

Text: Emmanuel van Deth and P. Echelle - Photos: Nicolas Claris – P. Echelle



# LAGOON 46

## Comfort without sacrificing performance The 450, but better?

The 39 and the 52 showed the way back in 2013, but it was the 42, 40 and the 50 that turned the idea of setting the rig further aft into a winning formula. The 46 now picks up on this experience to apply this idea (new to cruising boats, though not racing!) to the heart of the Lagoon range... the stakes are high! The challenge: replacing the company's best-seller, the 450.

The 46 of course represents the latest generation of Lagoons with her aft-set rig, coachroof with windows that are refined, aft, for a visual lifting effect and her marked hull ribs - which integrate and highlight the large hull portlights. Visually, the 46 fits perfectly between the 42 and 50, and like the 450, her ambition is to remain accessible to a family crew who can spend many months on board in excellent conditions of comfort. However, the Lagoon 46 has also been designed to appeal to charter companies (especially thanks to the four-cabin version). Not to mention that owners are likely to charter out their own boats...

### **A particularly well-thought-out design**

Before leaving the pontoon, a first observation: VPLP have worked hard to ensure that the imposing freeboard of the hulls and the XXL volume of the nacelle could be visually digested. The overall look of the 46 remains fluid. As we have seen above, the ribs, the hull portholes integrated into a reveal, the stepped hulls but also the colored band between the coachroof portlights and the bimini, the top of the plunging bows, all elements that contribute to refining the silhouette of the 46. Meticulous design work orchestrated by Patrick Le Quément, designer to whom we owe a good amount of Renault automobiles, starting with

the first Twingo. As for the very aft-set, and particularly sleek mast (stepped on the coachroof), we've finally got used to it - the Lagoon 39 and 52 have been wearing this style since 2012. The idea is to take care of the weight centering, to refine the mainsail and to offer a large self-tacking jib. But the rig of the 46 still offers nearly 10 m<sup>2</sup> (107 sq ft) of additional sail area compared to the 450, and it seems that the yard has awarded its 46 with the most powerful of the two rigs tested on the prototypes.

### Impressive under gennaker

The yard offers two engine options: Yanmars in either 45 or 57 horsepower. Two powers well adapted to the displacement of the 46: 16.6 tons lightship (almost 20 tons ready to sail). A displacement comparable to the 450 F, which displays 16.9 tons lightship, but higher than the SporTop version. The two tanks, with 520 liters (137 US gal) each, have the same capacity as the 450's. With a total consumption of 12 to 14 liters (3.2 to 3.7 US gal) at 7 knots, they provide a range of 560 nautical miles.

Our test was carried out with light to moderate winds and flat seas. A nice surprise: the Lagoon 46 moves rather well under full mainsail and with the gennaker unfurled. The yard strongly insists on the interest of this sail, which is essential to animate the log when sailing with below 10 knots of true wind. When cut flat, the sail carries you up to 60° off the wind in light airs - not very far from the optimum heading (50 to 55°). We picked

## CAREFUL, SENSITIVE SUCCESSION

up to a speed of 7 knots when the wind was no more than 9, and with the wind on the beam, we even saw a peak at 9.1 knots when the wind instrument was just teasing the 10-knot mark.

Results that are more than encouraging, even surprising. The very sleek and aft-set rig offers a decisive advantage here: it allows the gennaker to offer a maximum surface area. In any case, we are convinced: this aft rig seems to be able to effectively propel the imposing platform forwards. With the gennaker furled, the atmosphere was less euphoric; though the 46 remains always maneuverable and tacks easily, it's difficult to really get going again upwind and we didn't exceed 5 knots under self-tacking solent. And again, this is achieved by keeping an eye on the tell-tales and constantly correcting the course to optimize flows. The furled gennaker, just forward of the jib luff and the windage of the boat do not help... Many a crew, in these conditions, will obviously be tempted to turn on the engine. What can we conclude from this? The 46 goes surprisingly well under gennaker, but proves disappointing under solent - with 10 knots of wind, let's remember. We come back to the yard's recommendation: make maximum use of the gennaker... With

this sail, which therefore draws on the surface all the advantages of a sleek and aft-set rig, the performance is undeniably convincing for a model designed for comfort.

### An electric mainsheet traveler

These factors don't detract from the ease of sail trimming, which is remarkable on a boat of this size. The big advantage of the 46 is that it is effortless to use... thanks to the self-tacking jib, of course, but also with the support of the electric mainsheet traveler - a system developed by Harken. And the main sail-handling maneuvers, assisted by electric winches, are well-grouped around the helm station. Lagoon has once again opted for the flybridge - first seen in 2004 on board the Lagoon 440. The helmsman is in a central position, has a good view of the sails and the water. But for a good view of the sterns when maneuvering in port, the optional rear-view camera is not necessarily a luxury. It must be pointed out that the fabric bimini that protects the flybridge is too low for the helmsman, standing up, to be able to monitor his jib tell-tales. This option is probably preferable to the hard T-top: at least, on our model, we can fold the hoops back. The flybridge has to contend with the boom, which is not very far away!



1: The mast on the 46 is located 2m (6'7") further aft than the traditional position on the forward bulkhead, making the boom shorter and manageable, main higher for better profile performance, the battens much higher and a self-tacking solent with good sail area.

2: The 110m<sup>2</sup> (1,184sq ft) code 0 is a large sail which is very propulsive from just 2 knots of wind and it's easy to use!

