Safety Manual for the Skipper

Sailing yacht "Moody 41 Classic"

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Skipper's Safety Manual
Owners Manual Moody 41CL Buch eng V1.doc
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Introduction

This manual is intended to help you handle your sailing yacht safely and with pleasure. It contains general information about the yacht and its systems, as well as operation and maintenance. Please use this manual to acquaint yourself with your yacht prior to setting off on your first voyage. Further help regarding the individual devices that are part of the equipment can be obtained in the device's operating instructions.

This Skipper's Manual is not a course in watercraft safety or seamanship. Should this be your first yacht or if you have no special knowledge in sailing yacht,or you are not familiar with the special features of a sailing yacht, please acquaint yourself with the handling and operation of this yacht before taking charge of the boat. Your trader or national sailing or motor boat association or yacht club will be happy to inform you of training possibilities, if you would like to expand or refresh you knowledge in this way.

Please make sure that the expected wind and squall conditions meet the design category of your boat and that you and your crew are capable of handling the boat under these conditions.

Your boat is adequately designed, but you must be able to cope with the sea and wind conditions of storms of category A up to the serious conditions of the top category C, including the risk of breakers or strong gusts of winds, which comply with the design categories A, B and C. They are considered as dangerous conditions under which only a competent, capable and trained crew with a well maintained watercraft can operate in a satisfactorily.

This manual is not a detailed instruction guide for maintenance or troubleshooting. In case of problems, please consult your dealer. If a maintenance manual is provided use it to carry out maintenance on your watercraft.

Only hire trained and competent staff for maintenance, repairs or modifications. Modifications that can have an impact on the safety features of the boat must be assessed, implemented and recorded by qualified specialists. The boat manufacturer is not responsible for any modifications performed without his consent.

In some countries, a license or an authorisation is required, or special regulations apply.

Perform maintenance work on your boat in a proper way and consider the wear that can occur over time and through frequent or improper use of the boat.

Each watercraft, no matter how solid it is built, can be seriously damaged by improper handling. This is not compatible with safely driving your boat. Always adapt the boat's speed and direction of travel to the sea conditions.

Should your boat be equipped with an inflatable life raft, refer to the corresponding operating instructions carefully. The watercraft should have the appropriate rescue equipment on board (life jackets, safety belts, etc.) in accordance with the type of watercraft, the weather conditions, etc. In some countries, this equipment is mandatory. The crew should be familiar with the operation of all safety equipment and with manoeuvring in cases of emergency (man-overboard rescue, mooring, etc.). Sailing and motor boat schools and clubs organise training courses on a regular basis.

When above deck, all persons should wear buoyancy aids (life jackets, personal buoyancy aids). It must be taken into account that in some countries legal requirements stipulate wearing a buoyancy aid in compliance with national regulations.

We recommend keeping this manual on board in order for it to be used as an operating guide or for possible troubleshooting.

Individual illustrations may contain equipment features that are not included in the contract.

PLEASE KEEP THIS MANUAL IN A SAFE PLACE AND HAND IT TO THE NEW OWNER IN CASE YOU SELL THE YACHT.

HanseYachts AG warmly welcomes you to the circle of Moody sailing yacht owners and thanks you for the confidence you have placed in our product by purchasing this yacht.

Your contract partner as well as the management and employees of **HanseYachts AG** wish you the most pleasure with your new sailing yacht.

May it always be plain sailing!

HanseYachts AG

Management

Design Category

One of the requirements of the European Recreational Craft Directive is that each watercraft must be classified in a design category.

The sailing yacht Moody 41 Classic has been allotted the design category A.

In the Directive, design category A is characterised as follows:

Design category A: Ocean

Designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4 m and above, and vessels largely self-sufficient. Extreme weather conditions such as hurricanes are excluded.

Certification

In accordance with the EC directive, the certification module B+C was chosen for these yachts. The notified body issued an EC type-examination certificate for this type, certifying that the essential requirements were checked and have been satisfied. The manufacturer confirms the conformity with the type.

The **Germanischer Lloyd AG** is based in Hamburg (refer to declaration of conformity) and was commissioned, as an approved testing laboratory, to perform these tests according to the EU sport boat directive.

Identification

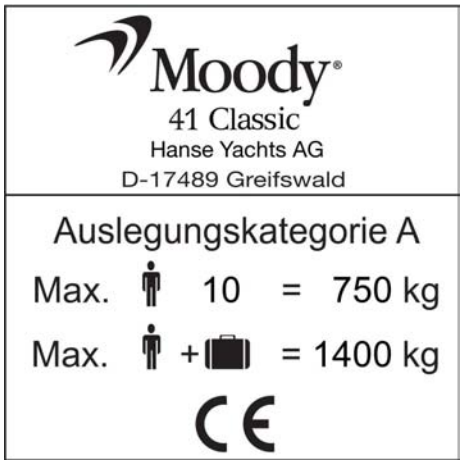
The hull identification is mounted on the starboard side of the transom. It is a globally unique sequence of numbers and letters.

Another number is affixed at a concealed place only known to the manufacturer. This serves to identify your yacht in case of theft.

The number is:

Identification plate (Builder's Plate)

In accordance with the requirement of the directive, the builder's plate is affixed in the cockpit. The information contained therein is stipulated and is explained in the following:


Moody
41 Classic
Hanse Yachts AG
D-17489 Greifswald
Auslegungskategorie A
Max. 10 = 750 kg
Max. + = 1400 kg
CE

Explanations

- Design category A:	**Ocean**
– Max.  10= 750 kg:	Maximum number of persons recommended by the manufacturer for which the boat was designed to carry when underway.
– Max. =  +  = 1.400 kg:	The maximal load capacity consists of 10 persons, personal equipment, supplies and provisions (basic equipment and equipment permanently on board, life raft and tank contents were not taken into account). Observe section 1.2.2.
– CE:	CE mark as verification that the boat was constructed according to the directive requirements.

Warning Notes

In many chapters of the owner's manual you will find notes meant to facilitate trouble-free operation and maintenance, but also to warn against dangers. For reasons of clarity, they are highlighted in boxes.

This indicates that there is an extreme, real source of danger that is very likely to cause death or irreparable injuries should no appropriate measures be taken.

Stands for a safety precautions reminder or draws attention to ways of operating that may be unsafe or lead to personal injuries or damage to the watercraft, its components or the environment.

Means that there is a source of danger that may cause injuries or death if no appropriate measures are taken.

Here, we give you valuable advice facilitating the operation or handling of the watercraft or it's components.

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DECLARATION OF CONFORMITY

of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 94/25/EC as amended by Directive 2003/44/EC

(to be filled in by the craft manufacturer)

Name of the craft manufacturer:

Street:

City: **postal code:** **Country (Abb.):**

Name of the notified body for design and construction (if applicable)

Name:

Street:

City: **Postal Code:** **Country (Abb.):** **ID No.:**

EC-Type Examination Certificate Number: **Date:** (Day/Month/Year)

as far as evaluation is done according to ESR3.2 and 3.3: ——————— **Date:** (Day/Month/Year)

Name of the named body for noise emission (if applicable)

Name:

Street:

City: **Postal Code:** **Country:** **ID No.:**

Module(s) used for design and construction: **A** ☐ **Aa** ☐ **B+C** ☒ **B+D** ☐ **B+E** ☐ **B+F** ☐ **G** ☐ **H** ☐

Module used for noise emission: **A** ☒ **Aa** ☐ **G** ☐ **H** ☐

Other used directives:

DESCRIPTION OF THE CRAFT

Craft identification number (CIN)

Model description : Moody 41 Classic **Type or number :**

Type of craft

☒ Sailing boat ☐ Motorboat
☐ inflatable
☐ other (describe):

Type of main propulsion

☒ Sail ☐ Petrol engine
☐ Diesel engine ☐ Electric motor
☐ Rudder/Oars
☐ other (describe):

Type of hull

☒ Monohull ☐ Multihull
☐ others (describe):

Type of machine

☐ Outboard engine ☒ Inboard engine
☐ Z-drive without integrated exhaust system
☐ Z-drive with integrated exhaust system
☐ others (describe):

Building material:

☐ Aluminium, alloys ☒ Plastic, FRP
☐ Steel, alloys ☐ Wood
☐ others (describe):

Deck

☒ fully decked ☐ partially decked
☐ open
☐ others (describe):

Design category(n): ☒ **A** ☐ **B** ☐ **C** ☐ **D**

Engine performance **Maximum recommendation:** 40,5 **kW**
Installed 29,4 **kW** (if applicable)

Length of hull L_H: 12.61 m **Width W_H:** 4.08 m **Draught D:** 1,99 m

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified ~~(and is in conformity with the type for which above mentioned EC type examination certificate has been issued) – delete text between brackets if no EC type examination certificate has been issued~~.

Name and position: _____
(Person, that signs for the manufacturer or the proxy)

Signature and title:
(or respective symbol)

Date and location: **(Day/Month/Year)**

Essential safety requirements (according to attachment I.A & I.C of the guideline)	ISO standards	Other technical methods	Technical documentation	Please indicate here in detail (*: Harmonised standards)
General Requirements (2)	☒			**EN ISO 8666:2002***
Craft identification number – CIN (2.1)	☒			EN ISO 10087:2006*
Builder's plate (2.2)	☒	☐	☒	ISO 14945:2004*
Protection from falling overboard; means of reboarding (2.3)	☒	☐	☒	EN ISO 15085:2003*;Germanischer Lloyd - part 3 – Pleasure Crafts
Visibility from the main steering position (2.4)	☐	☐	☐	
Owner's manual (2.5)	☒	☐	☒	EN ISO 10240:2004*
Integrity and structural requirements (3)				
Structure (3.1)	☒	☒	☒	EN ISO 12215-1:2002*; 12215-2; -4:2002*;Germa-nischer Lloyd - Part 3 – Pleasure Crafts ; ABS
Stability and freeboard (3.2)	☒	☐	☒	EN ISO 12217-2:2002*
Buoyancy and floatation (3.3)	☒	☐	☒	EN ISO 12217-2:2002*
Openings in hull, deck and superstructure (3.4)	☒	☐	☒	EN ISO 12216:2002*; 9093-1:1997*
Flooding (3.5)	☒	☐	☒	EN ISO 11812:2001*; 9093-1:1997*; 15083:2003*
Manufacturer's maximum recommended load (3.6)	☒	☐	☒	ISO 14946:2001*
Life raft stowage (3.7)	☐	☐	☒	
Escape (3.8)	☒	☐	☐	ISO 9094-1:2003*
Anchoring, mooring and towing (3.9)	☒	☐	☒	EN ISO 15084:2003*
Operating characteristics (4)	☐	☐	☐	
Engines and engine spaces (5.1)				
Inboard engines (5.1.1)	☒	☐	☒	EN ISO 16147:2002*
Ventilation (5.1.2)	☐	☐	☒	
Exposed parts (5.1.3)	☐	☐	☒	
Outboard engine starting (5.1.4)	☐	☐	☐	
Fuel system (5.2)				
General (5.2.1)	☒	☐	☒	EN ISO 10088:2001*; EN ISO 7840:1994*
Fuel tanks (5.2.2)	☒	☐	☒	EN ISO 10088:2001*
Electrical system (5.3)	☒	☐	☒	EN ISO 10133:2000* ; 13297:2000*; Germanischer Lloyd - Part 3 – Pleasure Crafts
Steering system (5.4)	☐	☐	☒	
General - Steering system (5.4.1)	☒	☐	☒	EN ISO 13929:2001*
Emergency arrangements (5.4.2)	☒	☐	☒	EN ISO 13929:2001*
Gas system (5.5)	☒	☒	☒	EN ISO 10239:2001* ; DVGW G608 (Germany)
Fire protection (5.6)				
General – fire protection (5.6.1)	☒	☐	☒	ISO 9094-1:2003*
Fire fighting equipment (5.6.2)	☒	☐	☒	ISO 9094-1:2003*
Navigation lights (5.70	☐	☒	☒	COLREG
Discharge prevention (5.8)	☒	☐	☒	EN ISO 8099:2001*
Annex I.B – Exhaust emissions	See the declaration of conformity of the engine manufacturer			
Annex I.C – Noise emission[1]	☐	☐	☒	2003/44/EG
Noise emission level (I.C.1)	☐	☐	☒	2003/44/EG
Owners manual (I.C.2)	☐	☐	☒	2003/44/EG

[1] Only to be completed for boats with inboard engines or sterndrive engines without integral exhaust

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Chapter 1 - Safety Notes

1. Description of the Boat

1.1. General description

You can find the general description of the yacht in the standard specification and the corresponding contract specification.

