

ENGLISH SUMMARY FOR HD- SYSTEM INFO- CATALOGUE „REINKE'S ALTERNATIVE YACHT MIT TEIL 4- INFO- PLÄNE“

In our Info- Catalogue you find scaled drawings and photos of all type yachts which are self-explaining.

In the following you find an English summary of the general description of our HD- System and our general Design highlights as well as description and dimensions of the individual boat types.

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1. General description of the HD- System and General Design highlights

The HD-System

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Yacht- building acc. to the HD- System for demanding self- builders and craftsman. Our alternative yacht- building system is based on over 30 years professional of yacht- building practice with the latest findings and experiences with the well-known self building system HOBBY- DESIGN

OUR DESIGNS ARE VERY SIMPLIFIED BUT HOWEVER CONSISTENT PROFESSIONAL!

That begins with the design of our world-wide well- tried double-hard-chine yachts, which originate from the comparison of over 200 towing tank tests and then were optimized in practice for performance and sea-behaviour. This continues with the professional dimensioning of structures for extremely high stresses and life span and ends with a highly developed simplification of operation for the small crew even at large long-time yachts

OUR TYPE YACHTS OFFER FAR MORE THAN THE STANDARD:



high safety by super- strong building method and safety against capsizing for high sea or ocean category!

Much more comfort and value for the money by rational building and cost- effective purchase!

Large stable value by Self Building- Type Yacht Certificate

TECHNICAL INNOVATIONS OF THE HD- TYPE YACHTS ARE TRENDSETTERS: :



e.g. whaledeck with much space and high degree of safety against capsizing

[ASY- Twin keels](#) with high efficiency and functionality

[Semi Cutter Rig](#) with large lift of sail at reduced heeling

Rafter and cockpit- reefable boom jib for simplified handling

[Deck salon](#) concept against living in the cellar.

short information to the individual items of our systems finds in the following.

Our slogan: SAFETY FIRST

we work for the realistic long-time Yachtsmen, who will enjoy independence on sea during longer periods with smallest crew (mostly man with woman) according to the slogan: THE SMALLER THE CREW, THE SAFER THE SHIP. Solid dimensioning, long life-span and good sail performances were already acknowledged to our ships in the test of German magazine YACHT, issue 4/97, representatively for our entire program.

Safety against Capsizing

Also the stability of the HD type yachts is unusually high (see also stability calculation in the book YACHTBAU; Chapt.. S.2.4.6). Within this important area no compromises are accepted.

Super- strong aluminium construction

is the safe base for our unrestricted ocean- going type yachts of 10 to 20 m. All our type yachts starting from 10 m are special double-hard- chine designs built on web frames with intermediate frames. In certain locally particularly stressed areas, they are even much more reinforced, than required by the Germanischer Lloyd for its highest yacht classification "100 A4 Sailingyacht" 1992! This ensures very high safety reserves for example in the exposed areas, which might be preferably hit by the unfortunately ever more increasing driftage.

Aluminium hulls are the future!

Fact is that for building of aluminium yachts only very few principles of the material combinations are to be observed to make sea water-resistant aluminium intended to one of the most corrosion resistant yacht- building material at all. The building of aluminium hulls according to the correct method reduces the work clearly compared to the professional steel construction and reduces the risk of dent considerably by thicker material! Even the unfortunately higher material costs for aluminium are compensated partly directly afterwards by deleting a lot of conservation work. The remaining small extra costs for the more expensive aluminium is fully justified by corrosion resistance, reduced maintenance ease and above all substantially higher resale value. Therefore HD- hulls are only built in exceptional cases from steel

Semi Cutter- simplified handling for small crew on large cruise

derived from the normal Cutter rig (2 fore sails used at the same time, which must be trimmed with much fine feeling in such a way to obtain an optimal nozzle effect), the SEMI CUTTER RIGG has also 2 forestays, however is sailed as SLUP:

ONLY THREE STANDARD SAILS, WHICH HAVE NOT TO BE BENT AND UNBENT, are enough even for long-time- yachtsmen-

NO MORE CHANGING OF SAIL!

more information:



A special large dimensioned boom jib which can be safely reefed from the cockpit replaced the usual labour- intensive tacking jib at the inner forestay as standard- foresail when tacking or at heavy weather and avoid the DANGEROUS way on the foredeck for sail changing in heavy seas. NOT at the same time but ALTERNATIVE a quite large RIFTER at the outer forestay is used for open courses to approx.. 40° which is a combination of Reacher and drifter of race-sloops; combined with a furling- jib- gear or a roller- reefing gear. This makes Blister or Spinnaker as far as possible unnecessary (nevertheless, they can be used of course if wanted)

A relatively small main sail can be handled simple and safe even at larger ships by a small crew. Expensive, trouble-prone main- sail roller- reefing gears with high top weights and sail cuts almost without performance are not necessary!

