

The Yacht

The yachts are Dubois 68's, and as the name suggests are designed by Dubois Naval Architects. Ed Dubois has been designing and sailing race winning yachts since 1976, as well as many high-performance large private yachts.

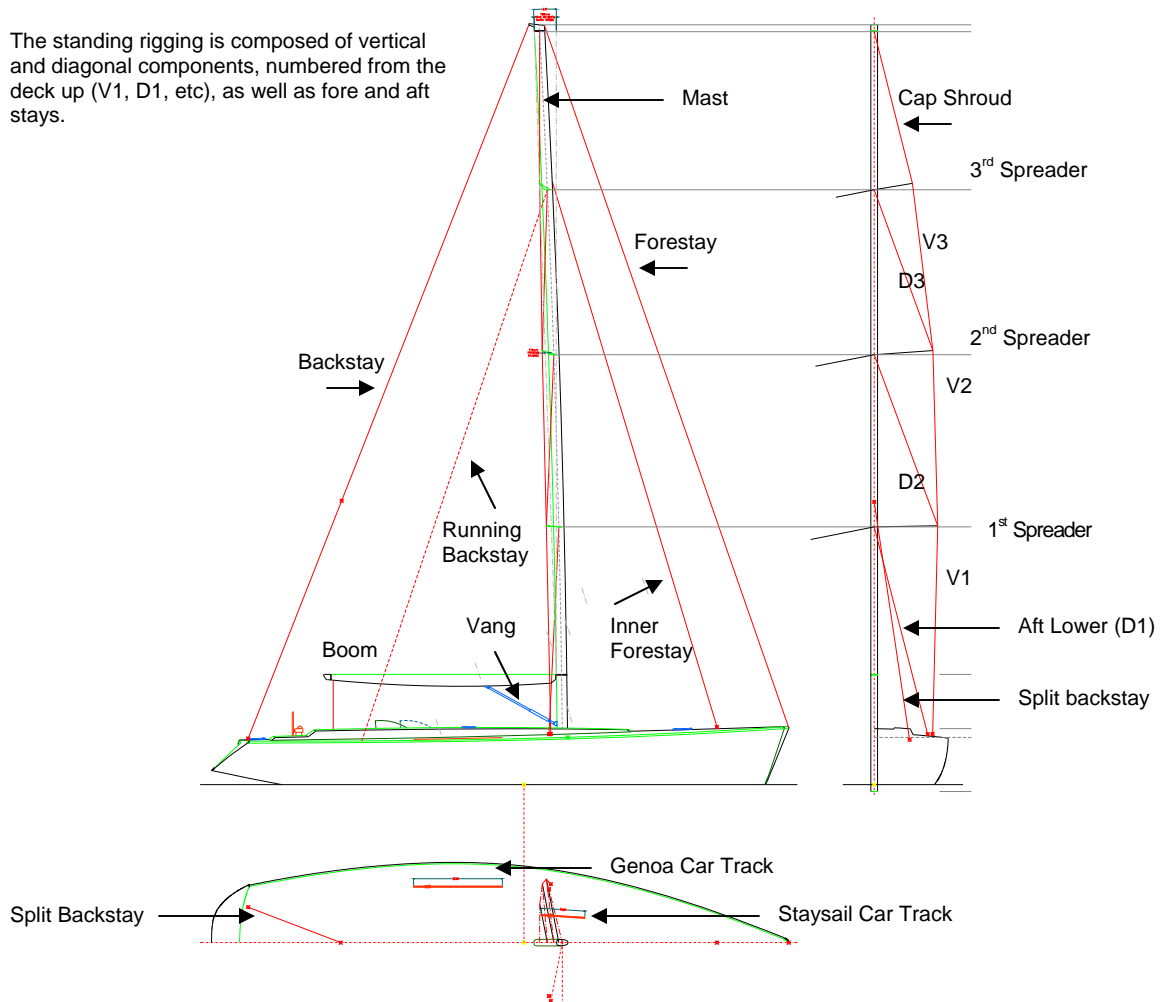
The basic yacht dimensions are as follows:

Length overall (LOA):	20.8m
Length water line (LWL):	17.39m
Beam (widest part of the yacht):	5.76m
Draft (deepest part of keel from the waterline):	3.00m
Height of mast from waterline (air draft):	27.3m
Displacement (laden):	31.2 tonnes

