

BAL TIC 35

DESIGN SPECIFICATION

SLOOP RIGGED IMS RACER/CRUISER

MAIN DIMENSIONS

L.O.A.	10.640 m	34.90 ft
L.W.L.	8.750 m	28.70 ft
BEAM	3.500 m	11.48 ft
DRAFT	1.850 m	6.07 ft
DISPL.	4,480 kg	9,877 lbs
BALLAST	1,880 kg	4,145 lbs
I	12.450 m	40.85 ft
J	3.850 m	12.63 ft
P	12.650 m	41.50 ft
E	4.550 m	14.93 ft

All measurements are approximate.

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1. HULL

1.10 GENERAL CONSTRUCTION

FRP sandwich construction to the highest specification, using unidirectional roving and high grade resin to develop an extremely rigid yet light and well insulated structure.

End Grain Balsa is used as core material in the sandwich laminate. This in combination with a specially developed unidirectional roving creates a very rigid, strong and light construction. This sandwich construction has the following advantages in comparison with conventional FRP lay-ups:

- Approx. 40-60 per cent lighter
- Ca. 200-300 per cent higher panel stiffness
- Increase in strength
- Better insulation, less condensation and less noise
- Strength of laminate will not decline as fast as a conventional FRP-lay-up due to less panel flexing
- The high panel stiffness and usage of unidirectional will prevent "micro cracking" and reduce risk of blistering

A high grade resin is used in the lamination process to create an extremely strong high-tech laminate. The Isophthalic Polyester resin has several advantages in comparison with the commonly used Polyesters:

- Higher elasticity. Higher elongation before breaking. Thus a better matching of the elasticity of the fibres and therefore a better usage of the strength potential of the fibres. The high grade resin elongates to approx. three times that of normal polyester.
- Higher water resistance helps preventing blistering.
- Better strength durability. Tests indicate that normal polyester laminates will lose approx. 50 per cent of its original strength during 10 years of use while the Isophthalic resins will lose only 10 per cent or less over the same period of time in combination with a sandwich construction

The combination of sandwich construction, unidirectional fibres and Isophthalic resin will make the yacht lighter and last longer. The lighter the yacht is, the more ballast it can carry for a given displacement. Thanks to this, the performance will be better and the yacht will be safer and easier to handle.

All high stress areas are specially strengthened with a build up of unidirectional roving orientated in the direction of the stress.

Transverse floors and longitudinal stringers are made up of a unidirectional roving and fabmat around a low density foam core. There are limber holes in floors to allow drainage to sump.

1.11 STRUCTURAL BULKHEADS

Main structural bulkheads are built up of marine plywood. Visible surfaces are teak faced.

1.12 CHAIN PLATES

Stainless steel through bolted to longitudinal or transverse bulkheads, which are securely bonded to the hull and deck. Plates are provided with backing plates to spread loads adequately. Chain plates are grounded to a keel bolt for lightning protection.

1.13 ENGINE BEDS

Incorporated in hull, built up of ud-roving and fabmat around a PVC foam core. Special care is taken to ensure a rigid foundation and correct bonding.

1.14 MAST STEP

Fabricated aluminium alloy mast step bolted to reinforced floors and stringers.

1.15 BILGE

Access provided as practical to the bilge. There are limber holes in the floor frames to allow drainage to the sump.

1.16 BALLAST

External fin keel, cast to high accuracy, in lead with added antimony.

The keel is through bolted to the hull by cast-in stainless steel keel bolts

1.17 RUDDER AND RUDDER STOCK

The cantilevered semi-elliptical balanced spade rudder is moulded from Fiberglas and filled with PVC-foam. The rudder forces are transmitted to the shaft via an internal alloy frame work. Foam filling under high pressure in a special strengthened mould.

Rudder Stock :

The rudder stock is made of high strength, seawater resistance aluminium. It is tapered to corresponding bending moments and to minimise weight. The rudder stock passes through Robalon bearings and a stuffing box which is strongly bonded to the hull.

2. DECK AND DECK EQUIPMENT

2.10 GENERAL CONSTRUCTION

Hand laid-up moulded Fiberglas with balsa core for stiffening and insulation, marine plywood core reinforcement incorporated in the mounting areas of winches and fittings. The deck has a high strength/weight ratio and is bonded to the hull with layers of roving. The deck is through bolted to the hull.

A pulpit and pushpit of best quality stainless steel tube are mounted on the bow and transom. Double life lines are installed passing through stainless steel stanchions. The life lines are of plastic coated stainless steel wire and set up with turnbuckles at the after end. The pulpit is fitted with navigation lights and the pushpit with a stern light. The height of pulpits, stanchions, spacing distance etc. conform to O.R.C. requirements. Best quality marine standard hardware and fastenings used throughout. Liferaft stowage provided in aft cockpit locker.

Finishing :

Deck is painted with high quality abrasion-resistance colour pigment gelcoat. Standard colour is white.

2.11 STEM HEAD FITTING

Custom fabricated stainless steel fitting provided with twin jib tack fitting.