Only for extreme situations still another special storm jib can be used above the boom jib lashed on its boom.

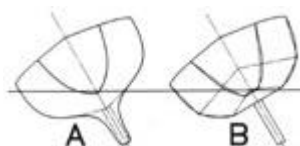
Who wants it still more simple and more effective, selects the "TRECKER": this patented, pre-balanced fore- sail of our system suppliers >Segelwerkstatt Stade< (<http://www.segelwerkstatt.com>).

(sail) and >ORCA- Technik< (rig) optimises the boom- jib also for reaching courses combined with simpler operation, better performance at less heeling and thereby more sail comfort. (<http://www.segelwerkstatt.com>). This sail can be used as sole fore sail, completed, if necessary for light wind by a flyer: a multi- purpose sail from strong storm spinnaker cloth as simplified Blister- replacement, which can be fast and easily tied to the railing or crammed into the sail bag.

Double hard chine advantages

Double hard chine hulls are simple to build, since no shell plate deformation is necessary. That is obvious. However it is not well-known that double hard-chine hulls have also advantages in sail performance and sea-characteristics: Correctly designed double hard chine hulls hardly increase the resistance in practice, - they offer however a considerable lateral lift effect, which works against the leeway!

[more information...](#)



The slender a hard-chine boat is, the more the boat is pointing high. Contrary to Multi- hard-chine designs or classical Veer- shaped boats double-hard- chine foreship set very softly into the sea at upwind courses, because they become to a sharp Vee- shape frame when heeling.

The whole behaviour of the optimised double hard chine design is practically almost identical to that of the modern trapezoid- shaped designs. In principle it is a trapezoid- shaped boat where the bottom and chine corner radii are reduced almost to be sharp- edged.

This is exactly why the correctly designed double hard chine hull sets incomparably softly into the sea when pointing high!

However the design of optimised double hard chine hulls is one of the most complicated tasks. Our well- proven trapezoid- shaped hulls with stretched displacement distribution were therefore developed based on a series of over 200 tank towing tests in the USA, in which above theories were confirmed and lines were optimised.

Faster with more payload

The stretched displacement distribution prevents that the stern of our long- time yachts with higher payload for holiday or long- time- cruising suck to the water like on modern Cruiser Racers with flat planning stern, which already from this point of view are not suitable for long time cruising.

The wide, usually negative transom of such yachts can lead breaking waves like a ramp into the cockpit when running under bare pools, whereby the yacht might broach and even capsize.

Our moderately wide sterns with usually positive transom and high reserve buoyancy provide less resistance to the sea and avoid this dangerous tendency.

Our yachts for the great coasting sailing like the [OMEGA](#), [10M](#), [11MS](#) und [EURO](#) are designed for fewer additional load and have therefore different stern types. Nevertheless they can usually take more payload than other serial boats of same size.

Enormous advantages: ASY- Twin keels

Small draft is the dream of almost each cruising yachtsman on coastal or long-time cruising. Sailing in shallow waters and anchoring near the beach in flat bays is the main goal for this. Due to many practical advantages our ASY- Twin- keels are now fitted almost to all HD- new buildings and became one of our characteristics.

[more information...](#)



Upright falling dry for works under water line or at stranding, well suitable for tide districts. Simple transport without cradle or supports or even shifting on pipes laying under keel.

Good bottom protection e.g. against reefs and underwater rockies.

Simple slipping without supports on each primitive slip.

Good course stability, almost like long keelers.

Good reaching performance.

Neither wear and tear or failures nor rattling or corrosion, as with lift and swing keels.

Until here also conventional bilge keelers have the same advantages. But:

Bilge keelers are almost known to everyone because of rather poor sail performance, especially when pointing high and symmetrically profiled, if at all.