The Rig

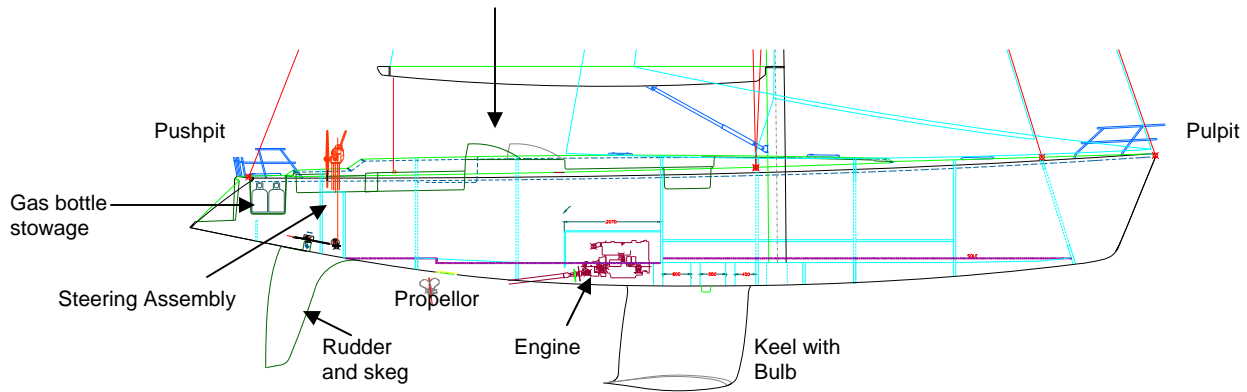
The rig is composed of standing rigging and running rigging. Standing rigging holds the mast up, running rigging controls the sails.

The standing rigging is composed of vertical and diagonal components, numbered from the deck up (V1, D1, etc), as well as fore and aft stays.



The Hull

Hatch open (fwd)
and shut (aft)



Sail Data

Sail	Cloth	Area
Mainsail	10.46 oz Dacron	111.3 m ²
150% Genoa	9.46 oz Dacron	154.6 m ²
115% No 1 Yankee	12.5 oz Dacron	128.6 m ²
95% No 2 Yankee	12.5 oz Dacron	84.0 m ²
80% No 3 Yankee	15 oz Dacron	67.1 m ²
Staysail	15 oz Dacron	46.7 m ²
Storm Jib	15 oz Dacron	17.0 m ²
Trisail	15 oz Dacron	17.5 m ²
Lightweight Spinnaker	0.75 oz Dacron With 1.5 oz Dacron edges	364.0 m ²
Medium weight Spinnaker	1.5 oz Dacron With 2.2 oz Dacron edges	364.0 m ²
Heavyweight Spinnaker	2.2 oz Dacron With 2-ply edges	247.0 m ²

Other Systems

Engine

The engine is a Perkins M130C 6 cylinder 130hp naturally aspirated diesel engine.

Generator

The generator is driven by an Onan MDKUB 2 cylinder intercooled engine, giving 5.5kW at 240VAC. This feeds the battery banks, which in turn provide 12V and 24V DC outputs to drive all the boat's electrical system.

The generator provides the heat for the calorifier, which gives hot, fresh water.

There is an inverter which gives 1500W to 240 VAC 3 pin sockets. To put it in perspective, this is about half a kettle.

Fuel

The yacht has 4 diesel tanks, two of 400 l and two of 340 l, giving a total of 1480 l. This gives about 1500 miles range at the economical cruising speed of 7.5kts at 1800 rpm (approximately 7 litres/hour).