1.2. Main data[2]

1.2.1. Main dimensions

Overall length	L_{OA}	12.70 m
Length of hull	L_H	12.61 m
Length of hull on waterline	L_{WL}	11.27 m
Beam of hull	B_H	4.08 m
Mast height		19.50 m
Draught (lower edge of the keel in m_{LDC})		
Crusing	T_{max}	2.00 m
Special keel (option)	T_{max}	1.65 m
Sail surface		
Mainsail		52.00 m²
Self-tacking jib		36.00 m²
Total sail surface		105.00 m²
Genoa 140%		53.00 m²
Gennaker		120.00 m²

The specified sail surface may not be expanded without prior consultation with the shipyard.

Shorten the sails in time according to wind conditions.

Fuel tank content	140 l
Water tank content	325 l

[2] All dimensions, weights and surfaces are approximate values.

1.2.2. Displacement and masses

		Deep keel
Mass of the empty vessel	m_{LCC}	8.962 kg
Mass of the liquids in installed tanks		445 kg
Basic equipment*)		102 kg
Life rafts*)		50 kg
Weight of the standard equipment on board		60 kg
Load capacity (provisions)		325 kg
Personal equipment*)		325 kg
Number of persons (10 persons)*)		750 kg
Mass of the fully loaded boat – ready to sail	m_{LDC}	11.019 kg

*) Component of the load capacity on the Builder's plate

It is the owner or skipper is responsible that the fully equipped boat does not exceed the mass as prescribed in the table above.

1.2.3. Maximum number of persons and load capacity

The Directive demands that for each craft a recommendation is made regarding the maximum number of persons on board when the boat travels in the area it is intended for. This yacht is designed for the ocean, meaning extended voyages between ports.

We therefore recommend the following:

For voyages across the ocean lasting several days, no more persons should be on board, than the number of berth that are allocated.

This category is deemed appropriate for significant wave heights of more than 4 m and for wind forces of more than 8 on the Beaufort scale, under the precondition that:

- the crew possesses sufficient knowledge and experience;
- the boat is constructed in line with state-of-the-art technology and
- the boat with equipment is in good state of preservation.

Life jackets must be provided for all persons on board. The inflatable life rafts that the boat is required to be equipped with, must correspond to the number of persons on board.

Put on personal safety equipment (life jacket, etc.) during the trip!

The recommended maximum number of persons may not be exceeded. Irregardless of how many persons are on board, the total weight of persons and equipment must never exceed the recommended maximum load capacity.

The stability criteria of the watercraft are designed for the specified masses and the arrangement and storage of the additional load are designed in compliance with the regulations.

Persons using this boat should heed the following notes:

- the crew members should be appropriately trained;
- the boat should not be loaded beyond the limit recommended by the manufacturer;
- water in the bilge should be removed as far as possible:
- stability is reduced by upright positioned weights;
- in case of rough weather, the hatches, locker seats and companionways should be kept closed to keep the risk of water penetration as low as possible;
- stability is reduced, if davits are used for towing or for lifting heavy weights;
- breaking waves are a serious danger for the lateral stability of the boat.

Avoid weather conditions under which breaking waves could approach the boat abeam. Therefore, plan voyages taking the weather forecast into account.

Load capacity

The Directive stipulates that the maximum additional load be recommended by the manufacturer. This includes persons and equipment marked with *) in 1.2.2. The maximum load capacity is indicated on the type plate. For the "Moody 41 Classic" the maximum load capacity is 1.400 kg.

The recommended maximum load capacity shall never be exceeded when loading the watercraft. Loading must always be carried out cautiously, distributing the loads in such a way that the design trim is maintained. Heavy loads must be placed as low as possible.

The masses of fresh water and fuel were not taken into account in the maximum load capacity.

When using stowage room beneath the floor or beds ensure that the here installed systems and components of the electrical systems are not damaged.

1.2.4. Motorisation

For details on the engine type and its technical specifications, please refer to the operating instructions for the engine and the contract specifications.

Max. power (EN ISO 8665)	max. 29,4 kW (40 PS)
Quantity	1
Cooling	indirect (seawater/fresh water)

1.2.5. Electrical system

The yacht is equipped with an electrical system with 12V direct current and a 230V alternating voltage system.

Do not modify the electrical system or the circuit diagrams. Only allow trained and instructed personnel to perform work on the electrical system.

Open the control panel only when in current free state since you might come in contact with live elements that are not protected by fuses. Risk of electric shock exists.

There is a risk of fire and explosion when handling electrical direct current (DC) and alternating current (AC) systems in an improper way.

230 V ALTERNATING CURRENT

Never carry out work on a live alternating current system.

Observe the following notes:

- Only use electrical power consuming devices with earthed conductors whenever possible.
- Connect metal housings or systems of installed electrical devices to the earthed conductor in the boat (green or green with yellow stripes).

Never leave the shore connecting cable hanging in the water. This could to injury or to the death of persons swimming nearby!

To avoid electric shocks and to reduce the risk of fire

- Do not modify to the electrical system. Any work performed on the electrical system shall be done by qualified specialists for marine electrical equipment!
- Only use devices that are insulated twice or triple braided!
- First switch-off the shore connection switch before connecting or disconnecting the shore connecting cable.
- Connect the shore connecting cable to the boat first before connecting the shore source of power.
- First disconnect the connection at the shore power source.
- If the reverse polarity display[3] is activated, immediately disconnect!
- Close the cap of the shore connector box.
- Do not modify the shore connections and only use compatible circuit connectors!

12 V direct current

Batteries supply the current for the 12 V installation on board.

Distribution is done via the main fuse panel. The labels next to the switches designate the respective consumer. If required, the dealer can provide the circuit diagram.

Changing the batteries

[3] depending on the contract specification

When removing the batteries, always disconnect the negative pole first and make sure that the pole terminal does not come in contact with other parts of the electrical system! Make sure not to contact both poles with the tool at the same time, thus establishing an electric circuit.

Danger

Only use insulated tools to detach or fasten the pole terminals at the batteries.

There is a risk of fire and injuries!

When connecting the batteries, make sure to first connect and secure the positive poles prior to attaching the negative poles.

Electrical winches

Attention

The force of the electrical winches shall not be underestimated and caution needs to be used. Damages (andes Wort für Schäden !!!!) to the boat can occur by improper handling e.g.: Rodkicker fittings can tear off or push into mast; sail outhauls or deck fittings can tear off, the roller reef(ing) system can be damaged or tear off.

1.3. General arrangement plan (GAP)

1.3.1. Specification

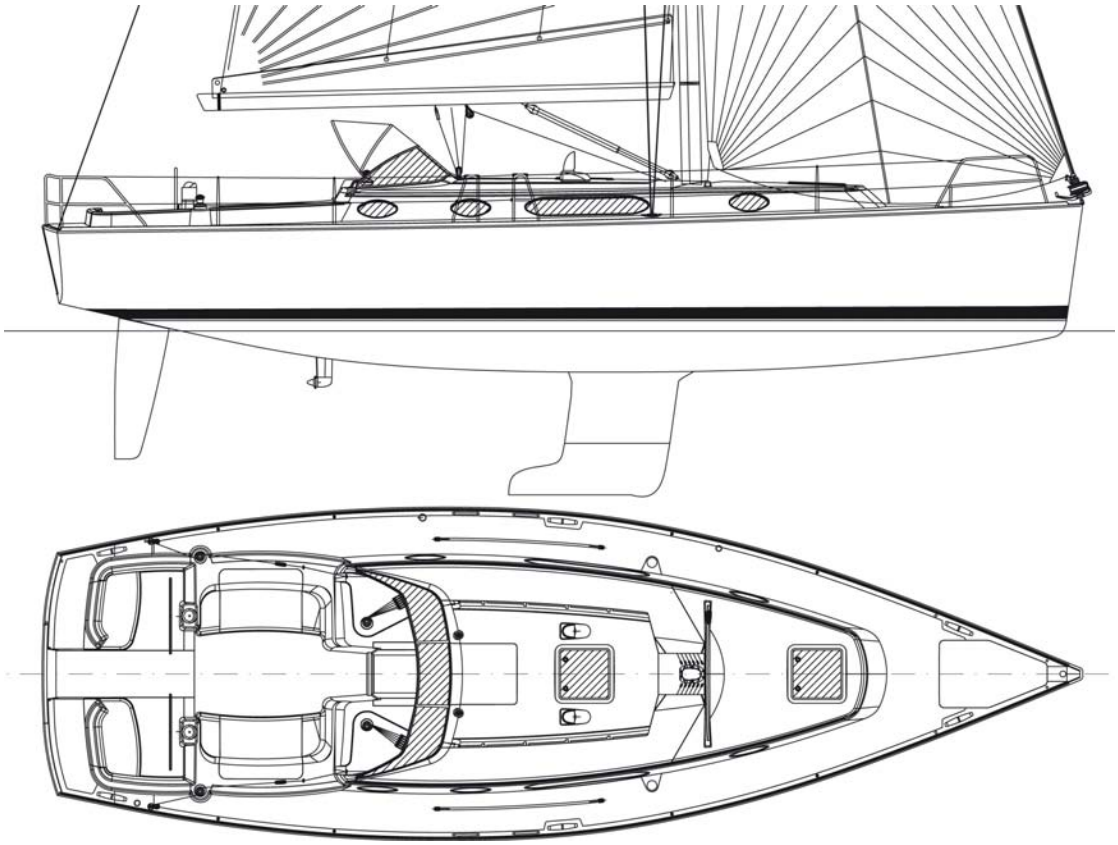
Structure

The Sailing Yacht "Moody 41 Classic" is a cruiser constructed of FRP.

The properties of all utilised materials comply with the requirements of classification societies or ISO standards.

Should you require these materials or the accompanying data sheets, please turn to the trader.

Always keep a sufficient clearance to the sea bottom. On principle, it is not possible to take severe collisions with solid underwater obstacles into account when dimensioning the yacht.



Ill

Illustration 1 General Plan

Note

Grounding or collisions with objects below the waterline can lead to damages to the hull and thus impair its strength.

Preservation

Osmosis protection is ensured by the use of an isophthalic acid gel coat and an isophthalic acid resin for the laminate of the hull. In addition, areas of the laminate surfaces heavily exposed to water were preserved with a top coat.

All parts not consisting of FRP are necessarily colour-preserved or consist of materials that are corrosion-proof.

An antifouling painting system against incrustation of foreign matter should be applied to the underwater body.

Deck covering

All areas of the working deck are provided with an anti-slipping covering.

Fittings and hatches

All fittings and hatches are made of rustproof and saltwater-proof materials. To securely transfer the occurring forces, reinforcements are laminated into the deck at the places where the fittings are mounted.

The hatches and portholes as well as the windows are certified or in compliance with the requirements or regulations in order to resist the impact of breaking waves.

Working deck

The working deck consists of all areas that must be accessed to operate the boat under normal conditions (Illustration 2). The bathing platform and the transom are not part of the working deck.

Warning

Never enter the areas that are not part of the working deck when the boat is moving. There is a risk of falling overboard.

Only step or stand on the seats in the cockpit to move about on deck!

It is generally recommended to secure persons on while deck with individual rescue and safety equipment (e.g. life jackets, safety belts).

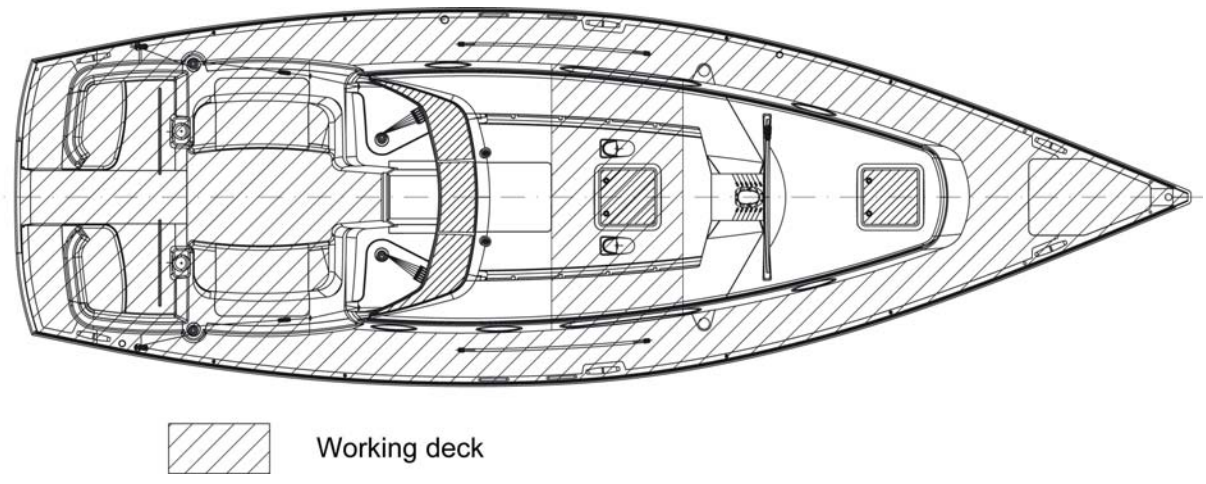


Illustration 2 Working deck area

Danger

When docking at port or to other boats and subsequently heading out again, ensure that you do not to get caught between the quay wall or the other boat.