ASY Twin keels

in contrary thereto are situated far down in the bottom chine area of modern trapezoid shaped or double hard chine hulls. There they operate effectively in almost turbulence-free water. Their distance to each other as their vertical skew are relatively small.

Therefore the draft is reduced already again above approx.. 20° heeling which enables a stranded yacht to come free by conventional heeling of the boat (practically not possible with bilge keelers).

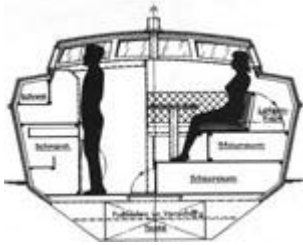
The asymmetrical profile

of the ASY- twin keels is however the main advantage of this trend-setting keel- system!

Like an airplane- wing- profile the leeward ASY- keel creates a drastically higher "transverse-lift " in windward direction, than each symmetrical profile ever could. The windward ASY- keel operates in the "inverted flight- position" and still provides a positive component

in windward direction and, by the skew of the keel, with a component downwards which is righting up the boat. In many years of evolutionary development in practice we could achieve that our ASY-twin-keelers run with similar height and speed at the wind like comparable centre keel boats!

Deck salon- concept



Living in the cellar is "out". With us the deck salon is already proven standard for decades. You do not only participate in harbour life all around, but also on long cruises you are always informed about the situation outside- for security especially of small crews!

Together with the remote control of the Auto- pilot nearly a second interior steering console exists without many costs.

No wonder that this outstanding concept is ever more copied by serial boat builders –however unfortunately often according to the slogan: "the larger- the better" a large "greenhouse" is installed which prevents full forward view and which is extremely endangered by sea wash due to too large window areas.

CE- marking

The CE- pleasure boat Directive was introduced by the EEC in order to enable the free trade of pleasure boats in whole Europe by a uniform minimum standard without restrictive national regulations, which should protect usually only the national manufacturers against foreign competition.

[more information...](#)

The CE- pleasure Craft Directive was introduced by the EEC, in order to enable by a uniform minimum standard the free trade of pleasure boats throughout whole Europe without restrictive national regulations, which should protect usually only the native manufacturers against foreign competition.

That is good if it is clear to you that this CE- MARKING is only the "passport" for your boat and NO QUALITY MARK.

Bad is however that for obtaining this "passport" an enormous bureaucracy was developed, causing an enormous amount of paper and additional money, but mostly without increasing thereby the quality or the standard of the ships.

Even leading managers of large classification societies, which live well from this system, regard the CE- Pleasure Craft Directive a "large nonsense" when speaking privately.

OUR SELF- BUILDINGS DO NOT NEED THIS, because **self-buildings are excluded from requirement of being CE- marked**, as long as they are not sold during a period of five years within the community market (from "Directive 94/25/EC, chapter 1, art. 1, 3g"). Better use the saved some thousand Euros for liferaft, Epirb, radar or other additional equipment.

Only somebody who **ORDERS** a COMPLETE REINKE- yacht needs a CE- certification: For this purpose the drawings necessary for CE- Approval for ships over 12 m are type- approved already successfully. All further additional costs of certifying are then to be taken over by the owner.

Good value Type yacht design

Only by perfected type yacht design it is possible to offer detailed construction plans, optimised for self- building for a sensational low price: The royalty amounts to only approx.. 0,8% of the building value of the yacht during while for single designs between 8 and 19% are to be paid to the designer. However these designers usually do not offer our following services:

Professional assistance for hull, interior work and installations

Far over half of our licensees now use the assistance of professional craftsmen recommended by us for the building of hulls. With only little more costs one the target is reached much faster..

A number of well- proven small companies [small companies](#) without large overhead costs execute excellent aluminium work at favourable prices.

Increasingly also interior works and installations are executed by HD- recommended companies. So even without own craft work it is possible to get an own yacht at reduced costs by saving the overhead costs of established boatyards.

Cost- savings at suppliers with HD- identity card

A large number of well-known yacht- suppliers with good consultation service are united also in our system.

By showing our HD- identity card to this suppliers often a multiple of the royalty can be saved in relation to the list prices.

(persons which might still consider to built our design without our license and HD- identity card under this conditions are not only acting illegal but are simply stupid).