Water

There are 4 types of water on board:

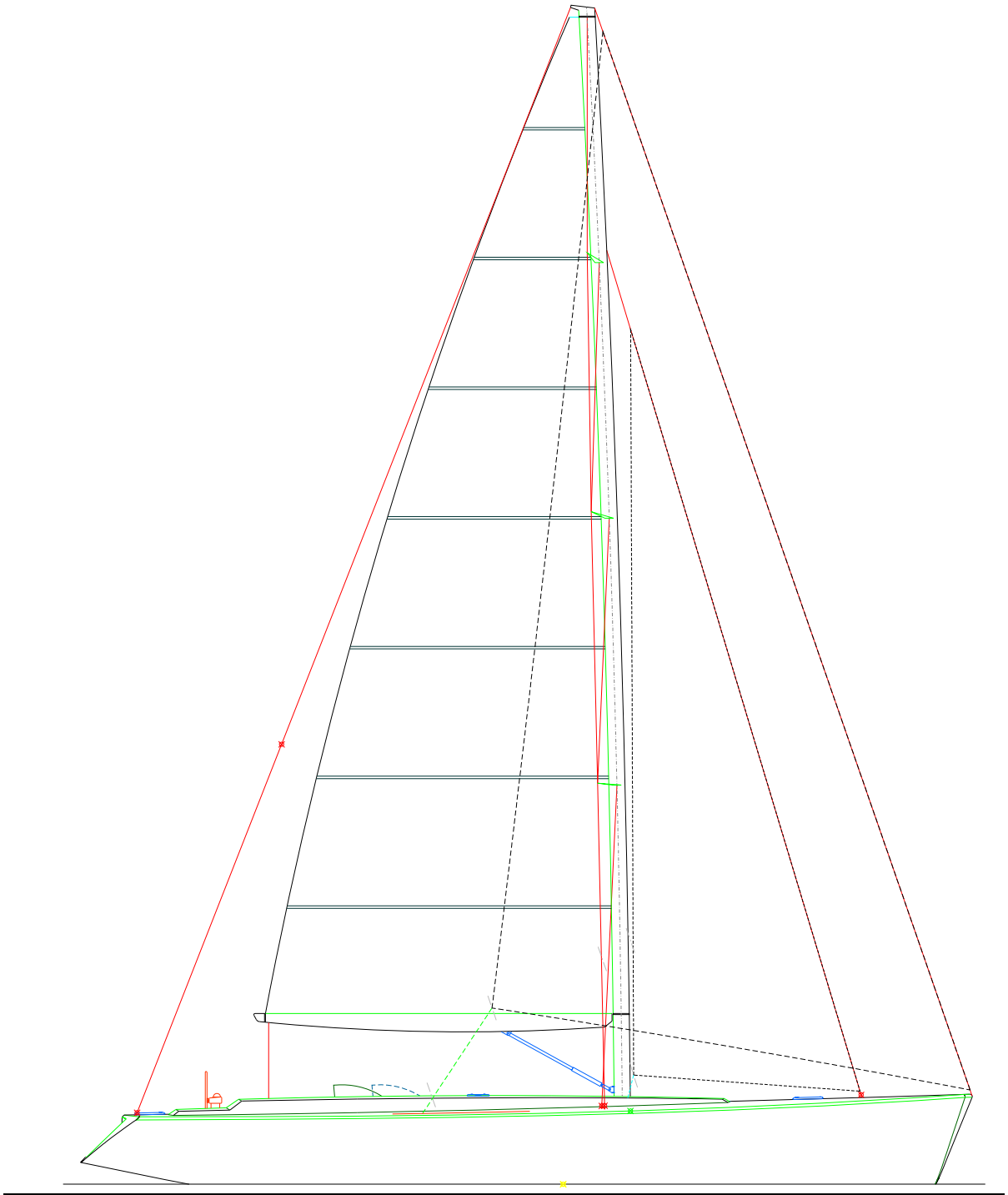
- (i) **fresh water** for drinking. This is stored in 4 tanks, each holding 195 l, giving a total of 780 l. 18 people at 4 l per day use 72 l, so this is just over 10 days' supply;
- (ii) **grey water**. This is non-sewage waste, i.e. sinks and shower trays. There are two grey water tanks – 130 l on the starboard side and 195 l on the port side;
- (iii) **black water**. This is sewage, directly from the heads. When in open water this is pumped directly overboard, but in certain coastal regions the black tanks (112 l on starboard, 130 l on port) have to be used, and then pumped out when alongside into dedicated disposal facilities;
- (iv) **raw water**. This is seawater, which is drawn in to cool the engine and the generator, and to provide the input to the watermaker.