3: The evolutionary steps allow for real beds, with lateral access in the forecabins and the gull-wing shape prevents slamming

4: Folding table for 4-10 people, generous seat aft, outdoor kitchenette with fridge, sink and worktop, efficient serving station and through-light! All attributes of a comfortable cockpit, according to Lagoon



Moving around the boat has been well thought out, with double access for this flybridge and very wide side-decks and steps. A handrail is integrated into the coachroof. Only one criticism: sheets-in hard, the gennaker sheet blocks the foredeck and access to the flybridge.

On the relaxation side, we like the cockpit protected by a rigid bimini. A set of canvas screens allows you to close off all or part of it. The table on the port side can double its surface area to accommodate up to 12 guests. It is equipped with a sliding bench to provide, in normal use, direct access to the port side deck. A complete galley, in two modules, allows you to prepare meals outside. A large lounge extends to starboard. The cockpit floor continues at the stern of the hulls, almost to the sugarscoops. Very wide, they are just inviting you to swim - if the weather is right. The yard offers electric davits or a hydraulic platform. The 46 offers two other relaxation areas. Starting with the forward cockpit, with its modular seats and the windlass locker, which acts as a mini-table. Of course, we continue with the flybridge; behind the helm station, the space available is quite impressive!

## Maximum volume in the nacelle

The nacelle, as on board all Lagoons, offers

### TECHNICAL DESCRIPTION

Builder: Lagoon
Naval Architects: VPLP
Exterior Designer: Patrick le Quément
Interior Design: Nauta Design
Construction: balsa/glass/polyester sandwich, bulkheads in glued or laminated plywood
Length: 13.99 m (45'11")
Beam: 7.96 m (26'1")
Air draft: 23.99 m (78'8")
Draft: 1.30 m (4'3")
Light displacement (CE standard): 16.6 t (36,600 lbs)
Upwind sail area: 140 m <sup>2</sup> (1,510 sq ft)
Mainsail: 87 m <sup>2</sup> (935 sq ft)
Self-tacking jib: 50.5 m <sup>2</sup> (540 sq ft)
Code 0: 110 m <sup>2</sup> (1,185 sq ft)
Fresh water: 2 x 300 l (2 x 79 US gal)
Diesel: 2 x 520 l (2 x 137 US gal)
Holding tanks: 2 x 120 l (2 x 32 US gal)
Engines: 2 x 45 hp or 2 x 57 hp on option (model tested)
Price: € 433,000 ex-tax

maximum volume and excellent protection against the sun's rays thanks to the all-vertical windows. We were immediately won over: ease of movement, interior brightness, panoramic view and overall quality of the walnut woodwork and finish - frankly stunning for a number one just out of the yard. On the other hand, contrary to current trends, the cockpit opening is not very wide; though the bay window does offer 1.38 m (4'6") in the open position (i.e. a total of 3 m / 10' of glazed area at the rear), the useful passage width is limited to 88 cm / 2'11" - the fault being the U-shaped galley furniture, whose cockpit-side return bites into the opening. Nothing problematic in use, however. This time, the yard decided to accept having the mast support strut, an inevitable consequence of the mast set back and placed on the coachroof, rather than surround it with furniture - this is the case on board the 50. The available floor space is beneficial. The chart table, forward, to port, gives a beautiful view ahead. The saloon can accommodate up to eight people. Forward, there is a large retractable window - Lagoon doesn't hide the fact that the concept is borrowed from the Bali. The hulls, five steps down, lead to the cabins. The yard has endeavored to offer bunks as wide forward as aft, 1.60 m (5'3"), and accessible on both sides. An important charter point, when it comes to the allocation of cabins... The necessary width was obtained by forcing the inner hull step, without influencing the hull width at the waterline. Each cabin has its own bathroom. Each one gains in volume thanks to the black water tanks moved under the floors, at the bottom of the hull. Good storage capacities can be found everywhere - drawers, shelves, wardrobes. The starboard hull of our model is dedicated to the owner. It is easily isolated from the nacelle. The bed is at the back. In the center, storage space, a desk and a sofa. Forward, a separate toilet and a huge bathroom. Both forepeaks can be equipped with a single berth.

## Conclusion

This new Lagoon 46 should convince those who want to spend time on the water in excellent comfort. On board, a family will find it comfortable: a real home on the water, guaranteeing a friendly environment in the saloon, the cockpits and on the flybridge while preserving privacy in perfectly insulated cabins. Nevertheless, the designers of the 46 have managed to preserve good speed possibilities for this boat: the magic design to take over from the 450..



- ◆ Efficient and tolerant mainsail
- ◆ Exemplary automation of the mainsheet traveler
- ◆ Efficiency of the aft-set rig under Code 0 and under self-tacking jib in a breeze



- ◆ The fiber projected onto the plywood bulkheads makes these elements heavier
- ◆ The service battery bank could be higher, to be out of reach of bilge water
- ◆ The secondary electrical panel (at the bottom of the starboard companionway) is poorly protected from accidental runoff

5: The flybridge has been completely redesigned to reduce the impression of being unpleasant elevated; the folding bimini is a great idea that allows you to use it when essential and, enjoy the sail plan the rest of the time. Beautiful seats, attractive sunbathing area and easy access contribute to the pleasure of this cockpit

6: A private interior designer seems to have taken care of the personalization of "your" interior