A constantly updated list of these suppliers with addresses and links for our licensees is in the service section [service section](#) of these homepage.

Included are riggers, sail makers, equipment and electrical suppliers, yacht transport companies, insurers as well as suppliers for engines, propellers, paints, wood, aluminium, lead, welding machines etc.....

Increase in value by certificate

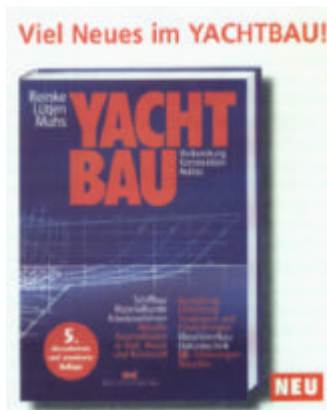
After completion of your ship the HD- SYSTEM SELF- BUILT- TYPE- YACHT -CERTIFICATE is issued.

This confirms (if our plans were observed) that your ship is a "HD- System Type Yacht" which has become a quality term in the course of the years, being well worth-increasing.

Additionally this certificate confirms that your yacht is a self- built one, which need not to comply with the EC- pleasure boat directive (except that the yacht been FULLY BUILT be someone else) and is therefore an important document for presentation at different authorities.

Literature

Our construction drawings (which are all in English and German language) are supported by a number of own specialist books (in German language only) with detailed tips and building explanations [more information...](#)



YACHTBAU (YACHT BUILDING)
 The proven standard book of Reinke/Luetjen/Muhs covering all areas of yacht building now in the 5. revised edition, among other things with "CE- experiences" etc.
 Publishing house Delius Klasing, ISBN 3-7688-0220-5, 808 pages, 72,- EUR in book shops (German language)



Alternativer YACHTBAU 2
 (Alternative YACHT BUILDING 2)
 Our system book and building manual with 240 pages in A4 is part of construction drawing delivery for our licensees only. No longer available for free sale (German language)



Wie baue ich meine Yacht
 (How to built my own yacht)
 Everything over the general and financial prerequisites for yacht self building. By Kurt Reinke, from the small yacht library of Delius Klasing. 220 pages, approx.. 9,50 EUR. Last copies are still available in the book trade- no new issue planned within the next years. Safe your copy now. ISBN 3-87412-106-2 (German language)

Building neighbours

With licensing you receive the addresses of your building neighbours for exchange of experiences, set up of building communities, common machine use or purchase of used tools, construction foundations etc..
 Also as a prospective customer you can receive the addresses of future building neighbours- because in our System you should know in ADVANCE what to expect.
 Use for this our

Regular Telephone- Hotline

Here you can place also questions, which should be still open after the reading of our info- plans or if you need advice to decide for a certain type.
 Also during the building phase we are glad to help you here at any questions. Or you use our

Internet- Service

In the password-protected service section of our homepage you will find actual addresses of our system suppliers (also these will answer your questions in their specialist field) and other important addresses, actual information, our annual circulars and, last but not least, a

Pinboard

there is an exchange of experience between our self builders, tools and equipment offer or search and the possibility to offer used or partly-finished REINKE- yachts and possibilities for charter or joining a trip on REINKE yachts which is accessible for ALL homepage visitors.

Over us



Kurt Reinke became well- known for his constructions for self builders as well as author of the well-known book >YACHTBAU< (BUILDING OF YACHTS), which just appeared in the 5th revised edition.

Kurt Reinke served his apprenticeship with the well-known yacht-yard Abeking & Rasmussen leisure and was later the technical manager of small type yacht projects and large luxury yachts. Start of the seventies it was appointed into the design office of Britton Chance jr./ USA and was there responsible for towing tank tests for the development of optimal lines of 12M America ' s Cup yachts. These experiences were later used for the design of his type yachts.

This was in 1971 the start of his Self- Building- System >HOBBY DESIGN<, later briefly called >HD- System<.

From smaller yachts around 7 to 9m like plywood hard chine boats, wooden round- framed boats and steel yachts his type yacht pallet developed in 30 years up to a size of 20m length, mainly in aluminium.

After the sudden death of Kurt Reinke in February 2000 his son Peter Reinke continues with the HD-System together with his wife Marion.

