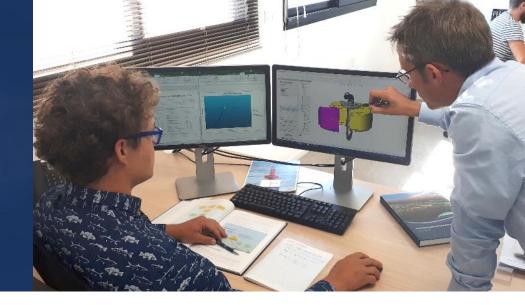
#### - - - • Versatile

All types of ships
All types of site conditions
Single Point Mooring (SPM) or Multi
Buoy Mooring (MBM)



#### DESIGN / MANUFACTURING

Compliant with International Rules, Recommendations, Standards and Practices



#### ANCHORING AND MOORING CALCULATIONS

**DNVGL-OS-E301: Position Mooring** 

**DNVGL-OTG-18**: Guidance for long term nearshore mooring systems

**DNVGL-RP-C205: Environmental conditions and environmental loads** 

API RP 2SK : Design and analysis of Stationkeeping Systems for

**Floating Structures** 

#### STRUCTURE CALCULATION

**Custom design with dedicated CAD** 

Validation of mechanical performance using a finite element calculation tool

Mechanical tests on a traction bench

#### DESIGN / MANUFACTURING

Incorporates the latest technology



**POLYETHYLENE FLOAT** 

**Precompounded Low Density Polyethylene** 

Stabilisation UV and high quality pigments to avoid colour fading

Foaming with high density Expanded Polystyrene (EPS) or Polyurethane (PU)

MOORING BUOYS STRUCTURE

Validation of mechanical performance on a traction bench

Approved anti-corrosion protection systems (galvanisation, painting, anodes)

**LESS MAINTENANCE** 

No corrosion on plastic parts

LOWER WEIGHT THAN STEEL OR ELASTOMER

**Less logistical and lifting ressources** 

**ENVIRONNEMENT-FRIENDLY** 

Polyethylene is fully recyclable

No anti-fouling coating

Longer service intervals

MODULARITY

Easy transportation and storage

Easy to repair

#### DESIGN / MANUFACTURING

Option



**OPTIONAL EQUIPMENT** 

D-Link

Footsteps

Static-T

Marking

S-Shackle

Identification

**CT- Chain Through** 

**MOORING LINKS** 

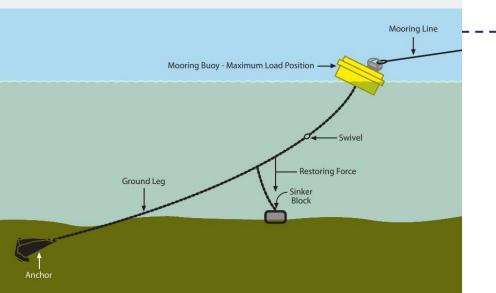
**Retro-reflective stripes** 

Pelican Hook(s)

**LED lanterns** 

#### RELATED DESIGN

#### **Anchoring**



---- TEXTILE, HYBRID AND CHAIN ANCHORING LINES

Chains with or without studlink tested on a traction bench
Textile anchoring lines and floats subsurface
Dampers to withstand peak loads

- - - - ● SINKERS

Concrete

**Concrete and Magnetite** 

**Cast Iron** 

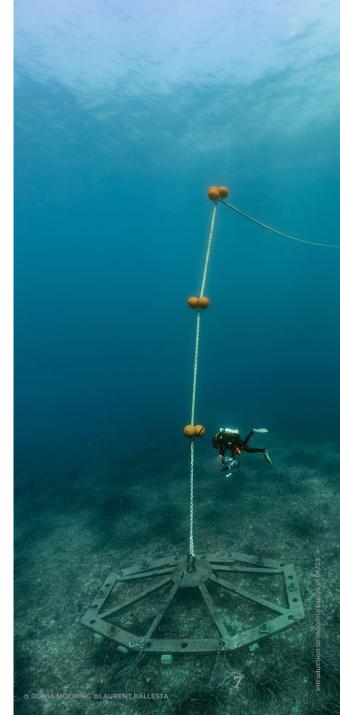
• EMBEDDING OR SCREW-TYPE CERTIFIED ANCHORS