2.12 TOE RAIL

Toerail to be in teak. T-track recessed on top of toerail, aft of mast, for multi-purpose sheet take-off points.

Stainless steel stanchion bases with strong eyes for sheet take-off points.

2.13 WINDOWS, HATCHES AND PORTLIGHTS

Fixed Windows :

Windows in cabin trunk are fixed and made of hardened glass, securely attached and sealed off to the deck.

Sliding Hatch :

Companionway hatch is custom made sliding type, perspex with lock and washboard. Storage space for washboard.

Hatches and Portlights :

-Foredeck	1
-Main saloon	1

2 Cockpit portlights provided to owner's cabin

2.14 MAIN SHEET SYSTEM

Main sheet traveller Lewmar 2221 and blocks Easymatic 23102 and 23103 with sheaves for terylene tails.

2.15 GENOA SHEETING SYSTEM

Two Genoa cars, Lewmar 1006, and two track sliders Lewmar 2343.

2.16 BLOCKS, JAMMERS and FITTINGS

2 double sheave footblocks

2 medium snatch blocks

2 spreader blocks

2 foreguy block

2 mooring cleats

2.17 WINCH SPECIFICATION

Winch equipment Lewmar or equal.

Winch list:

-Primaries/genoa sheet	2 x Lewmar 40 A
-Secondaries/spinnaker sheet	2 x Lewmar 30 A
-Genoa/spinnaker halyards	2 x Lewmar 30 A
-Main halyard	1 x Lewmar 30 A
-Reefs, cunningham etc.	2 x Lewmar 30 A

Following handles are standard:

2 x plain	10"
1 x lock-in	10"

3. INTERIOR

3.10 GENERAL

Joinery work is to the highest standard. All joinery is teak faced with solid teak or laminated teak frames and capping. The joinery is varnished throughout. Visible surfaces are varnished and hand rubbed to obtain a satin type of surface.

All doors are provided with retaining hooks and swing stops. Kick plates on steps and chafing pieces on sills are provided. Canvas leecloths provided for berths in owner's stateroom and guest cabins. Hanging lockers are provided with rods and hooks. Locker doors are fitted with louvers for ventilation. Teak gratings in head.

Floorboards with laid teak veneer. Access to bilge provided where practical. Ceiling lined with removable soft panelling.

Where particular sizes are not specified the material will be as light as consistent with good practice.

3.11 INTERIOR LAYOUT, COMPARTMENT DESCRIPTION

3.12 FORWARD CABIN

V- berth in center. Storage space for sails, rigging equipment etc. under berth. Hanging locker on starboard.

3.14 TOILET COMPARTMENT

Moulded GRP basin in special hygienic gelcoat. Counter unit and lockers with ample provision for stowage. Foot operated fresh water pump. Marine toilet with overboard discharge. Mirror. Soap and paper holder.

3.15 GALLEY AREA

L-shaped galley provided with 3 burner gimbaled propane stove with oven. Stowage for propane tank is under helmsman's seat. Mechanical shut-off at stove. Isolated stainless steel ice-box.

Stowage for cooking utensils. Garbage container. Adequate drawers and glass racks for stowage of crockery. Cutting-board. Formica-covered work top with deep fiddles. Deep stainless steel sink unit. Foot operated sea-water pump. Foot operated fresh water pump.

3.16 NAVIGATION STATION

Navigation table with stowage for charts, pencils etc. Bulkhead space for mounting electronic instruments, radio equipment, etc. Master electric panel with safety circuit breakers and navigator's light.

3.17 MAIN SALON

U-settee to port. L-shaped settee to starboard. Storage space behind settee backrests. Dining table.

3.19 OWNER'S CABIN

Double berth to port with storage space under. Hanging locker, seat and mirror.

4. PLUMBING

4.10 VENTILATION

Ventilation provided via hatches and port holes. See accurate specification at 2.13.

Standard Simpson Lawrence ventilators, 3 pcs. For locations see deck layout.

Engine room blower provided.

4.11 WATER SYSTEMS

Footpump operated fresh- and saltwater in galley. Footpump operated freshwater in head.

4.12 BILGE PUMPS

Two diaphragm type manual bilge pumps with removable handles. Locations, one at main companionway and one in the aft cockpit.

4.13 TANKS

All tanks are Baltic custom made in stainless steel with baffles and inspection covers.

approximate capacities:

- diesel fuel 120 litres (32 US gallon)
- fresh water 120 litres (32 US gallon)

Tanks are pressure tested.

Tank shut-offs provided. A water separator is installed on the fuel line. The fuel tank has a single deck fill marked FUEL.

The fresh water tank has a single deck fill marked WATER.

The tanks are securely laminated to the hull and foamed in for rigidity and sound insulation.

4.14 PIPING

Seacocks and through hull fittings :

High quality seacocks and through hull fittings of best marine standard. All through hull fittings located below the waterline are provided with seacocks.