Peter Reinke is involved for over 25 years in the boat building business and is working as a naval architect on a successful yard for authority ships and life boats and knows therefore many problems of the boat building from own experience. His wife Marion contributes her experience as architect into inner design, insulation etc. Both are enthusiastic yachtsmen, learned sailing on the Reinke sail dinghy MINI SUPER, started cruise sailing on the Reinke OMEGA and have also made their experiences with yacht racing. Meanwhile both have over 40.000 nm of cruise experience.

2. REINKE TYPE YACHTS

[Omega F\(7,5m\)](#)

[Taranga SC](#)

[Reinke 10M](#)

[Reinke S10](#)

[Euro \(11,0m\)](#)

[Reinke 11ms](#)

[Reinke S11](#)

[Reinke 12M](#)

[Reinke 13M](#)

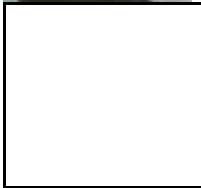
[Hydra SC](#)

[Reinke 15M](#)

[Reinke 16M](#)

[Hydra Duo](#)

[Tourina 115](#)



Omega F(7,5m)

THE STIL TRAILABLE SEA- GOING YACHT

Super strong sea- going grp sailing yacht designed for long lifetime. Competitive prices again by German- Polish Cooperation (3 different order variations until over- complete yacht ready for sailing from € 19.840,- up to € 29.960,- (2003)). Trailable already with common diesel- vans if some of the removable keel lead segments are carried in the car.

Effective cockpit- reefable safety rig.

Seaworthy furniture with lot of lockers and stowage areas. Dinette as alternative. Separate toilet room with wash basin.

High- quality grp- hull with basic wooden furniture, windows, doors, hatches, lead ballast, s/s- rudder and chain plates as optimal base.

This OMEGA F is a development from sea- and storm- proven OMEGA T to even more safety and comfort.

Also total self- building in fully glued wooden diagonal- method is possible- with well- proven shallow draft keel or even with lift keel for easier trailering at less weight (from abt. 1200 kg).

Description, prices and photos also under

www.Fabian-Boote.de

Length over all. 8,00m

Length hull 7,55m

Length waterline 6,35m

Breadth on frame 2,42m

Draft 0,90m

Sail area 26m²

Displacement designed 1,85t

Taranga SC

The TARANGA is the classic design in our program. Although the advantages of our later type yachts like deck house and ASY- twin-keels are missing, she is still built in single cases- however now in simplified SC (Semi- Cutter) version with more sail area combined with more simple operation.

Length over all 10,60 m

Length hull 10,00 m

Length waterline 8,80 m

Breadth on frame 3,25 m

Draft 1,35m

Sail area 55 m²

Displacement designed 5,6 t





Reinke 10M



This HD- type-yacht is in meantime built more than 100 times and well proven in Baltic- and North Sea.

She got even more interest since she became even more spacious and practically with the alternative concept with 4 fixed berths (plus 1+1 pilot berth in deck house as spare) or the considerably enlarged saloon table.

The behaviour of this slender but high- sided yacht is very comfortable even in short and steep seaway.

But also due to berth- convenient dimensions, shallow draft and easy falling- dry the 10M is ideal for worldwide great coasting navigation

Length over all 10,35 m

Length hull 10,00 m

Length waterline 8,70 m

Breadth on frame 3,00 m

Draft abt. 1,00m

Sail area 56 m² (main sail + fore sail triangle)

Displacement designed abt. 5,0/ 6,5 t (alu/ steel)

Reinke S10



This type is a scaled reduction from our 12M, but with more “shrinkage” in length to be berth- convenient. She is therefore the only more full- shaped type yacht in our program. This does not disturb in the long waves in the open sea: a lot of space under deck, good sail- carrying- facilities and ocean- safety against capsizing are exceptional. Huge tank and stowage capacities are clear advantages for long-time Yachtsmen.

However short and steep waves in shallow waters may slow down the relative wide boat.

The Super 11 with the original beam- length ratio of the 12M, reduced payload (and therefore improved weight/ sail area ratio) exceeds the S10 clearly in space and speed, but not so far in costs

Length over all 11,15 m

Length hull 10,62 m

Length waterline 9,05 m

Breadth on frame 3,47 m

Draft abt. 1,50/ 1,20 m (ASY- Twin keel)

Sail area 65 m² (main sail + fore sail triangle)

Displacement designed abt. 8,5 t

Euro (11,0m)



This new HD- design for aluminium construction is a more sporty design, but without leaving our “SAFETY FIRST”- principle.