HHP AC-14

**Flipper Delta** 

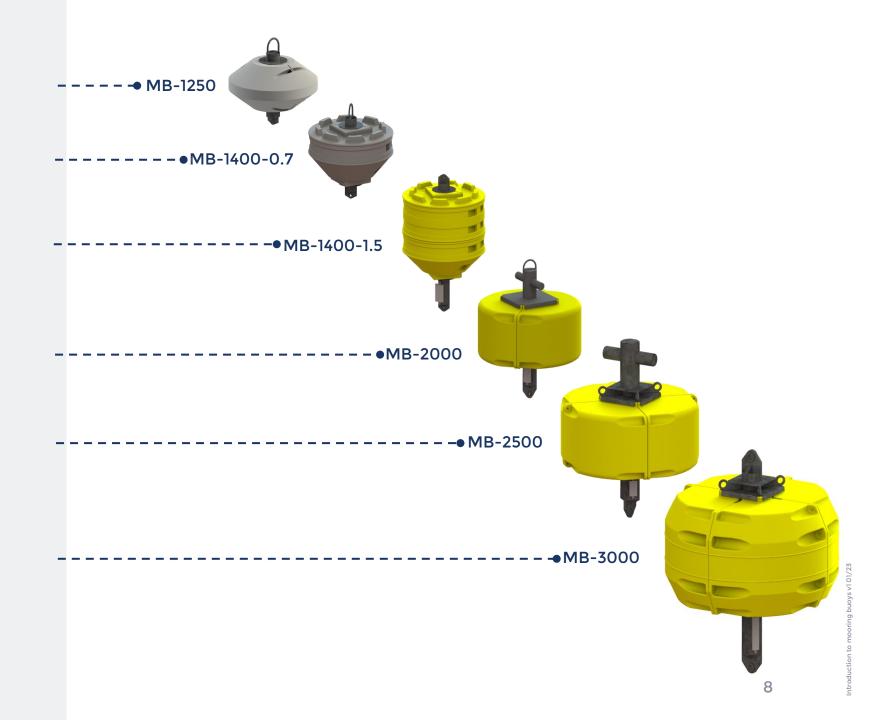
**Danforth** 

Stevpris ...



# RANGE OF MOORING BUOYS

Diam. from 1250 to 3000mm SWL from 5.5 to 150t



# MB-1250 SWL from 5.5 to 15t

# YACHTING HARBOUR

Diameter (m)	1.25
Net Buoyancy (kg)	350
Volume (m³)	0.4
SWL (t)	5.5 to 15
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL



# MB-1400-0.7 SWL from 5.5 to 15t

# YACHTING HARBOUR

Diameter (m)	1.4
Net Buoyancy (kg)	600
Volume (m³)	0.7
SWL (t)	5.5 to 15
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL Hand rail



## MB-1400-1.5 SWL from 5.5 to 15t

Diameter (m)	1.4
Net Buoyancy (kg)	1250
Volume (m³)	1.5
SWL (t)	5.5 to 15
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL Hand rail



# MB-2000 SWL from 7.8 to 80t

Diameter (m)	2.0
Net Buoyancy (kg)	2650
Volume (m³)	3.1
SWL (t)	7.8 to 80
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL Hand rail Rubber fender LED lantern



# MB-2500 SWL from 17 to 150t

Diameter (m)	2.5
Net Buoyancy (kg)	4250
Volume (m³)	5.25
SWL (t)	17 to 150
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL Hand rail Rubber fender LED lantern



MB-3000 SWL from 17 to 150t Available in 3 distinct volumes

Diameter (m)	3.0
Net Buoyancy (kg)	6500 / 8700 / 10700
Volume (m³)	7.5 / 10 / 12
SWL (t)	17 to 150
Mooring Links	D, Shackle, Chain Through, T
Option	EPS or PU foaming Enhanced SWL Hand rail Rubber fender LED lantern



# GISMAN, SINCE 1862.

close to 500 customers in 80 countries



Implementation of major historic lighthouses and light stations on all continents.



Acknowledged as a pioneering designer and manufacturer of modular plastic navigational buoys in the early 1990s.



Market introduction of its own range of marine lanterns and applications suite for monitoring and maintenance in 2022.



Quality Management System approved to standards ISO 9001:2015.



IALA was established in 1957.
GISMAN is member since 1966.

# GISMAN

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