## SAGRES, SAGRES+

## **GENERAL FEATURES** Structure Structure in hot-dip galvanized steel and deck **Fenders** Exotic rot-resistant or composite wood Adjustment along the pontoon dock that allows the fixing of other **Flexibility** walkways, fingers, and accessories Mooring Piles, metal profiles, radius arms, chains, or elastic moorings systems Easy assembly and maintenance of the electricity and water piping Services system Live load 1.5kN/m<sup>2</sup>, on the surface between evenly distributed lines Epoxy paint over galvanization; Ducts equipped with PVC fender profiles or guttering; Accessories Marine elastomer fenders; and options Overloads exceeding 2.5kN/m<sup>2</sup> or 4kN/m<sup>2</sup> with additional flotation.

## **APPLICATIONS**

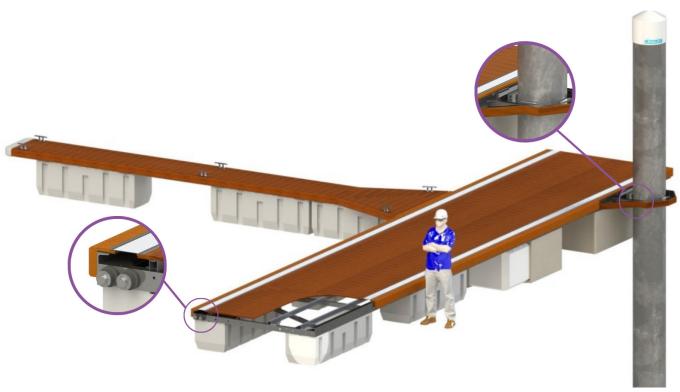
- Semi-sheltered areas in protected bays
- Mooring pontoons in marinas, harbors and fishing docks
- Private and public piers
- Anchorages





The Sagres and Sagres+ systems consist of floating pontoons with hot dip galvanized steel structure, composed of modular units and suitable for adverse weather conditions; optionally, and depending on the specific features of each application, the structures can be painted after galvanization. The walkways are supplied with ducts on both sides, covered by anodized aluminum coverings.

These systems are recommended for semi-sheltered areas in protected bays and were developed from experience acquired over more than 35 years in the sector. They have proven to be stable, resistant and durable.



## **TECHNICAL SPECIFICATIONS**

Structure and deck	Welded mild steel, hot-dip galvanized (BS.EN.150.1461:1999)
	Exotic rot-resistant wood, striated slats 145x21mm, with stainless steel screws; optional composite and pultruded grating
	Dente and Chandral 4 Flat / 12 Flat / 12 Flat / 12 Flat / 12
Live load	Pontoons: Standard 1.5kN/m <sup>2</sup> with 2.5kN/m <sup>2</sup> option;
	Fingers: standard overload of 1.0kN/m <sup>2</sup> .
Freeboard	500 mm without load
Draft	400 mm without load
	Waves with a maximum significant height of 400mm (Sagres) and 500mm (Sagres+).
Project parameters	Wind with peak speed of 47m/s and average speed of 25m/s.
	Maximum lateral load of 1.25kN/m (Sagres) and 1.50kN/m (Sagres+).
	Maximum distance between piles: 25m (Sagres) and 30m (Sagres+)
Hulls	Expanded polystyrene coated with stainless steel reinforced concrete or rotomolded polyethylene filled with
	expanded polystyrene
Fasteners	Flexible with elastomer blocks crossed by M24 hexagonal bolts, nuts, and section brakes; with two or four
and fittings	

bolts per connection between walkways; galvanized or stainless steel