There is no toe rail at the rear part of the cockpit. Please take note of this when you are located here.

Attention

Do not leave loose objects lying in the area of the working deck or the emergency hatches. Secure all pieces of equipment against sliding!

Guardrail

The boat has a surrounding guardrail with a top and bottom rail. Except for the bow and stern pulpits, the top and bottom rails are made of stainless steel.

Hand-rails and boarding ladder

Additional hand-rails and the arrangement of the deck gear provide protection against falling overboard.

The pull-out swimming ladder can be inserted in the stern flap to be opened at the transom. It extends below the waterline. Reboarding is ensured by the swimming ladder. Acquaint yourself with the handling of the swimming ladder and practice reboarding, e.g. in a man overboard manoeuvre (MOB).

Attention

Instruct the crew in this respect before setting off on a voyage! It is recommended to not sail the yacht alone (single-handed sailing).

1.3.2. Furnishing plan

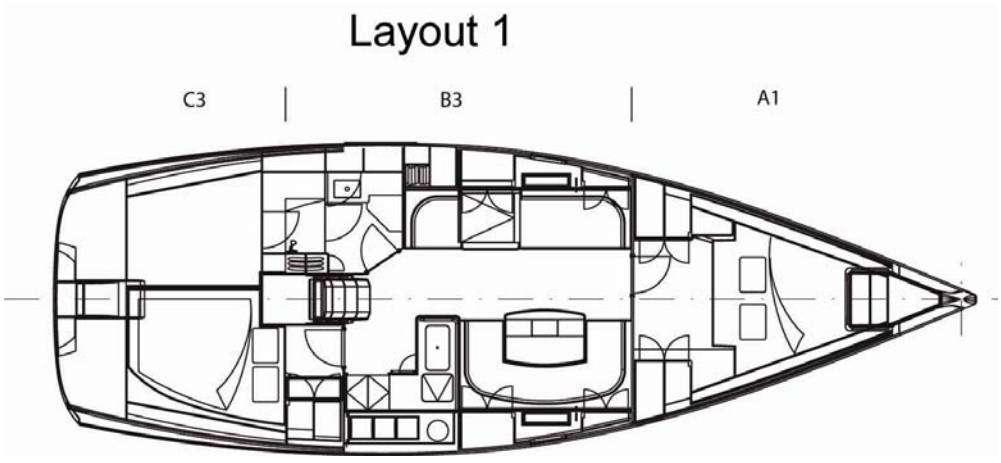
see (Examples of finishing's variants).

1.4. Propulsion system

1.4.1. Engine room

The engine room is located underneath saloon. All aggregates necessary for running the boat are located in the engine room.

The room encloses the installation and is ventilated by an air inlet and an exhaust pipe. The engine room is lined with flame resistant insulation. The engine room can be accessed either by lifting up the companionway stairs and entering through a door located behind the stairs or through a door in the stern cabin.



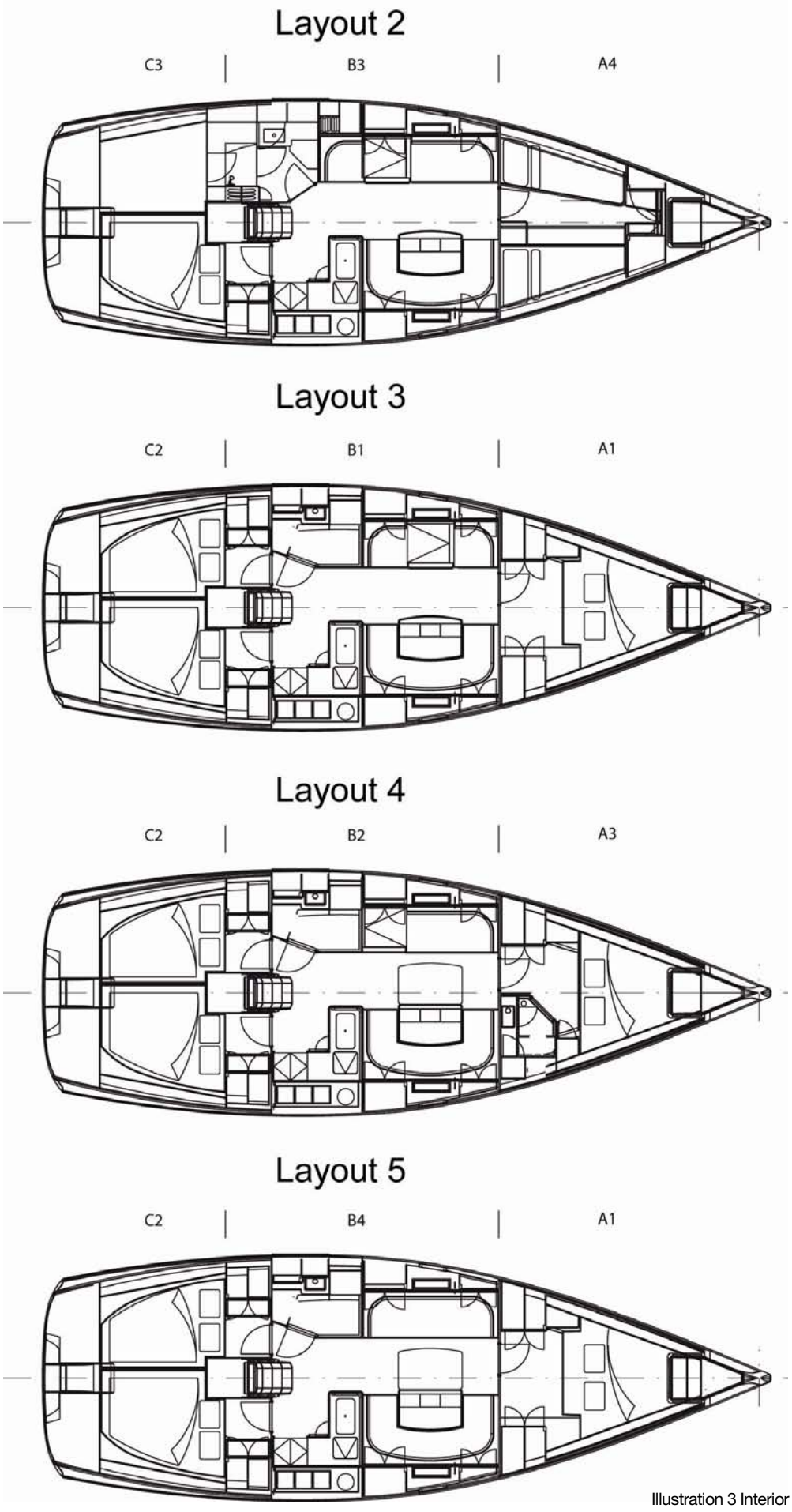


Illustration 3 Interior variants

Rotating parts are equipped with the respective protective gear.

Never remove the protective gear from rotating components while they are running. Never touch the rotating components. Only step on the intended areas.

The engine room is not storage space. Do not leave loose objects lying around. Store inflammable liquids in the appropriate vessels in boxes or locker seats in the outside area!

1.5. Safety notes

1.5.1. Flooding, watertight integrity

The sailing yacht "Moody 41 Classic" is constructed with great care according to recognized technological rules. However, external events, faulty operation or other unforeseen events can lead to flooding and the sinking of the yacht.

The strength of the hull, its built-in parts and systems are dimensioned in such a way that it securely resists the strain when travelling in the areas it is designed for.

It is necessary to skipper and equip the yacht according to nautical rules. In some cases, the standard equipment supplied by the shipyard may not suffice.

The watercraft is equipped with a self-draining cockpit to drain water and rain off.

During danger of flooding the hatches and openings must be shut.

During the voyage, all portholes and deck hatches and saloon door must be shut!

The interior hatches, especially at the backboard of the cockpit must be latched and locked during the voyage! Check the condition of the seal regularly!

The respective weather conditions should be avoided, and voyages should be planned according to the weather forecast.

Observe the following notes:

- Keep the boat tidy to remain systems accessible at all times!
- Check that the outboard openings and seacocks are closed!
- Keep the bilge systems ready for operation!
- Equip your boat with leak stoppage material!
- Sturdy buckets (bailer) help bail water
- Adapt your yacht to the current weather conditions!
- In case of heavy weather, shut the hatches, windows and vent holes (as far as possible)!
- Do not undertake any technical modifications without consulting the shipyard beforehand!
- Ensure regular inspections and professional repairs!

- Avoid the risks of touching ground or stranding

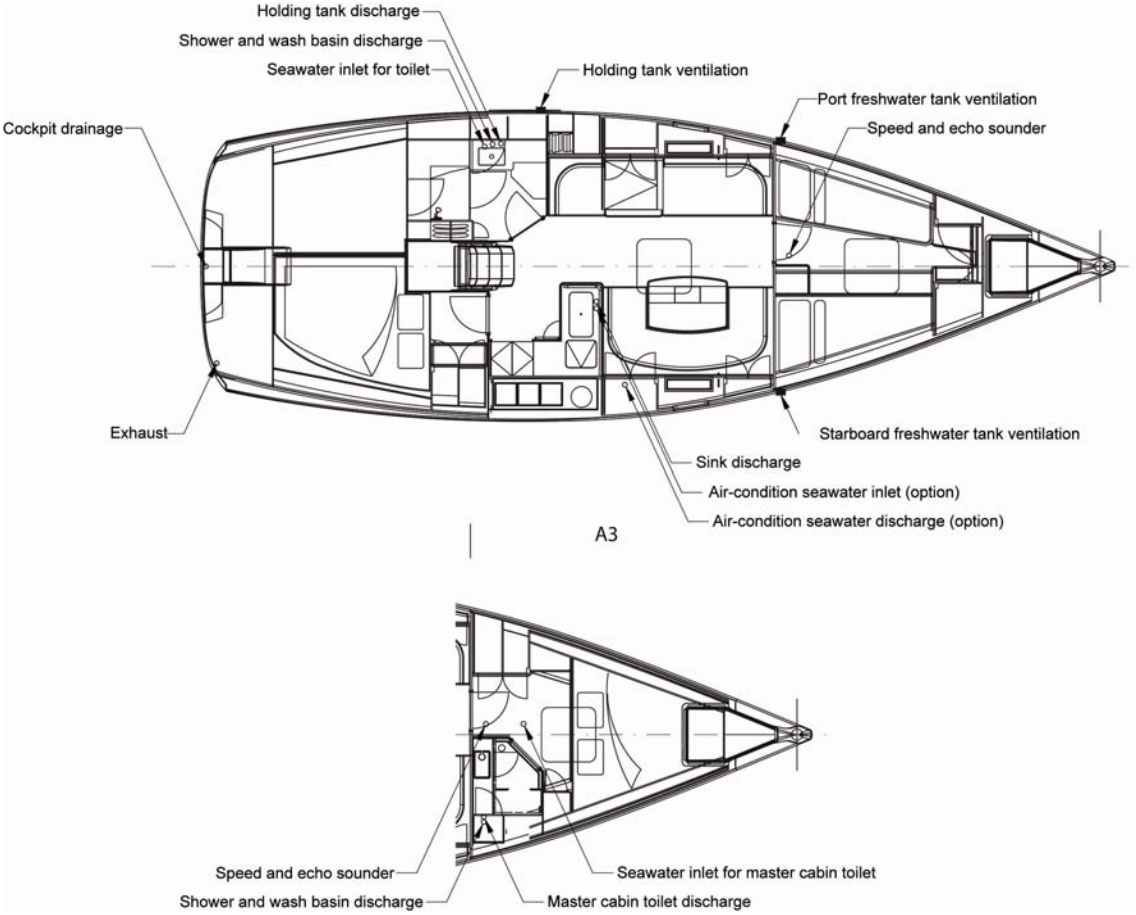


Illustration 1 Boat wall feedthrough

1.5.2. Hull openings, seacocks

Openings in the hull are points that pose a risk of water entering the inside of the boat. They require your special attention.