Beside the strong way of construction and safety against capsizing for open- sea- areas also cruising comfort with all- round- view deck hose, generous division and a lot of locker- and stowage areas are



typical highlights of our HD- Type- yachts also for this fast semi-planning design.

This includes also the highly- efficient and advantageous ASY- twin keels for sailing very close to the wind and giving very comfortable behaviour at sea and the extreme operator- friendly SC- rig.

The special stern for optimized for modern high- thrust "Big- Foot" outboard engines is also very practical for swimming, stern- anchor operation, dinghy- use and MOB- salvage if you prefer a conventional inboard- diesel with folding propeller

Length over all 11,50 m

Length hull 11,00 m

Length waterline 9,20 m

Breadth on frame 3,30 m

Draft abt. 1,15m (ASY- twin- keel)

Sail area 70 m² (main sail + fore sail triangle)

Displacement designed abt. 6,0 t

Reinke 11MS



Sailing only when you enjoy it- otherwise fast, quiet, economical and sea- comfortable cruising under engine! More and more enthusiastic coastal sailors decide in later years for this combination concept.

But also beginners with demanding partners who do not like sailing under all weather conditions prefer this good compromise to a pure motor yacht.

Depending on sailing area this many- sided yacht can also be used without rigging as pure motor yacht.

This is mainly interesting for inshore boating people, who are bound for example to a river area in front of their door during their professional life.

The recommended moderate and economical engine of abt. 40 KW is with abt. 9 knots even sufficient for stronger currents.

Thanks to the small hull width within the European Transit- measures for cheap train- transport a later change to all coastal areas is without problems!

Length over all 11,80 m

Length hull 11,50 m

Length waterline 9,05 m

Breadth on frame 3,15 m

Draft abt. 0,95 m

Sail area 58 m² (main sail + fore sail triangle)

Displacement designed abt. 6,8 t

Reinke S11



Within few years this design is one of the most- new- chosen designs- result of good value for money, simplified technique and the practical interior concept.

Further the restriction to realistic tank capacities engine output has improved the ratio of sail power to weight so far that even steel constructions does not provide a weight problem.

As aluminium construction this allows up to 20% more ballast for even Ocean- safety against capsizing or enormous reserves for additional payload.

Length over all 12,00 m

Length hull 11,67 m

Length waterline 9,97 m

Breadth on frame 3,46 m



Draft abt. 1,30m (ASY- Twin- keel) or 1,60 (centre keel)
Sail area 75 m² (main sail + fore sail triangle)
Displacement designed abt. 9,7 t

Reinke 12M



Dozens of this example for all following long- time cruisers are nowadays sailing worldwide:

beside friendly greetings positive technical comments only!

The 12M, consequently designed for realistic long- time yachtsmen is regarded as fully sufficient by most sailing couples, even together with children or guests.

However since the a little bit lengthened version of the 12M provides an aft cabin with full headroom and inner passage nearly only the [13M](#) is built now.

Length over all 13,50m

Length hull 12,50 m

Length waterline 10,60 m

Breadth on frame 3,70 m

Draft abt. 1,35 m (ASY- Twin- keel) or 1,60 (centre keel)

Sail area 83 m² (main sail + fore sail triangle)

Displacement designed abt. 11,7 t



Reinke 13M



This new type- yacht in aluminium- construction is a consequent development of the more than 100 times- built and world- wide sailing REINKE- 12M.

The effective Semi- Cutter- rig and the lengthened aft ship allow high sailing speed combined with simplified operation and good safety.

The inside passage to the aft cabin with full headroom is the outstanding innovation compared to the 12M

Length over all 14,00 m

Length hull 13,30 m

Length waterline 11,40 m

Breadth on frame 3,70 m

Draft abt. 1,35 m (ASY- Twin- keel) or 1,60 (centre keel)

Sail area 96 m² (main sail + fore sail triangle)

Displacement designed abt. 11,8 t

Hydra SC



The 14 m- HYDRA was already developed in the early 70th as a result of tank towing tests in the USA.