Sea/fresh water, sanitary and fuel pipes :

Adequate vinyl piping for fresh water and sea water system. Sanitary hoses are especially made for toilet application and with a rigid vinyl helix for reinforcement. Copper tube fuel lines with appropriate valves.

5. ENGINE AND TRANSMISSION

5.10 MAIN ENGINE

The main engine is YANMAR 2GM 20F Marine diesel with following characteristics:

- 13.5 kW (18 hp) at 3600 rpm (maximum continuous rating)
- 2 in-line vertical cylinders, 4-stroke engine
- cubic capacity 0.64 liters
- direct injection
- electrical starting 12 V DC

Fresh water cooling for marine application with a heat exchanger and a sea water pump.

5.11 ALTERNATOR

55 A 12 V for starting and service batteries.

5.12 ENGINE INSTRUMENTS AND CONTROLS

Engine instrument panel with a RPM meter, oil pressure indicator, temp. indicator, low pressure and high temp alarm and starting switch.

Morse single lever controls de luxe version.

5.13 GEAR BOX AND CLUTCH

Reduction gear box with reverse gear, reduction is 2,6:1.
Internal thrust bearing in gear box.

5.14 PROPELLER SHAFT AND PROPELLER

The propeller shaft is made of corrosion resistant steel AISI 329 The outboard end is supported with a stainless steel IOR-type shaft strut including rubber bearings. The stuffing box has a hose connection to the stern tube. Zinc anodes on shaft.

Propeller :

Two-blade folding propeller.

6. MAST AND RIGGING

6.10 MAIN MAST

Two-spreader racing/cruising type mast. The spar is made from a hollow oval aluminium section and provided with aluminium airfoil spreaders. The halyards are internal and the mast will be provided with appropriate exits, halyard blocks and fittings. The boat is fractional rigged.

6.11 BOOMS

Main boom is a tapered aluminium alloy hollow section with appropriate fittings, rollers and cables. The slab reef system with reefing lines runs through sheaves in boom end. The port and starboard reefing lines lead aft to center cockpit trim winches via turning blocks.

One aluminium spinnaker pole, hollow section, with shotgun type outboard end and stud fitting on the inboard end.

6.12 STANDING RIGGING

Standing rigging is rod and the transverse rigging arrangement is discontinuous. All fittings like shroud attachments, linking at spreader ends are carefully chosen to meet requirements like lower windage and light weight. All fittings are so called high fatigue type for higher safety, strength and durability.

1 Headstay	Rod
2 V1 Main shrouds	Rod
2 V2/D3 Upper shrouds	Rod
2 D1 Lower shrouds	Rod
2 D2 Intermediate shrouds	Rod

1 Backstay	1x19 s.s.
2 Running backstays	1x19 s.s. wire with block and tackle.

6.13 RUNNING RIGGING

Running rigging is made of 7x19 stainless steel wire plus terylene tails as appropriate. Pad eyes are all Baltic custom made.

Item :

- 1 main halyard, with shackle
- 1 main sheet
- 2 main traveller adjusting sheets

- 2 genoa halyards, with snapshackles
- 2 genoa sheets

- 2 spin halyards, with snapshackles
- 2 spin sheets, with snapshackles
- 2 spin aft guys, with snapshackles
- 1 spin toplift, with snapshackle
- 1 spin foreguy with snapshackle

- 2 reefing lines
- 1 cunningham line
- 1 rod kick

7. ELECTRICAL, ELECTRONICS

7.10 MAIN SWITCHBOARD

Baltic custom made with automatic safety circuit breakers. Indication diodes, amp.meters, volt meters and tank level meters are provided. A 12 V DC system throughout the boat.

7.11 BATTERIES

All batteries are heavy duty deep cycle marine type of the following capacities:

- main engine starting battery 12 V DC 108 Ah
- service batteries 12 V DC 108 Ah

7.12 LIGHTING

Following lights are provided:

Interior :

- navigator's light
- 8 dome lights white
- 3 fluorescent lights white

Exterior :

- pair bow lights red/green
 - stern light white
 - steaming light white
 - tri-colour masthead light
 - anchor light
 - deck flood light
 - compass light
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8. STEERING SYSTEM

The steering is provided by a light weight "destroyer type" wheel The wheel is made of stainless steel, welded and polished construction. Aluminium steering pedestal.

9. MISCELLANEOUS

9.10 EQUIPMENT

Following items will be provided:

- Steering compass, SUUNTO, mounted on steering pedestal.
- 4 fenders
- flagstaff
- bosuns chair
- boat hook
- 4 docking lines
- instruction manuals for engine, plumbing and electrical system
- a drop forged galvanised bow anchor, DANFORTH type, is provided. The anchor weight is 10 kg.
- galvanised steel chain 6 m and 40 m anchor warp.

NOTE:

These specifications are believed to be correct at the time of printing. However, there may be changes and alterations to the finished yachts thanks to continuous improvements. Baltic Yachts therefore reserves the right to amend specifications, materials and equipment without prior notice. Alterations will not be considered retroactive for yachts already delivered or under construction.