

## Day marks for bridges

### Highly resistant to the marine environment

MSM offers a wide range of days marks for Aids to Navigation made from stainless steel or marine aluminium, and painted using UV high resistant paint or reflective material highly resistant to the marine environment. They are designed to provide a great mechanical stability and a colorimetric appearance stable throughout its service life.

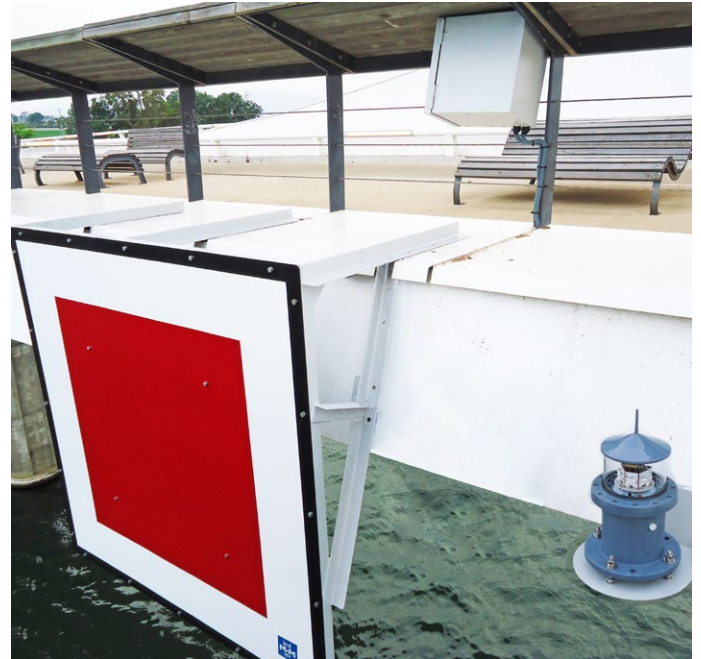
### Adaptable to any type of support structure

They can be adapted and dimensioned for any type of support structure where the nav aids are located, they are available up to 3.000 x 3.000 mm. These versatile marks can also be used to make numbers and any type of symbolism, so that they remain unalterable over time.

### Maintenance free

Without need of maintenance, they contribute to save resources and respect the environment.

Designed according to IALA Recommendations.



## FEATURES

- *Lightweight, solidity and resistance to the marine environment..*
- *Highly resistant to UV rays.*
- *High visibility in standard sizes.*
- *Possibility of superior visual ranges under request.*
- *Easy replacement of any element.*
- *Stainless-steel bolts.*
- *Fitting and dimensioning to all type of structures.*
- *Dimensions according to IALA Guideline O-113 "The marking of fixed bridges and other structures over Navigable Waters".*
- *Customization of numbers or symbols according to customer requirements.*
- *Optional specific configurations and colours under request.*
- *Colours according to IALA Recommendations.*

# DAY MARKS FOR BRIDGES

## TYPICAL RANGE VALUES OF A MARK

3' Perception angle (0.873 Mrad)

Range (km)	1	2	3	4	5	10	15
Range (nm)	0.54	1.08	1.62	2.16	2.70	5.40	8.10
Equivalent square side	0.87	1.75	2.62	3.49	4.37	8.73	13.09



## CHROMATIC COORDINATES

Measurements done according to CIE 1931 Specification with geometry 45°/0° for standard illuminant D65



COLOUR	X	Y
Green	0.1350	0.5597
Yellow	0.4782	0.4726
Red	0.6292	0.3265
Blue	0.1521	0.1544

## PROPERTIES OF THE MATERIALS USED

	Marine Aluminium	Stainless steel
Tensile strength	305 Mpa	460-860 Mpa
Modulus of elasticity E	70,000 Mpa	190-210 Gpa
Brinell hardness	95 HB	160-190 HB
Breaking load	295 Mpa	500-700 Mpa
Shear modulus of elasticity G	26,300 Mpa	81,000 Mpa



! Specifications subject to change without previous notice.

