

# Super Yacht

i n d u s t r y



## **Carpe Diem**

FULL-BEAM BEAUTY

## **New Technologies**

METS 2011

## **Firefly**

FIRST IN CLASS

## **Hole In One**

MARITIME GOLF TOURNAMENT



# *Firefly*

First in Class



**FIREFLY**

BUILDER  
HULL CONSTRUCTOR  
NAVAL ARCHITECT

Claasen Shipyards  
Bloemsma Aluminiumbouw  
Hoek Design



*There is a new superyacht in town. She looks classic, but make no mistake – she is a high-tech, modern creation in a class, quite literally, all her own. Firefly, a performance-oriented sailing yacht built with the 1930s flare of a J-class, is the first to receive the new F-class rating.*

After an extensive research project and fifteen prototypes later, Hoek Design, in the Netherlands, produced the 35m Firefly. She is a new one-design race-classic of the F-class, developed as a high-performance racer, fit to race in the Spirit of Tradition class. As outlined in the design brief, designer André Hoek, wanted her “to be fast on all points of sail, both in light- and heavy wind”, in order to beat a J-class racing yacht despite wind conditions. To accomplish that goal, the resulting Firefly is a hybrid of sorts. Above the water, she maintains the traditional beauty of the J-class in look and feel, but beneath the water she has the power of a maxi racer.

After the owner and designer carefully calculated the ship’s optimum size to compete against J-class racers, Firefly was constructed to “the highest quality standards in the Netherlands”, according to her makers. To ensure quality construction, Hoek chose two yards for the job, each a specialist in their field. Bloemsma Aluminiumbouw, an expert in aluminium builds and well-acquainted with J-class hulls, constructed Firefly’s hull. Claassen Shipyards, responsible for the recent J-class yacht Lionheart, finished Firefly to Lloyd’s Register classification code. Builders revealed the construction, for a superyacht of this size, was prompt with only nine months between the first drawing and its sea trial.

### Vintage Look, New Class

Firefly’s unique charm lies in her classic lines, modern design, advanced technical systems and bold materials. From a distance, she commands attention with her fiery spinnaker donning a voluptuous personified firefly. Up close, her long overhangs and sleek lines draw similarities to the exterior styling of Svea, a 1937 Swedish J-class yacht. Her sweeping sheer, flush deck and modest deck camber create a traditional ambience echoing designs of the 1930s.

Firefly’s performance, however, resembles little from the 1930s. Built from a technical racing point of view, she fares well against modern maxi racers,

with her high aspect ratio and T-style fin keel with a 26t lead bulb. The newly formed F-class Association believes this combination is “exceptionally powerful”. It is no surprise this new design, nicknamed the J slayer, created a new class rating. According to the F-class Association, Firefly represents “race classics of an altogether different breed”, since F-class yachts can be built at an economical price, only require eight to twelve crew members and allow crews to race competitively against vessels of almost identical speed.

### Stacking the Deck

The layout of Firefly’s deck compares to a modern maxi with a large open cockpit and separate cockpit for the helmsman. However, the visual similarities stop there. Firefly’s deck is flush, unhindered by a deckhouse, with a calculated camber to reinforce its stiffness. The obvious wide appearance of the deck clearly distinguishes it from a maxi yacht.

Firefly speaks speed and endurance from her deck design to her interior. It is a pure racing vessel. The absence of unnecessary trappings is evidence of that. The minimal, but stylish interior consists of pipe cots, a stall shower, locker space and a small galley and navigation table. The only painting, a matching lady firefly from the spinnaker, hangs above the navigation station bringing her







fierce spirit below deck. Red cedar slats line the hull to accompany the red cedar floors. Aluminium striping and composite gratings finish off her all-business interior. The inside of the hull is coated with a new insulation paint system, Mascoat Marine DTM coating, designed for thermal insulating and anti-condensation protection as well as Mascoat Sound Control DB, to dampen noise caused by structural translation. The belly of Firefly is a quiet control centre for the crew to focus on competitors.

Engineers planned every inch of Firefly around the equipment to maximise performance. This ensures owners and crew have a level playing field to display their nautical skills. Firefly maintains a carbon mast, hall spars and boom as well as light weight PBO rigging to help her run lean in the water. There is an open cockpit area with one large winch designated for the mainsheet and two large primaries. The separate cockpit for the helmsman required no built-in seating since the cockpit floor is a mere 40cm lower and the deck serves as a seat. Indicative of the new F-class, Firefly's helm consists of a wheel, instead of a tiller, for a quick and accurate change of course. As the F-class Association put it: "the fine detailing and classic elements... of an F-class are truly memorable."

### Tech Savvy

If her looks are any measure, her technical systems are also a cut above. Technically speaking, Firefly is indeed cutting-edge. The main engine is

a Steyr six-cylinder that drives a folding propeller and Integrated Flywheel Generator (IFG). A second four-cylinder Steyr engine drives another IFG and hydraulic pump. Since both engines contain IFGs, there is no need for a traditional generator set, which devours limited space on board. Built for long distance races, the power from the engines enables the water ballast system to transfer five t of water from one side to the other within two minutes. Accordingly, all sailing systems on Firefly are hydraulic, which makes her simple to sail, eliminating the need for a large crew. She sports Harken winches and Lewmar deck gear and is fitted with a fixed keel, though class rules allow yachts to have a lifting keel. Naval architects and engineers decided the additional weight of a lifting keel would not improve performance. As her namesake suggests, Firefly's only goal is to soar on the water, so the keel is fixed at 5.2 m and has only 30 cm of floor height.

### Racing Debut

In July 2011, Firefly made her racing debut at the SuperYacht Cup in Palma de Mallorca. Her modern design combined with an image reminiscent of the past, her makers insist, caused a buzz among spectators. The F-class association stated: "she received positive reactions from the press, visitors and other participants." Firefly represents an upcoming class in sailing yachts as an order for a second F-class has been placed, and negotiations





are under way for two more sister vessels. The Spirit of Tradition class may hit a growth spurt in the near future as a result of the budding, new F-class.

## Main Suppliers & Subcontractors

**Bloemsma Aluminiumbouw** Hull construction | **Bonsink Yacht Painters** Paintwork | **Claasen Jachtbouw** Interior / Deck construction | **Frans Brandjes Engineering** Keel engineering | **Hall Spars** Spars | **Harken** Winches | **Hoek Design** Design | **Jongkind Yacht Installations** Technical installations, engineering | **Lewmar** Deck equipment | **North Sails** Sails | **SmartRigging** Rigging | **Steyr Motors** Engine, generator

**i.** [www.hoekdesign.com](http://www.hoekdesign.com)

**i.** [www.fclassyachts.com](http://www.fclassyachts.com)

**i.** [www.hoekdesign.com](http://www.hoekdesign.com)

## Facts & Figures

Type of ship	F-Class Racer
Year of launch	2011
Length o.a.	35.20 m
Length w.l.	22.23 m
Beam	5.58 m
Keel	5.2 m
Ballast	28 t
Displacement	62 t
Superstructure	Mahogany
Engines	Steyr 4-cylinder, 6-cylinder
Gearbox	Twindisc
Shaft & Propellor	Maxprop
Generators	Steyr
Fuel tank	900 ltr
Water tank	800 ltr
Spars	Hall Spars
Sails	North Sails
Upwind m <sup>2</sup>	594
Downwind m <sup>2</sup>	1,095