Watermaker

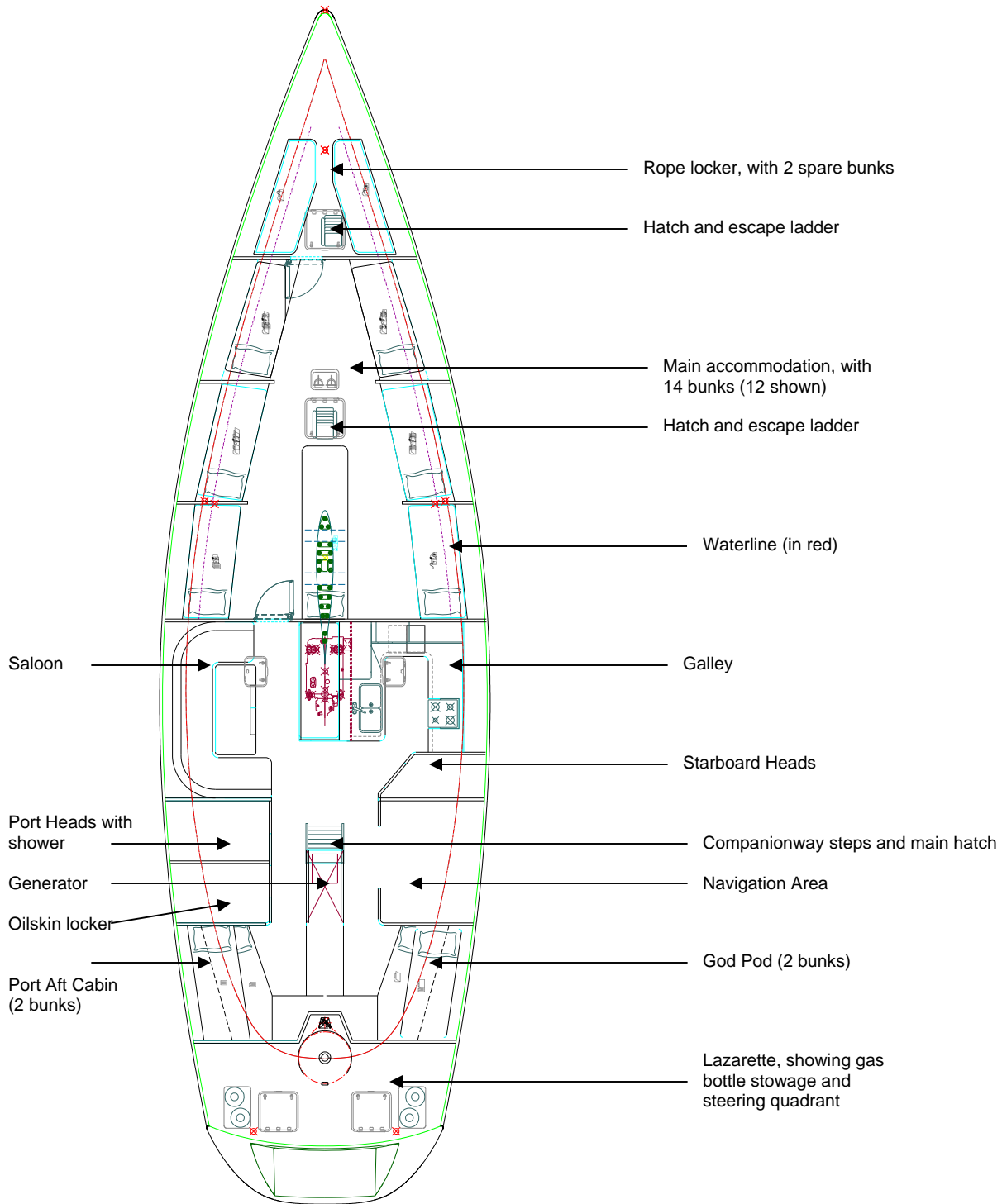
The watermaker is a Livol D30 model, which is a low power electrically driven version, giving 30 l/hour of fresh water from an input of 350 l/hour of raw water and taking 4 Amps off the 24V system. This allows the watermaker to be run while the generator is off, which is a great advantage.

The watermaker is effectively a very fine filtering device, allowing nothing larger than water molecules through. As such it gives very pure water, and this may taste strange at first.

Full Main, Staysail, Yankee 1



Interior Layout



- Seacocks – through hull closable valves
- Instruments – no fluid through the hull
- Exhausts – above the waterline, no valve