They have been selected and installed according to established technical rules. It is necessary to check their condition on a regular basis.

All underwater hull openings can be closed with seacocks. If you leave the boat unattended, these should always be shut.

For safety reasons, the hose connections are always double. Do not change this!

Through hull fittings such as echo depth sounders are specially constructed and cannot be closed by a seacock.

When not in use, keep the seacocks closed.

You can see if they are closed:

Closed – lever is at a right angle to the hose or pipe

Open – lever is in the same direction as the hose or pipe

To avoid risk of danger, keep leak stoppers in different sizes on board. In case of damages, these can quickly and effectively seal the openings.

1.5.3. Stability

Stability is the property of the yacht that enables it to regain an upright position after a heeling has been caused by wind and/or waves. Stability is ensured if there are no significant amounts of water in the boat. Shape, weight distribution and dimensioning lend the yacht sufficient stability.

Any change of the masses on board can have a considerable impact on the watercraft's lateral stability, trim and driving characteristics.

1.5.4. Fire protection

Preventive fire protection

In addition to penetrating water, fire is the greatest risk for any boat and also for a sailing yacht. A fibreglass plastic yacht is made of a combustible material, even if it is hardly inflammable. We paid a great amount of attention to the risks of fire when building the yacht. This includes selecting the materials and their treatment.

The engine room is lined with a fire-resistant, soundproof material that can resist fire extremely well for a short period of time.

During refuelling, the engine, the heating system and the cooker shall not be in operation.

Smoking and open fires are prohibited!

The bilges must be kept clean and checked at regular intervals for oil leakages or fuel and/or fuel vapours. Do not store any combustible material in the engine room. Non-combustible materials in the engine room must be secured in a manner that they cannot fall into the machines. They may not obstruct access to the engine room.

We have kept combustible materials such as curtains away from the cooker unit. Please maintain it in this manner.

Please instruct your crew how to use the fire extinguishers!

The most crucial sources of fire are the engine and the cooker unit as well as open fire.

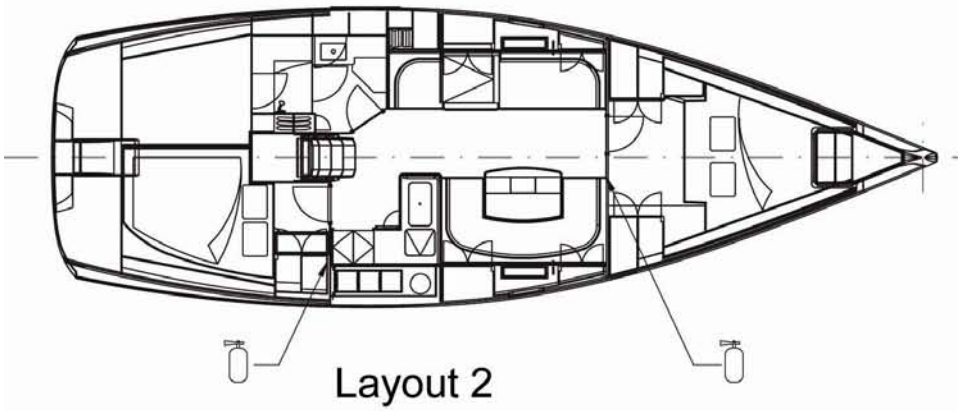
The owner/skipper is responsible for providing portable fire extinguishers. Your sailing yacht should be equipped with appropriate, portable fire extinguishers in compliance with the recommendation below, located in the location marked with the sign you see to your left. Please pay attention to regional regulations regarding the amount and equipment with portable fire extinguishers. The boat may only be operated after this requirement has been met.

They should be at the following locations:

- in the aft cabin cabinet on the starboard side — dry powder fire extinguisher — at least 10A/34B
- in the cabinet in the forecabin — dry powder fire extinguisher — at least 10A/34B
- at the helm — dry powder fire extinguisher — at least 10A/34B

CO_2fire extinguishers shall **only** to be used to fight fire in the galley. In all other living spaces the dry powder fire extinguishers shall be used.

Layout 1



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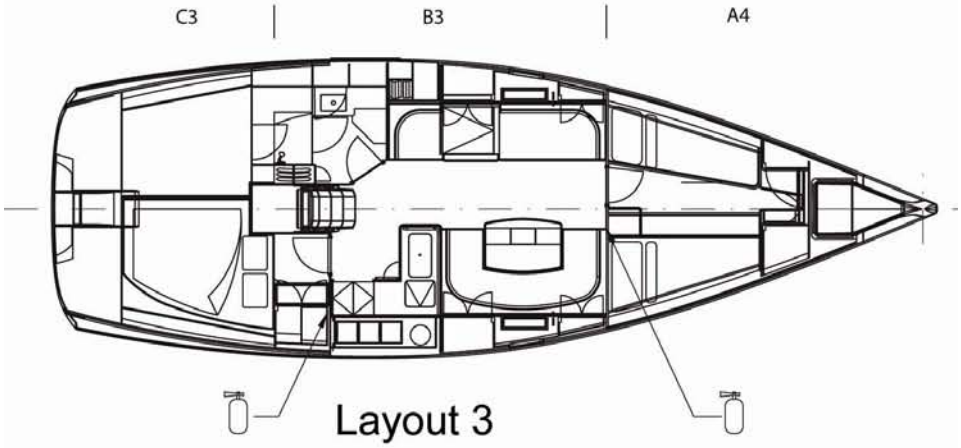

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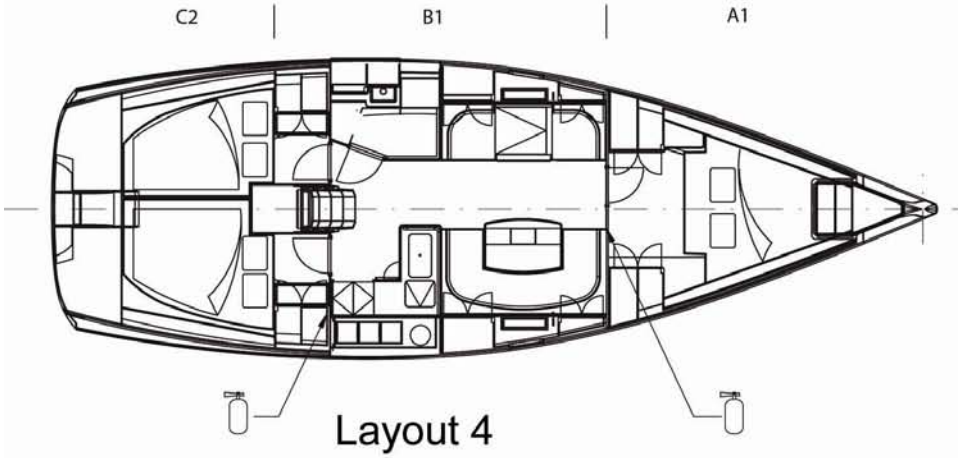

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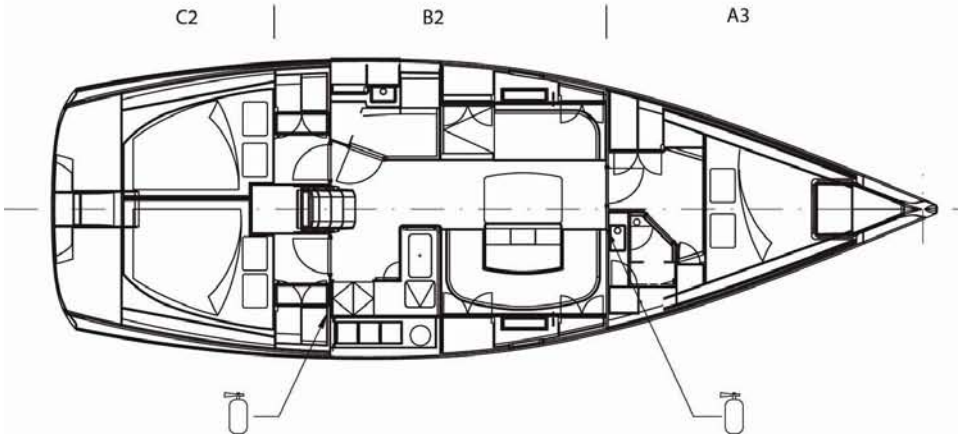

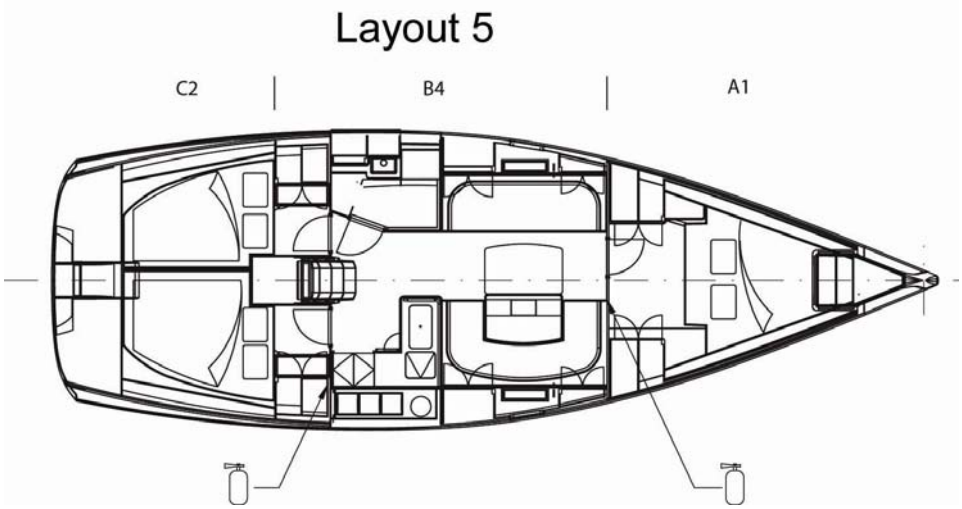

Illustration 2 Location of the portable fire

Danger

Please take note that after the actuation of the dry powder fire extinguisher, dry powder will be in the room. It is absolutely necessary to air the room prior to entering it again.

Supplement your equipment with a fire blanket, which is highly effective in the area of the cooker, especially with hot grease.

Note

Comply with the inspection periods as indicated on the fire extinguishers and ensure that they are ready for operation.

Fire extinguishers that are expired or that have been previously used, must be replaced by fire extinguishers with the same fire classification and the same or higher capacity. If parts of the fire-extinguishing system are replaced, only appropriate components shall be used with the same designation or that are equal in terms of their technical or fire-retarding properties.

Instruct your crew and your guests on the arrangement and handling of the alarm and fire extinguishing equipment on the yacht. You should also include alternative possibilities to extinguish fires such as water buckets, fire blankets, etc.

The skipper must inform the crew of

- the location of fire extinguishers and the operation of fire extinguishing gear;
- the arrangement of the discharge openings in the engine rooms;
- and the location of escape hatches.

Easy access to the fire extinguishers must be provided when the boat is manned.

Attention

Never

- Obstruct exits and hatches;
- use blockages to the hatches when persons are on board;
- obstruct the safety equipment, such as fuel valves and switches of electrical systems;
- obstruct fire extinguishers that are kept in cabinets;
- leave the vessel unattended when cooking or heating devices are in use;
- use gas lamps in the watercraft!

- modify anything on the watercraft systems (in particular, the electrical, fuel and gas systems);
- fill fuel tanks when the engine is running or when heating devices are in use;
- smoke when handling fuel.

Active fire fighting

Any fire poses an immediate risk to you, the crew and the yacht! All persons on board must start fighting the fire with all means and without hesitation immediately after the alarm sounds.

All persons who cannot actively engage in fighting the fire should go on deck and use the escape openings and put on their personal life jackets. The rooms that are must be sealed off from air supply as far as this is possible when fighting the fire.

In case of fire in the galley:

- Close the gas supply valve!
- Smother flames with fire blankets!
- Use the fire extinguisher if the fire has encroached the equipment!

In case of fire in the engine room:

In case of fire, you must immediately turn off the engine, nautical safety permitting! Do not open the hatches!

- Shut off the engine!
- Shut the fuel cock!
- Do not open the hatches!
- There is a small opening behind the companionway between the steps of the engine room flap. Here you insert the nozzle of the fire extinguisher and empty its entire content into the engine room.
- Open the engine room only when you are sure that the fire has been extinguished, the compartment has cooled down and you are able to fight a new fire that might flare up.

Fire on a yacht can turn into a nautical distress. Try to establish radio contact (mayday or pan pan). Keep the distress signals ready.