Sailors and yachting journals were more than astonished when this innovative motor sailer with racer- lines was among the leaders in large international Ocean races, in spite of her super comfort with double engine plant and bath tub.

The interest on this combination concept of motor sailer and racer decreased only when potential customers preferred much more comfort with all- round view deck house, SC- rig, shallow ASY- twin- keels especially for world- wide cruising as provided on the [15M](#) which was developed from the HYDRA.

The semi- cutter- rig for improved light- wind sailing together with extremely simplified operation for small crews was already integrated beginning of the 80th and well- proven in meantime.

The ASY- twin- keel- alternative of the HYDRA SC now also offer the enormous advantages of this concept to inveterate HYDRA- fans

Length over all 14,85 m



Length hull 14,00 m
Length waterline 12,40 m
Breadth on frame 3,90 m
Draft abt. 1,30 m (ASY- Twin- keel)
Sail area 93 m² (main sail + fore sail triangle)
Displacement designed abt. 13 t

Reinke 15M



This design is based on the experience of owners of the 14 m HYDRA which was built far over 100 times: The new type should neither be faster nor have better sea behaviour but should be much more comfortable!

In addition for all long- time- yachties it should be possible to handle the boat with small crew (2 persons).

The low- priced double- engine plant already well- proven at the HYDRA with its good manoeuvrability, safety against engine breakdown and profitability also allows use as a pure motor yacht with extreme low running costs for a certain time.

With fuel capacity increased to 3500 litres more than 4000 nm range can be achieved when driving economical.

Length over all 15,90 m

Length hull 15,00 m

Length waterline 12,75 m

Breadth on frame 4,47 m

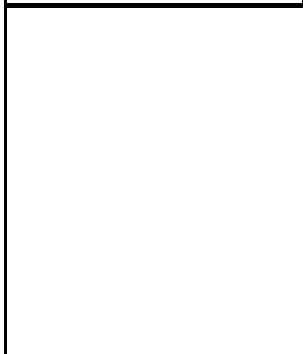
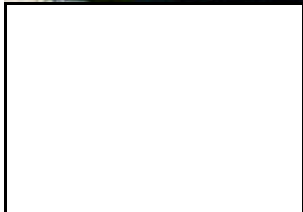
Draft abt. 1,52 or 1,62 m (ASY- Twin- keel)

Draft abt. 1,75 or 1,90 m (centre keel)

Sail area 127 m² (main sail + fore sail triangle)

Displacement designed abt. 20 t

Reinke 16M



The impressive performance of the smaller sister 13M with the new slim lines at the stern where also transferred to the aft ship of the REINKE- 16M. Combined with much more stowage space compared to the 15M, more deck space, integrated swimming and diving platform and an ideal stern girder for dinghy, equipment and sun- sail this HERA is now the ideal combination of comfort and speed!

The already high standard hull speed of abt. 9 knots is already achieved with small fore sails, but can be considerably exceeded with the optimized new sails TRECKER and FLIEGER (FLYER) or BLISTER at corresponding wind conditions.

Safety due to very simplified operation, very solid construction, high degree of safety against capsizing and best sea behaviour are highlights of the 16M, while costs are barely higher than the 15M. The 16M HERA is the highlight of our program with good spreading already now and low depreciation

Length over all 17,60 m

Length hull 16,00 m

Length waterline 13,70 m

Breadth on frame 4,47 m

Draft abt. 1,52 or 1,62 m (ASY- Twin- keel)

Draft abt. 1,75 or 1,90 m (centre keel)

Sail area 127 m² (main sail + fore sail triangle)

Displacement designed abt. 20 t

Hydra Duo



This large yacht was designed for a request of an optimized charter yacht with outstanding performance but minimized operation.

By using the Semi- Cutter- principle for the main mast a considerable increase of performance was achieved beside even further simplified operation.

Due to the unusual rigging of the jigger mast an additional jigger staysail can be used to allow speeds up to 12-13 knots.

At the same time the comfort for 10 guests and owner couple with 2-3 crew members was increased to a level of even larger yachts.

Of course other concepts are possible if the owner of this Mega-Yacht will use it for private purposes and have only sometimes paying guests on board.