In case of fire in the engine room, persons not directly involved in fire fighting should leave the inside area via the escape hatch in the saloon or the foredeck cabin/forecastle.

In case of fire in the other areas

Try to extinguish the fire with the fire blanket or with water if no inflammable liquids are involved. Otherwise, use the fire extinguisher to fight the fire.

Use the life belt to facilitate the exit via the escape hatch in case of emergency. The escape life belt shall only to be used in case of emergency, since using it can damage the surface quality of the hatch frame.

The stowage for the life belt may not be altered! Free access shall be guaranteed at all times!

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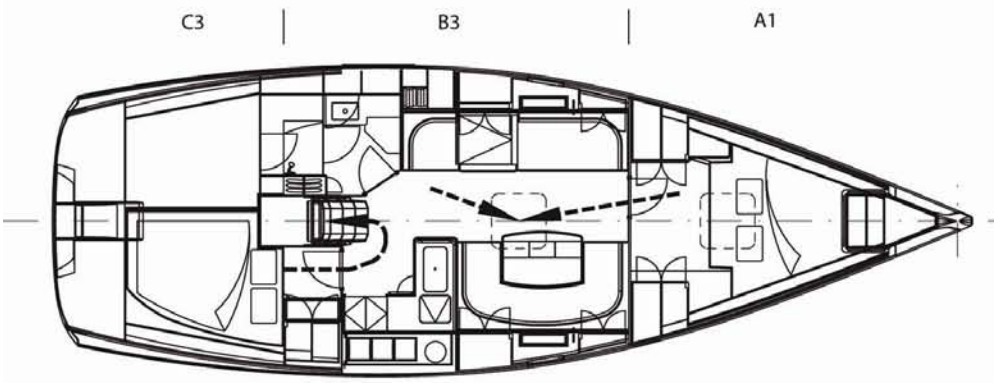

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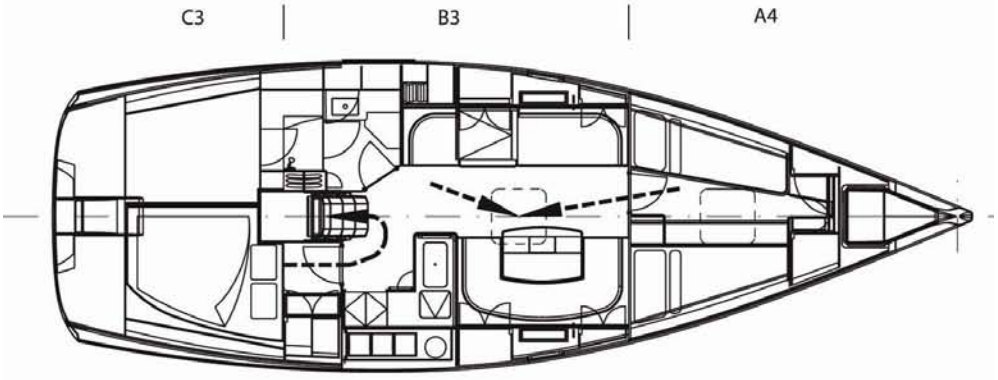

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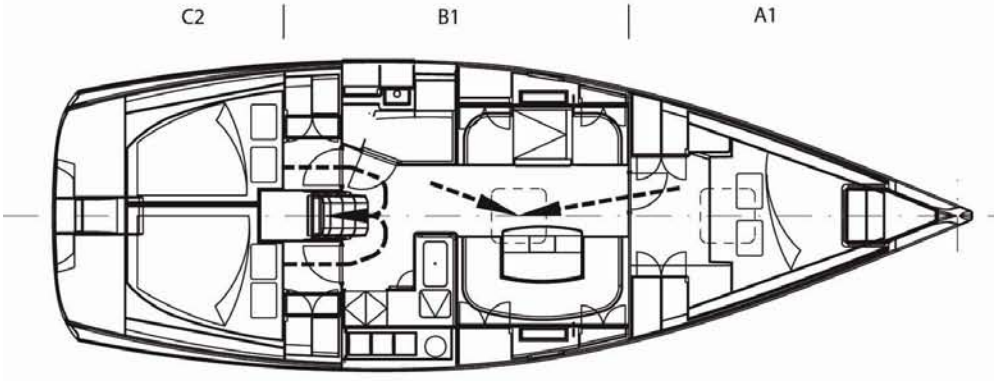

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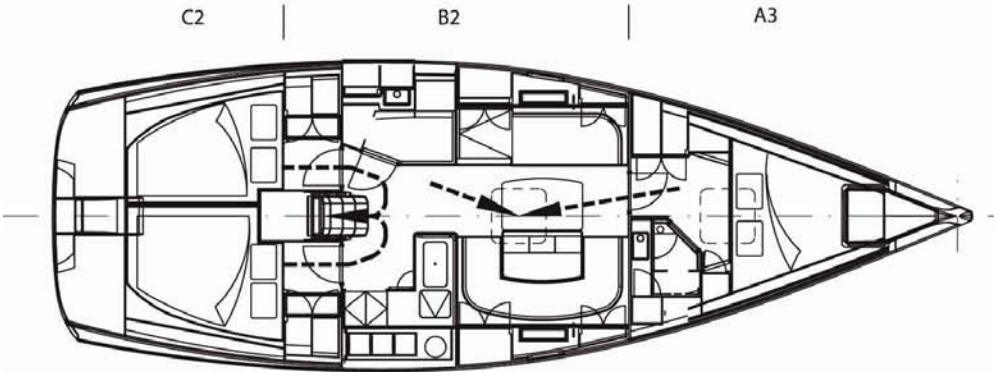

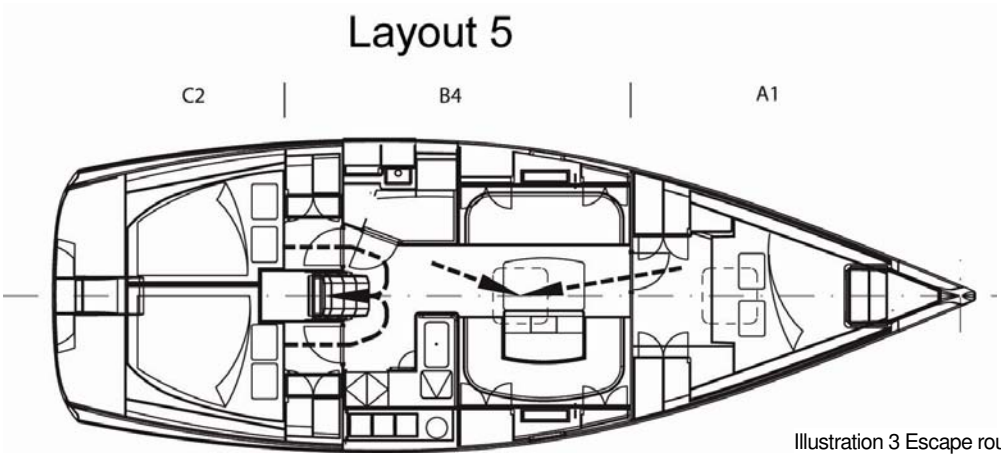

Illustration 3 Escape routes

Safety notes regarding the operation of the liquefied petroleum gas (LPG) unit

The yacht is equipped with an LPG unit. Please observe the following instructions when operating it.

During malfunctions of the system close the valve in the cabinet next to the stove immediately.

Conduct at the smell of gas

If you smell gas, close the gas cylinder valve and ventilate the boat thoroughly. Gas detectors can be used to check for gas.

Have a specialist examine and remedy the cause prior to using the gas system again!

Notes on preventing malfunctions of the LPG unit:

- Close the valves of the supply line and the cylinder when the stove is not in use. In case of an emergency, close the valves immediately.
- Ensure that the valves of the appliances are closed before opening the cylinder valve!
- Check the LPG system for possible leakages on a regular basis. Check all connections with soapy water. (In doing so, the valves of the appliances must be closed and the cylinder and unit valves must be open.)
- If there are leakages, close the valve of the cylinder and have the system repaired by a specialist before using the appliance again.
- Since flames consume oxygen: Good ventilation is required. Do not use the stove to heat the saloon.
- Never block the access to the LPG system.
- The valves of empty cylinders must be closed and disconnected from the system. Keep lids and sealing caps ready for use. Store reserve cylinders and empty cylinders on the open deck or in provided spaces that have outboard ventilation!
- Never use the lockers or boxes meant for the gas cylinders to store other equipment!
- Never leave the yacht unattended if the stove is on.
- Check the hose lines of the LPG system on a regular basis, at least once a year. Have them replaced if they are defective.
- If you replace the stove, make sure that the new one has the same operational pressure.

- Never use the stove during high sea or when the boat is heeling extensively (if the boat is not equipped with a gimballed stove).

Adhere to the inspection intervals of the entire system! The inspection should only be carried out by a maintenance firm specialised in LPG systems on boats.

If the boat is travelling under the German flag, you, as owner, are obligated to have the gas system inspected on a bi-annual basis by a specialist from the German Association of Gas and Water Engineering who is certified for caravans and boats.

Observe the following instructions and the manuals or operating guides of the appliance manufacturers!

Escaping gas is heavier than air. It accumulates in the hull. In this case there is a risk of **suffocation and explosion**. If you smell gas, never use fire or open light or electrical devices!

- Never use solutions containing ammonia to check the lines.
- Never use an open flame to search for leakages.
- Never smoke and do not use an open flame when connecting or replacing gas cylinders.

2

Chapter 2 – Further Technical Details

1. Installations and Systems

1.1. Tank capacities

2 Fuel tanks	Each approx. 70 l	The tanks are located under the bed in the aft cabinet on the starboard side They are equipped with electrical transmitting devices, inspection lids and connecting lines with valves, as well as discharge valves and ventilation.
2 Fresh water tanks	Each approx. 165 l	The fresh water tanks are are equipped with inspection lid, compensating joints, valves and ventilation. The tanks are located underneath the berth in the bow.
Waste tanks (standard)	approx. 30 l	The tank is located close to toilet. The tank is permanently installed. The system includes the respective valves and deck openings to extract the content onto shore and the seacock for direct discharge into the sea.

1.2. Water systems

1.2.1. Drinking water

The yacht has 2 water tanks with a total capacity of approximately 325 l. Each tank is equipped with a cleaning opening on the top.

The Filler necks are located on the side deck.

Before filling, check whether the marking on the filler neck is correct.

The pressure water pump (12 V) draws the water from the tanks and feeds the cold water to the taps. A pressure vessel ensures steady water pressure in the drinking water system. When taps are opened, the pump is activated. When they are closed, the pump is switched off by the counter-pressure.

Should the pump still continue to operate, then the system must be checked for leakages.

Note

If air bubbles come from a water tap, please immediately switch off the corresponding pressure water pump at the main fuse panel. The pumps are safe to run dry for a short period of time. The pump's impeller may be damaged in dry motoring cycle .

You can obtain spare impellers from specialist shops or the dealer. When ordering, always specify the exact type of the pump.

If drinking water is stored for a longer period of time, disease-causing germs can develop. Use appropriate and approved agents to protect against germs. Change the water frequently and rinse the tank.

An electric boiler is installed to generate hot water. The cold fresh water is supplied via the pressure pump. Due to the pressure drop in the cold water system during boiler filling, the pressure water pump automatically switches on.

Empty the system and the tanks if there is a risk of temperatures below freezing.

Do not switch on the electric boiler if there is no water in the system. The heating element can be damaged.

1.2.2. Seawater

Seawater is used for two circuits:

- for the engine system (see section 1.7.4)
- for flushing the toilet

The seawater valves must be closed after use!

Cleaning the seawater of impurities is necessary for the faultless operation of the systems. Therefore, check the seawater filter on a regular basis and clean or replace the filter pads if necessary.

Take care that the filter lids are firmly fastened and that the hose clamps are firmly attached, otherwise risk of water penetration exists.

1.2.3. Waste water

Waste water designates all sewage from the toilets. Seawater is used for flushing. It is pushed into the bowl and pumped into the waste water tank with the content of the bowl.

The septic tank with approx. 30 litre is installed permanently and located close to the toilet. The ventilation ends at the vessel's side.

The tanks are emptied either via the respective deck vacuum nozzle with the help of an extractor on shore or outboard via the seacock. However, make sure the hoses are compatible with the chemicals used.

Before leaving the port, always make use of the available pumping facilities to drain off the waste water tanks.

Emptying via deck nozzles

The deck nozzles are located on deck and are marked “Waste”.

Please ensure the ventilation of the waste water tank, since the system could be damaged when emptying the tank.

When pumping out the tank, keep to the correct following order:

- Open the deck screwing, insert the suction nozzle
- extract/pump out
- Fasten the deck screwing.

Emptying using seacocks

To drain the waste water tank outboard, open the seacock(s). Then switch on the pump. After finishing pumping, close the seacock(s) again.

Please note that there are regulations for certain ports and travelling areas where it must be ensured that no sewage can be pumped outboard (e.g. the Baltic Sea Convention). Instruct your crew and guests how to operate this.

The toilets and the waste water tanks may not be drained near the coast or in any protected area (see also3.8)!

The outlet can be closed and sealed in order to-do this.

Operating the system

Follow the symbols on the toilet to operate it. Never throw solid or clogging materials or objects into the toilets.

Maintaining the system

Never use aggressive liquids, aggressive solvents or deodorants to clean the system, since this may damage the line system.

Never use pure antifreeze when preparing the system for winter storage. If necessary, contact the dealer. Always completely empty the system in case temperatures fall below freezing.

1.2.4. Bilge system

The anchor locker and the cockpit are self-draining, therefore no pumps are required here. The openings must be kept free of blockage.

The yacht is equipped with a manual and an electrical bilge pump, each with a capacity of 30 l/min. Check the functionality regularly.

The manual bilge pump is located at the helm position in the cockpit. The electrical bilge pump is accessible through the floor hatch of the companionway.

The electrical bilge pump can be operated in two modes:

- Automatically - the pump switches on if the bilge has reached a certain level
- Manually - the pump is operated manually from the operating panel of the bilge pump.

Please pay attention to whether the valves are open or closed. Make sure that the bilge in the engine room is free of oil.

The functionality of all bilge pumps is to be checked regularly. The pump intake openings must be cleaned of dirt.

The bilge system is not designed for damage control. See section 1.5 Safety notes.

The boat additionally should be equipped with a bucket on a rope or a bailer.

1.3. The fuel system

The fuel tanks with each approx. 70 l total content are located in the engine compartment starboard and portside. These can be filled via the filler neck marked "Fuel" or "Diesel" located on the side deck. To do so, unscrew the lid. Check if the ventilation openings are clean.

The level can be read at the central control panel.

The fuel reaches the engine via a suction pipe and a preliminary fuel filter with a water separator. Due to the short lines, the system predominantly consists of fireproof fuel pipes.

The tank indented for the fuel supply can be switched via a three way cock. Ensure that the respective valve on the tank is open. Ensure that the return is via the extraction tank.

Please check that the return pipes are always open to ensure the return to the tank.

Fuelling

The boat should be fuelled carefully, to avoid fuel spills onto the deck or into the water. Keep an oil absorbing cloth at hand. Open the cap and insert the funnel or the nozzle of the fuel pump. Make sure to establish contact with the filler neck (earthing). Then begin fuelling.

Only fill the tank using the fuel types (diesel) recommended by the engine manufacturer.

Only fill the tank with clean fuel. Check and cleanse the filter and the water separator on a regular basis.

Do not fill the inlet pipe all the way to the top. When you hear the sound of rising fuel, stop tanking.

Closing the tank in an emergency situation

The supply to the engine can be shut off using a valve if their is a leakage in the fuel system or a fire in the engine room.

1.4. Steering system

The helm is set in motion by means of the two steering wheels in the cockpit.

The steering system can be accessed through the hatch in the stern part of the cockpit.

The rudder spindle is set in motion by the concentric mounting of the hydraulic cylinder.

Make sure that your helm operates free from play, but also that it is not sluggish.

If there is a failure in the steering system, you can operate the rudder with the emergency tiller.

To steer using the emergency tiller, proceed as follows:

- Open both rudder spaces and check the steering mechanics.

- Remove the lid for the emergency tiller on deck.
- Take the emergency tiller from the mounting and insert on deck.
- Steer on deck.

In case of failure of the steering system

- Head into the wind
- Mount the emergency tiller as described above.

Find a safe anchorage. Observe the depth when doing so.

The helm room is not a suitable location to store equipment or other objects.

Moveable components of the helm should be treated with water-resistant greases during winter care.

1.5. Electrical systems

The boat is equipped with two electrical systems: 12V DC and 230 V AC.

Information on the scope and equipment can be found in the operating instructions and the contract specification. Take note of the operating instructions with circuit diagrams for the electrical systems and devices!

The electrical systems can be switched and controlled via the respective central control panels.

When operating the engine, the main switches may not be switched off, since this would destroy the diodes of the dynamo.

1.5.1. Direct current system

Batteries supply the current for the 12 V installation on board.

The direct current system starts the engine and supply power to the navigation instruments, the lighting and part of the electrical equipment on board.

Use the 220 Volt system when connected to shore power.

The current is distributed via the switchboard in the saloon. The circuits have switches for the consumers to be switched from a central location. Fuses protect all electric circuits within the system against overload. The fuses indicate whether there is a failure in the system. If required, the dealer can provide the circuit diagram.

The individual circuits are described in more detail in the following.

Take into consideration that the power from the batteries is only available for a limited amount of time. If the voltage falls below 10.5 V, the batteries must be recharged by starting the engine.

The essential circuits of the direct current consumers are:

- position lights
- interior and deck lighting
- electrical devices
- 220 V devices via current converters (according to the contract specifications)

The interior and deck lighting consists of energy-saving halogen or fluorescent lamps and requires relatively little current. The navigation electronics also require very little current.

Nevertheless, you should turn off the consumers you no longer need as soon as possible. This can also be done centrally from the central control panel.

If for certain reasons it is not possible to recharge the batteries at sea, you must conserve the electrical energy. Nautical lighting has absolute priority. In case a capacity bottleneck occurs due to a failure in the supply, all other consumers must be switched off first.

We recommend switching on the consumers according to their importance:

- at night only the position lights
- map table lighting only when it is used
- switch navigational instruments to “stand by” if possible.
- VHF radio only in critical situations

If an autopilot is included in the equipment, it can consume a lot of current, especially when sailing in heavy sea, since the hydraulic steering may have to carry out significant steering corrections depending on the sea conditions.

The general lighting should also only be switched on when immediately necessary. Do not use the refrigerator, the heating and other equipment that require a huge amount of energy.

Keep in mind to recharge the batteries when at sea, as well. Running the engine when sailing can recharge the batteries to the desired state so that the next most important consumers can be switched on.

In case of malfunctions, you should check the electrical systems and installations to find out the reason for an insufficient charge.

The yacht possesses two separate 12 V networks with their own batteries.

The batteries are located slip-proof underneath the seats in the saloon on the portside.

The batteries are charged via the engine’s generator and the battery charger.

ENGINE BATTERIES

The engine battery is used to start the engine.

BATTERY SELECTOR SWITCH

The battery switch is underneath the map table.

MAINTENANCE

The gel batteries require little maintenance and should be well charged at all times. Regularly check if this is the case.

In the winter season it is necessary to store the well-charged batteries in a dry and frost-protected place.

Make sure that the poles are clean and protected against corrosion with pole grease.

1.5.2. Alternating current system

The 230 V installation on board is supplied with power via the shore connection, the batteries via an inverter or the generator (option).

In case there is no shore connection or a generator (option) at your disposal, you should use the 230 V devices via the inverter in a very energy-conscious way, because the capacity of the

batteries is limited. You may have to start the engine to recharge the consumer batteries. Therefore: Use the 230 Volt system when connected to shore power.

The current is distributed via the switchboard in the saloon. The circuits are provided with switches in order for the consumers to be switched from a central location. Fuses protect all electric circuits within the system against overload. The fuses indicate whether there is a failure in the system. If required, the dealer can provide the circuit diagram.

SHORE CONNECTION

If the yacht is equipped with a shore connection socket, you have 230 V at your disposal. With the appropriate shore connecting line, you can will save power in your batteries.

The shore connection socket is protected by a fuse. The connection is established by means of a compatible shore connecting line.

Please do consider that on the shore there is usually a limited amount of power connection, therefore shore power shall not be used for heating.

Establish the shore connection in such a manner where the connection on board is first made and then on shore. Voltage is then immediately available.

To disconnect the connection, begin with the shore-side connection first.

Route the cable, ensuring that the cable is not in the water and the plug connections are water-protected or watertight (rain).

For your own safety, the shore connection is equipped with a fault current breaker that switches the installation voltage-free within a split second.

Check the function of the switch on a regular basis by pressing the release button or with the help of an electric tester.

CONTROL PANEL

The control panel is located in the saloon at the navigation station.

BATTERY CHARGERS

The batteries can be charged using the built-in battery charger when the power is supplied via the shore line power supply and during generator (option) operation. Do not change the charging current circuit on your own, since this could damage the batteries. Follow the operating instructions for the battery charger.

SOCKETS

The boat is equipped at different locations with sockets for 230 V alternating current.

1.5.3. Navigation systems

Navigation systems are installed as an option. The position lights are firmly installed as navigation lighting. This includes the side, stern, top and anchor lights.

Keep a supply of spare bulbs on board.

1.6. Anchoring, towing and mooring equipment

1.6.1. General

The boat owner/skipper is responsible that sufficient docking lines, towing lines, anchor chains and anchors are available for the area in which the boat is planning to travel. Boat owners should also consider which measures are required to attach a towing line on board.

1.6.2. Anchoring

The bow anchor is located, ready to be dropped on the bow roll in the forepeak.

The chain falls in a chain locker beneath the stowage room. The end is attached at this point.

Please note that in bad anchorage, unfavourable weather conditions, strong sea and strong wind the holding force may not suffice, and that you must take special nautical measure to increase the holding force or leave the anchorage on time.

1.6.3. Towing

The anchor line can be used for towing. However, a special towing line of the same strength is more suitable. Fasten the towing line in the shape of a crowfoot to the two cleat pairs at the bow. When towing longer distances, wind a rope of the same strength around the entire boat to distribute the higher forces. Other places, e.g. the guardrail, and the mast step are not suited for towing. A towing line may only be attached in a manner that can be slipped under load. Abrasions must be avoided!

Please note that when towing, the speed of both the towing vessel and the towed vessel must be below the so-called hull speed, since the towing forces otherwise can damage the boat. The hull speed for this boat is approximately 9 kn (=16.5 km/h).

Depending on the weather conditions, state of weaves and depth of the water, it might be required to reduce this speed considerably, since the occurring loads can lead to damages.

1.6.4. Mooring

The cleats arranged on the bow and stern, which are sufficiently dimensioned to deal with the normal forces in protected ports, are used for mooring.

Use the onboard winches or cleats in pairs to position the boat.

In case the boat is unattended for a longer period of time, protect the mooring lines against chafing and unintentional detaching.

Before embarking on a voyage, the skipper must make sure that

- the anchor and the anchor chain are clear,
- the necessary docking and tow lines are on board and in working order.

Only use the cleats and winches to moor the boat. The guardrail and other points on deck are not suitable.

1.7. Engine system

1.7.1. Structure of the engine compartment

The centrally arranged main engine on a stable foundation takes up most of the space. It is elastically mounted to absorb vibrations and sound. The area underneath the machines is constructed as an oil tray that must be cleaned regularly. Due to the colouring, you can immediately see whether there are leaks in the oil circulation. The area below the engines should be checked periodically to recognise oil leaks in time. This area must always be kept clean.

All hull openings are equipped with seacocks. Before travelling, check whether they are open and whether the seawater filters are dirty.

Observe the operating instructions of the engine system and the notes on operation, maintenance and care contained therein.

1.7.2. General

The boat can be operated at a maximum engine power of 1 * 29,4 kW. Any changes intended for the boat's design must always be discussed with the dealer. No liability can be assumed for changes made to the design without the prior approval of the shipyard.

The maximum exterior temperature for issuing the engine installation certificate is 35°C).

The speed must be reduced on crowded, much used waterways or in case of poor visibility. Reduce the speed and keep a lookout due to your and others' safety. Observe the speed limits and notices to avoid breaking waves.

Observe the right of way as it is stipulated by the waterway regulations (COLREGS).

Always keep a sufficient distance in order for you to be able to stop or manoeuvre to avoid collisions.

1.7.3. Instruments

HELM POSITION

Rev counter

This instrument displays the number of the engines revolutions per minute. The revs per minute when travelling depend on the external conditions and the type of engine.

Alarm systems

The alarm is set off, if the cooling water temperature is exceeded or the oil pressure is too low. The oil pressure switch triggers the alarm when the engine's ignition is switched on but the engine is not yet running.

If the alarm is heard during the operation of the machine, the engine should be switched off immediately and the cause of the fault investigated.