Length over all 21,50 m

Length hull 19,25 m

Length waterline 17,05 m

Breadth on frame 5,50 m

Draft abt. 2,00 m (centre keel)

Sail area 157 m²

Sail area 220 m² with genoa and jigger stay sail

Displacement designed abt. 20 t

Engine abt. 2 x 92 kW

Speed under engine abt. 12,0 knots

Tourina 115/ 120



The **TOURINA 115** offers comfortable private space for 6 persons in separate double cabins as well as an outstanding all- round-view- deck saloon.

A light flybridge and many sun areas at deck are well suitable for southern climate, the sheltered living areas inside provide good suitability also for the rougher northern areas.

Alternatively a >southern< version with fisherman- cockpit aft or a >C<- version (Canal) with only 2,9 m passage height w/o flybridge are possible

The slender hull lines result in very low towing resistance and smooth setting of the forebody when running hard against the sea. A well proven special stabilizing stern absorbs rolling.

Already with low output as f.e. half power of one the both engines about 7-8 knots can be achieved in economical displacement mode at only 5-6 litres. per hour. So a range of over 2000 nm is possible with one tank filling in extreme quiet mode.

With normal motorizing of 1 x 130 hp or 2 x 65 hp 11-13 knots are possible (Steel/ aluminium), with 2 x 130 hp and light aluminium version about 18 knots in semi- displacement mode.

Length over all 12,00 m

Length hull 11,50 m

Length waterline 10,50 m

Breadth on frame 3,50 m

Draft abt. 0,95 m

Displacement designed abt. 10,14 t (steel)/
7,73 t (Alu)

Engine abt. 50 - 120 kW

Speed under engine abt. 8 - 14 knots (at 8 t)

For much more living comfort the **TOURINA 120** was developed as new variation of the TOURINA 115 which was in meantime

well- proven under hard sea conditions.

As the wish for low canal passage height was predominant, a passage height of 2,75 m only was achieved by lowering saloon- and engine room deck for 0,15 m.

In spite of raising height of the aft deck for full headroom aft now and increased length of deck saloon for a full meter to forward, the favourable centre of gravity of the 115-C was not increased!

The favourable large deck saloon with integrated pantry however was achieved by loosing one double cabin. But the remaining two double cabins with roomy bathrooms are now ideal for two couples which can own and operate and maybe even built this comfortable long- time yacht together.

This halves the costs and can double the fun!

Length hull 12,00 m

Length waterline 10,50 m

Breadth on frame 3,50 m

Draft abt. 0,90 m

Displacement designed abt. 10,2 t (steel)/

7,8 t (Alu)

Engine abt. 50 - 120 kW

Speed under engine abt. 8 - 14 knots (at 8 t)

3. Translation examples for Drawing list and required shipbuilding material, shown in catalogue for each boat type

<u>German Description</u>	<u>English translation</u>
<u>Umfang der Bauzeichnungen:</u>	<u>scope of drawings:</u>
Generalplan	General arrangement plan
Schotte und Bodenwrangen	Bulkheads and floors
Wellenanlagen und Motorenfundamente	Shaft plant and engine foundation
Ruder	Rudder
Bauplan	Construction plan
Hauptspant	Main frame
Segel- und Takelplan	Sail- and rigging plan
Deck- Layout	Deck- layout
Linienriss	Lines plan
Spantenriss	Frame lines
Einrichtung	Accomodation plan
Einrichtung/ Schnitte	Accomodation/ sections
Kiel	keel
ASY- Twinkiele	Asymmetric twin keels
Schnitte Spt....	Sections frame
Vorstag- Beschläge	Forestay- fittings
Bug- und Heißauge	Bow and hoisting eye
Pinne	tiller
Pinnen- Beschlag	Tiller fitting
Windschutzscheibe	Wind screen
Heck	stern
Rüsteisen	Chain plates
Luke und Tür	Hatch and door
<u>Ca.- Schiffbau- Material- Bedarf:</u>	<u>Approx. Need of shipbuilding material:</u>
Alu	Aluminium
Stahl	Steel
Ca.m ² Platte= ca.kg (hauptsächlich ...mm)	Abt.m ² plates= abt.kgs (mainly ...mm)
Ca. ... kg Profile (hauptsächlich)	Abt.kgs profiles (mainly.....)
.....kg Bleikgs lead