The engine should be warmed up slowly and not accelerated to full speed if the operating temperature has not yet been reached.

1.7.4. Cooling system

The engine is equipped with a two-circuit cooling system.

The internal system is a closed circuit. In case of frost, an antifreeze agent must be added to the internal circuit. The temperature is controlled by a thermostat. During winter storage, the coolant shall not be drained if it is mixed with an antifreeze agent suited for the existing temperatures below zero.

The outer ring extracts the seawater via the sail drive. The cooling water is transported in the heat exchanger and subsequently sprayed into the exhaust system in the exhaust manifold. The exhaust is thus cooled and the sound absorbed. The exhaust gas is discharged at the stern.

The heat exchanger serves to cool the engine oil, the cooling water of the primary circulation and the hydraulic oil of the gears. The heat exchanger is provided with a zinc anode to avoid electrolytic corrosion.

The seawater filter must be cleansed in a regular basis.

Check the seawater filter on a regular basis. Depending on the water quality, the filter may require cleaning.

After starting the engine, check whether water is discharged from the exhaust, also intermittently, in addition to the exhaust gas.

In addition, the cooling water supply must be checked and ensured.

Before starting the engine:

- make sure that the cooling water inlet is open,
- make sure that the engine compartment is ventilated,
- take a look in the engine compartment to check for possible leaks,
- keep the engine compartment hatch closed (danger posed by loose objects).

When the engine is running:

- visually check whether cooling water comes out of the exhaust.

The temperature guard sets off a visual and acoustic alarm if the engine is overheating. In this case, turn off the engine and check the cooling temperature circulation!

If the engine does not start after the third attempt, please close the seawater valve for cooling the engine. Try to restart the engine. If the engine starts, open the seawater valve again (within half a minute).

1.7.5. Exhaust system

The exhaust is discharged at the stern, thus reducing the sound emission. The exhaust gas duct consists of hoses with a water collector which simultaneously functions as a sound absorber. The exhaust installation is included in the seawater cooling systems. In this arrangement the exhaust system meets the requirement of RL 2003/44/EG Annex I.C.

Beneath the manifold the water is led to the exhaust installation and is discharged to the outside along with the exhaust gases. It cools the exhaust. This simultaneously absorbes the sound.

It is very important that the cooling circuit is running. As already mentioned in the section about the cooling system, check whether water is discharged from the exhaust pipe while the engine is running. The exhaust gas should neither be sooty nor blue. If this is the case, either the

engine's air filter must be cleaned – which you can do yourself – or a specialist workshop has to adjust the engine.

For safety reasons, the hose connections on the suction side are equipped with double hose clamps.

If the boat is not in use, close the seacocks and drain the water out of the exhaust duct.

Notes regarding winter storage

Fresh water and seawater circuits are to be emptied according to the detailed instructions in the engine's maintenance guide, and the conduits are to be ventilated.

1.7.6. Lubrication

The machines are lubricated according to the specifications in the operating guide of the engine and other installations.

Please note that during oil change the oil must be extracted with a pump. When changing the filter, you should use an oil absorbing cloth against dirt.

The oil must be changed at least once a year, even if the boat travelled very few kilometres.

A well maintained boat should never leak. The engine's foundation is shaped in the form of a closed tub, so that not even the smallest amounts of oil can enter the bilge and thus the pumps out bilge water. Water that is possible mixed with traces of oil collecting at this location must be filled into a separate canister by means of a small bilge pump and disposed of together with the used oil.

1.7.7. Gears

The gears to change from forward to reverse and the other way around are hydraulic gears. They are flanged directly onto the engine. Please read the special operating and maintenance instructions for the gears.

The gears are designed, with respect to stress, to meet the manoeuvring demands. However, avoid abrupt gear changes from full forward to full reverse, even if these are hydraulic converter gears.

1.7.8. Gear change

The engine's speed and the gears are controlled via mechanical gear shifting with Bowden wires. The actual gearshift in the gears is performed hydraulically (see 1.7.7).

1.7.9. Saildrive

The yacht has a saildrive. Similar to the Z-drive, the engine output is transferred to the propeller. The only difference is that the propeller is located under the boat. The passageway is sealed at the floor.

Also check the tightness of the shaft seal during your inspections.

Avoid touching the sea bottom, since this could lead to damages to the propeller or the shaft.

Check all underwater components of the saildrive when preparing for winter storage and remove mussels and other deposits from the bearings.

Watch out for flotsam and jetsam. Rope ends or plastic bags can damage the propeller and the shaft and thereby reduce their service life.

1.7.10. Propeller

The propeller is dimensioned according to the performance and intended speed. Watch out for unusual vibrations in the area of the propeller that can be caused by damages to the propeller.

Notes regarding winter storage

For winter storage the propellers should be cleansed of possible incrustation of foreign matter, inspected and the flapping mechanism greased. In case of deformations, dents or nicks, the propellers must be repaired and balanced by a specialist.

1.8. Aeration

Aeration can take place via the existing hatch openings and entrances. The engine room is aerated passively (no electrical ventilator). The air circulation must not be obstructed and the ventilation system may not by altered!

Good ventilation prevents Corrosion, marks caused by mould or mildew and fungus. This applies to both summer and winter. The low humidity in winter during clear weather lets the boat dry well.

Ventilate the boat as often and as well as possible for the sake of the boat and your own well-being. Humidity and changes in temperature can lead to the precipitation of moisture.

Carbon monoxide can accumulate in closed cabins or cockpits. Carbon monoxide can be created by the running engine

- at low speed, wind from astern or while the boat is docked,
- or from neighbouring boats.

Carbon monoxide is an odourless, invisible and extremely poisonous gas. Inhaling carbon monoxide can result in injuries or death.

Ensure for adequate ventilation!

1.9. Heating [4]

If your yacht is equipped with heating (option), please read the operating instructions.

Observe the operating instructions of the heating system and the notes on operation, maintenance and care they contain.

Keep the hot air pipes of the heating free of equipment.

Do not obstruct or close the openings. Otherwise, it is a fire hazard.

[4] According to contract specification action

1.10. Liquid gas system

1.10.1. Installation

The storage space of the gas bottles is located in the starboard stowage boxes. The gas system for the cooker is installed in accordance with the European standard EN ISO 10239. Please heed the special regulations of the state under the flag you are sailing!

Never:

- Change the condition of the bottle case.
- Place feedthroughs into the inside of the boat from the bottle case
- Install electrical systems or conduits in the bottle case
- Use the bottle case as a stowage space.

Any modification to the design of the liquid gas system shall only be performed by an approved maintenance technician for LPG systems on boats and the shipyard.

The bottle case is ventilated outboard. Possible water that has entered the boat is drained through the opening.

Keep the ventilation opening free of blockage. Regularly check the condition of the opening!

1.10.2. Changing the gas bottle

Change the gas bottle as follows:

- First, switch off all appliances that use gas.
- Switch of the engine and the generator.

Never smoke or use open fire when changing the bottle.

- Close the valve at the bottle.
- Loosen the pressure reducer at the valve of the cylinder. Only use appropriate tools so you do not damage the connection and the fitting.
- Detach the empty bottle from the mounting and take the bottle from the bottle box.
- Insert the new bottle in the mounting.
- Fasten the mounting to the bottle.
- Check if the connector thread at the bottle is possibly damaged.

Bottles with damaged threads may not be used. There is a danger of leaking gas.

- Carefully place the union nut and screw it hand-tight.
- Screw the union nut tight with an appropriate tool.
- Check whether the connection is tight.

Never use grease at the bottle connection or the valves.

1.10.3. Operating the gas system

The gas system must be operated with great care. Therefore follow these steps:

- Check if the cooker valve is closed.
- Open the valve in the bottle box.
- Open the valve in front of the cooker. It is inside the cabinet next to the stove.
- Open one of the burner valves, keep it pressing (safety pilot) and ignite the gas.
- Keep pressing the valve until the flame burns steadily!

When turning off, keep to the following sequence:

- Close the valve at the bottle; the flame extinguishes.
- Then shut the valve in front of the cooker and the burner valve!

1.11. Corrosion protection, painting system

High-quality materials were used to build the boat. They are for the most part corrosion-proof.

The sea climate is harsh and a rust film might form on the metal components, especially if rusty metals parts are nearby. This corrosion is only on the surface. This corrosion can be removed with the appropriate metal polish.

Ensure that components and fittings made of aluminium alloys as well as rust-proof and acid-proof steels (stainless steel) are not permanently in contact with other metals.

The wooden parts do not need special protection. Section 5 describes the care for them.

Underwater coating can be applied to the underwater hull to prevent incrustation of foreign matter on the hull.

1.12. Manuals and operating instructions

Manuals, operating instructions etc. can be attached, depending on the contract specifications.

Carefully read and comply with the guidelines and notes contained therein!

2. Initial Operation

2.1. Transport, craning, slipping

2.1.1. General notes

Transport by water is more preferable than by land.

If your yacht is transported by land, this is a special transport, because the boat's dimensions exceed the usual transport dimensions on the road and by train.

Ensure that the hauler transports your boat only with a special vehicle design for boat transport.

It is customary nowadays to lift boats with a crane or other special lifting gear such as travel lift. If possible, to use a crosshead in order for forces not to oppress the boat (see also section 2.1.2).

But there is also the possibility of slipping, meaning that the boat is taken from the water by means of a cradle.

During all transport procedures possible points of abrasion shall be protected.

The boat must be secured when it is lifted, possibly with a stern and aft line. The belts must be secured against sliding.

It is prohibited to stand under hanging loads!

2.1.2. Suspension points for lifting gear, support points for slipping and transport

Craning

In many marinas the yachts are brought on land by means of a crane and lift fixture. Here, the belts must be placed according to the boat hulls solidity and the weight distribution in order for the boat to be in an as far as possible horizontal position.

The boat may only be lifted with belts and a traverse dimensioned for the load. The exact positions are shown in the illustration “Side view” (with underwater body and ribs). The correct position of the belts should be marked with stickers below the toe rail.

The rear belt is in the area of the saildrive. It must not run over the propeller drive!

Slipping

If the yacht is transported to the shore on a slipway, it is recommended to use an appropriate cradle for transport and storage preventing the yacht from tipping over. The yacht may stand on its keel.

If the yacht is placed on its keel for a longer period of time, the bow and the stern must be supported on order to relieve the strain on the structure.

Storage

On principle, the yacht is only to be stored using appropriate transport and storage crate. A three-point storing is permitted.

The light construction that also provides good sailing characteristics also requires particular care when the boat is set down on blocks. The exterior shell must be handled with care. The supports should always be applied plane. The bearing area should be at least 200mm x 300mm and (not too soft) cushioned.

When setting the boat down, ensure that the boat is equally supported by all supports. Furthermore, it must be ensured that the supports never carry the weight of the total boat, the keel must be separately supported in order to "catch" its weight.

Transport

Transport by land can only be carried out by an appropriate special transporter.

For the most part, the same rules apply as listed under slipping. In addition, the yacht must be supported under the bow and aft to relieve the strain on the structure. The yacht must be secured with at least 2 appropriate belts.

2.2. Underwater coating

The boat should be coated with an under water coating if it has not been done at the shipyard or the dealer. A specialist company should do this prior to the initial sea going. It increases the service life of your boat and reduces the travelling resistance.

2.3. Engine, propeller

The boat is delivered with an installed drive system ready for operation. Make sure that the batteries are connected and that there is fuel in the tank.

You may only start the engine when the boat is in the water and the seacock is open. Start the engine following the operating instructions for the drive system.

After starting the engine, check if coolant is discharged from the exhaust.

During the break-in of the engine, follow the operating instructions. Do not run the engine in too high RMPs and keep to the oil change intervals.

2.4. Equipment

The boat is provided with the essential nautical equipment making it ready to sail. Further equipment is generally required and sensible for navigation, depending on the respective area of travel.

Equip your boat in accordance to the area of travel.

2.5. Initial voyage

Before setting off on a “long voyage”, calmly acquaint yourself with the systems and the drive system, even if this is not your first boat.

You can arrange an instructional trip with your dealer.

First, travel under power and make yourself familiar with the boat’s manoeuvring behaviour using the engine. Pay attention to the propeller effect when travelling forward and backward.

2.6. Manoeuvre under power

Heed the information given in the engine’s operating instructions before starting.

- Switch off the main switch.
- Check whether the single-lever control is in neutral.
- Begin the start procedure.
- In case the engine does not ignite, repeat the start procedure after a short pause.
- If the engine does not ignite after 3 attempts, determine the cause.

After the engine ignites and all systems are checked, especially that the coolant system is working, you can set off on your first voyage. Pay attention to the turning efficiency of the propeller and manoeuvre carefully.

Anchoring should also be part of the training programme.

2.7. Checking the systems

On principle, the boat is delivered in working order, if not otherwise agreed upon. We attempt to convey the necessary knowledge and special features upon boat delivery.

Upon initial operation, you should check all systems on board step by step. Here, use the structure of this manual. You will simultaneously gain knowledge of the arrangement and functioning of the systems.

Perform these checks if the boat has not been used for a longer period of time and at the start of the water sports season.

3. Environmental Protection

During the development and manufacturing of our boats, we have taken care that the materials used, when used properly, do not harm the environment. There are a number of regulations regarding environmental protection and we ask you to observe them when using your boat. In

the following, we shall address several special notes on the environmental-friendly use of your boat.

Sailing is a quiet sport. Please handle your boat in a responsible way and thus make your contribution to not harming nature more than to the extent that is unavoidable.

Please pay attention to the following sections!

3.1. Fuels and oils

Fuels and oils are an environmental hazard because they pollute, impair and damage nature for a longer period of time.

Handle these substances carefully on board in order for nothing to go overboard when tanking, filling or emptying.

Take special care before draining the boat to ensure there is no oil in the bilge water. In that case, use special oil absorbers to clean the bilge water or pump the bilge water into special canisters which you then properly dispose of on shore.

3.2. Wastes

Wastes of all sorts must be disposed according to environmental regulations. For this purpose you should separate the waste on board and dispose of it on shore in the appropriate waste containers provided by the marinas.

Reduce the amount of waste, in particular by reducing packaging! Use packaging that can be reduced in volume after use.

Glass packaging does not belong in the water either!

3.3. Sound

Noise also has environmental impact. We have taken soundproofing measures in constructing our boats that reduce the sound, particularly of the engine, below the legally permissible values. Maintain the sound insulation in the engine room by keeping it clean and not covering it with paint.

You should additionally choose engine speeds that keep noise within bearable limits.

3.4. Swell

Reduce speed when driving in narrow waters and in the vicinity of protected coastal zones.

Watch out for speed limits on the water and maintain them.

3.5. Exhaust gases

Exhaust gases are an unavoidable environmental burden. We chose our engines according to the most favourable exhaust emission values. Pay attention to the colour of the exhaust gas as this can be an indication of a faulty adjustment of the engine. A blue or sooty appearance is a sign of serious adjustment errors. Have it repaired!

Do not run the engine as an “auxiliary aggregate” in the port for charging the batteries, but instead use the shore connection.

3.6. Antifouling, painting

The underwater paint coat prevents incrustation of foreign matter on the hull. There are different painting systems. We recommend applying anti-toxic antifouling. Consult your dealer or a specialist shop on this issue.

When treating, sanding, etc. you should place a foil underneath or use an efficient suction device and dispose of the sanding dust according to the manufacturer's instructions. At any rate, consult with the person renting out the berth.

3.7. Lacquer removal

Use mechanical methods to remove paint layers. Do not use varnish or paint removers.

3.8. Waste water

The toilet produces most of the waste water on board. It is collected in a tank and should be disposed of on shore by siphoning it out. When in a port, it makes sense to always use the port's facilities.

Please note that, for example, the Baltic Sea Convention, prohibits the discharge of waste water tanks. Some countries have adopted regulations prescribing that the board discharge openings be sealed.

3.9. Nature conservancy

Please handle your boat in a responsible way and thus make your contribution to not harming nature more than to the extent that is unavoidable.

Pay attention to the information about conservation areas, national parks and other protected areas.

Navigate carefully to keep a distance to these areas and not expose yourself to danger in difficult sea territories.

Also be aware of the international treaties keeping the seas clean.

4. Maintenance

4.1. External inspection

Winter storage is the right opportunity to thoroughly inspect the hull and all supporting components. Should the varnish layer be damaged and the laminate or wood is visible, the paint structure must be completely renewed, starting with grinding the subsurface, applying filling material and then applying the coat of varnish. For this purpose you receive the original batch and special advice from your trader.

Information on the entire technical gear can be found either in this manual under the respective topic or in the manufacturer's manuals delivered with the components (appendix to this manual).

4.2. Care and cleaning

The boat should only be cleaned with fresh water. Environmentally compatible cleaning agents suitable for FRP and varnished surfaces may be used for persistent dirt. Do not use any agents containing silicone.

Special agents are offered for further treatment such as refurbishing and sealing FRP surfaces. Only use agents suitable for this!

Metallic parts may only be cleaned with metal polish. Please note that aluminium parts are anodised and must not be treated with scratching or polishing agents.

4.3. Rigging and sails

4.3.1. Rigging

Stainless steel fittings that are tarnished or have a rust film should be polished to maintain their good properties.

4.3.2. Sails

Plastic sails are sensitive to UV radiation and should always be covered.

4.4. Painting

Painting is only applied to the underwater body and must be reworked or renewed regularly. This will depend on the frequency of use. If possible, do not alter the painting system if the compatibility of the systems is unknown.

Dispose off the sanding dust according to the manufacturer's instructions.

The varnish inside the boat only needs to be reworked or renewed if damaged. If necessary, contact the dealer on this issue.

4.5. Expendable parts and replacements

If the boat is damaged, only use original parts or components of the same quality, if possible. This particularly applies to parts that must resist certain strains, e.g. parts of the rigging, the deck gear etc.

Your dealer can help you in this respect.

4.6. Repairs

Repairs to the hull, drive, systems, tanks and sails should be performed by a specialist firm, since they have the required technical equipment and expertise as to how the repair can again provide a fully functioning boat. This is especially the case with structural damages.

Our shipyard will support you and refer you to respective specialist firms that can carry out expertly repairs.

4.7. Inspection of installations and systems

The reliable functioning of the individual systems is important for safely operating the watercraft. Check the functioning of the installations and systems on a regular basis. For this purpose use the manual and the enclosed operating instructions.

Appropriate measures must be taken to prevent damages to the fuel lines.

Prevent inflammable materials or liquids from coming in contact with hot parts of the engine!

Equipment that contains petrol may not be stored in areas that are not meant for it!

4.8. Winter storage

Winter storage is the time during which your boat is left unattended for a longer period of time. During this period it must stand securely and should be stored in a place protected from the effects of weather.

Observe section 2.1 Transport, craning, slipping

Dispose of all waste.

Remove all valuables from the boat. Cushions should be stored in dry, airy and frost-free places.

If the boat is covered by a tarpaulin, you should make sure that the air can circulate well underneath the tarpaulin. If possible, keep the ventilations on board open.

The tarpaulin should be tied together well to avoid abrasions on the boat's body and especially the hull.

4.8.1. Hull and deck

If possible, clean your yacht right after it has been taken out of the water. High-pressure cleaning devices can remove all incrustation of foreign matter.

For boats sailing in seawater: Salt remnants bind water and lead to faster corrosion.

The boat should only be cleaned with fresh water. Environmentally compatible cleaning agents suitable for FRP and varnished surfaces may be used for persistent dirt.

Special agents are offered for further treatment such as refurbishing and sealing varnished surfaces. Only use agents suitable for this!

Metallic parts may only be cleaned with metal polish. Please note that aluminium parts are anodised and must not be treated with scratching or polishing agents.

4.8.2. Rigging

Prior to winter storage rinse the entire rigging and the sails with ample freshwater. In the winter storage the rigging should undergo a thorough visual inspection. This particularly includes the running rigging, but also the halyard disc housing, the mast and boom extrusion as well as their bearings. Minor damages can be repaired with little effort when the rigging is down.

Seams and thimbles should be closely examined and possibly repaired.

4.8.3. Electrical equipment

Contacts must be free of corrosion and firmly connected. Check the connections once a year.

The batteries are to be taken from board and stored, well charged, in a dry and frost-free place. If they remain stored on board, they should be recharged regularly about once a month.

4.8.4. Systems and tanks

Rinse the waste water lines well. Empty the drinking water and waste water tanks and all respective lines. Open all the lines and clean the connections well. Cover the open tanks, lines and hoses at the ends with gauze or cloth (air: YES, dust: NO).

It is better to fill the diesel tank to reduce condensation. Check whether the lines are firmly seated.

At the engine, the seawater circuit including the exhaust system shall be drained of water. If the internal cooling water circuit contains an antifreeze for expected low temperatures, it does not require draining.

5. Rescue equipment

The shipyard does **not** generally equip the watercraft with rescue equipment. Equip the boat with life vests according to the number of persons on board. Automatic inflatable life rafts corresponding to the number of persons (10) should be taken along as collective rescue equipment and kept ready to use on sea voyages.

If you use self-inflatable life rafts or life jackets, keep to the inspection intervals.

Life jackets can be stored in the cockpit's locker seats. Additional life rafts must be brought along if required.

6. Warranty

In case of a warranty claim turn to your contracting party.

7. Concluding remarks and notes

In the preceding sections we have provided you with some information on using your boat.

You have certainly gained experience with boats yourself. Our information can only serve as a supplement and it does not replace your personal nautical duty to take care as owner or skipper.

As shipyard we have delivered you a product that, according to the best available technology and in compliance with the European Recreational Craft Directive, is a safe and reliable sailing yacht satisfying the demands arising from its use.

Extreme strains stemming from touching the sea bottom, collisions etc. can, of course, lead to damages to the boat.

The owner and skipper is responsible for personal safety equipment and for providing all persons on board with personal life jackets. This also includes the acquisition and maintenance of a life raft, emergency signals, fist-aid box, tools, important spare parts, etc.

Since the European Recreational Craft Directive dedicates special attention to safety and fire protection, you should familiarise your crew with the safety installations and fire extinguishers and how to handle them.

> We are constantly working on the further development of our sailing yachts. Please understand that shape, equipment and technology are subject to alteration. For this reason, no claims can be made from any information, illustrations and descriptions in this manual.
>
> Should your sailing yacht be provided with equipment details not described in this manual or if no description is included in the Owner Folder, your contracting party will inform you of the correct operation and care.

8. List of delivered manuals, plans and operating instructions

See delivery notes

Proof of Identity

(to be filled out by the trader or contracting party)

1. First sea landing: .....
2. Date (delivery to the owner): .....
3. Boat type: Moody 41 Classic
4. Hull and/or construction no.:
5. Contract number: .....
6. Name of the yacht: .....
7. Engine (make and type): .....
8. Engine number .....
9. Drive (make, type, gear reduction): .....
10. Propeller (make, type, dimensions): .....
11. Trader, representative (name, address): .....
12. .....
13. .....
14. Signature/stamp of trader:: .....

Information for the yacht owner (First owner)

Model **Moody 41 Classic**

Type of ownership □ Sole owner □ Fractional owners

□ Mr. □ Mrs. □ Co.

Title ----------

First name: ----------

Last name: ----------

Co. ----------

Address data:

Street ----------

Street number ----------

Postal code ----------

City ----------

XXXXXXX ----------

Country: ----------

Telecommunication:

Telephone (landline) ----------

Telephone (e.g. cell) ----------

Fax ----------

Email 1 ----------

Email 2 ----------

Website ----------

Information for the yacht owner (owner no. 2)

Model **Moody 41 Classic**

Type of ownership □ Sole owner □ Fractional owners

□ Mr. □ Mrs. □ Co.

Title ----------

First name: ----------

Last name: ----------

Co. ----------

Address data:

Street ----------

Street number ----------

Postal code ----------

City ----------

XXXXXXX ----------

Country: ----------

Telecommunication:

Telephone (landline) ----------

Telephone (e.g. cell) ----------

Fax ----------

Email 1 ----------

Email 2 ----------

Website ----------

Information for the yacht owner (owner no. 3)

Model **Moody 41 Classic**

Type of ownership □ Sole owner □ Fractional owners

□ Mr. □ Mrs. □ Co.

Title ----------

First name: ----------

Last name: ----------

Co. ----------

Address data:

Street ----------

Street number ----------

Postal code ----------

City ----------

XXXXXXX ----------

Country: ----------

Telecommunication:

Telephone (landline) ----------

Telephone (e.g. cell) ----------

Fax ----------

Email 1 ----------

Email 2 ----------

Website ----------

Please sign and send back to:

Dealer's address:

Acknowledgement of Receipt

Name: .....

Address: .....

.....

Owner of the sailing yacht ***Moody 41 Classic*** with the CIN

This watercraft receives the warranties that were handed over with the vehicle.

This warranty commences on.....(date)

Signature:.....

Information for the trader:

Please send this acknowledgement of receipt

to:

HanseYachts AG
After Sales Department
Salinenstraße 22

17489 Greifswald, Germany