

M.A.T 1220, 2023

The MAT 1220 is designed for a new generation of IRC racers for MAT, emphasising versatility both in performance profile and configurations. Because it is not an extreme typeform with a medium sized sail plan and reasonable displacement, stability and draft, it's also optimized for ORC.

The premise for the boat is to produce a modern light design that is equally at home offshore as inshore. The design combines features such as medium displacement, greater emphasis on bow overhang, fin keel of moderate draft, and a number of sail plan tweaks to arrive at a very competitive both inshore and offshore. The base rating for the fin keel version with the fin keel and a squaretop it could go up to 1.190.

The deck and styling with a large cockpit offer an optimal platform for high level racing as open space for fun family sailing. The interior can be completed to a range of fitouts from stripped racing to offshore racing to family racer/cruiser. Working with engineer Steve Koopman of SDK Structures we have configured the boat to be as versatile as possible.

The boat has been modified to suit the ORC rule, with lot of hours spend to achieve the right handicap without losing speed in the water.

Special cradle for transportation on land. Cradle both for boat and keel. Seldén mast divisible for easier transportation

Location:

Kristinehamn, Sweden

Measurements:

Length overall: 12.20m

Beam: 3,96m

Draught: 2,50m

Displacement: 5.250kg

Construction:

Hull, deck, bulkheads and all interior components in PVC foam cored composite glass sandwich. Vacuum assisted resin infusion. Laminated assembly of all components to hull and deck. Carbon fiber reinforced structural grid for keel and mast loads

Hull:

Hull color: White gelcoat

Bottom color: Nautix racing

Keel: Lead fin, fully CNC shaped lead fin keel cast around duplex stainless steel keel spar, draft 2.50m

Rudder and Steering: Isotop made prepreg carbon autoclave cured rudder and stock. Jefa self-aligning high performance rudder bearings. 900 mm Carbonautica GFC composite twin wheels

Motor:

Ocean volt SD15 motor 15 kW with Piccolo 5, 3.3 kW 220 V removable diesel power plant and a removable 40 L diesel tank.

Two blade folding Gori racing propeller

Tank capacities:

Water tank: 200L

Diesel tank: 40L

Holding tank: 40

Deck:

8 x Seldén Performa 52 STP black winches for primaries, main sheet and backstay
Seldén mainsheet track 6:1 up down purchase and 2:1 mainsheet to winch
Seldén transverse jib tracks and ball bearing cars allowing up to 5 degrees sheeting angle
Seldén Black Magic ball bearing halyard lead blocks
Seldén Black Magic ball bearings primary blocks
Seldén composite control blocks
4 of Spinlock XX and 5 of XCS clutches
Custom alloy fairleads
Custom stainless-steel chainplates recessed in hull
Composite mast collar
SS stanchions, pulpit and pushpit with socketed to laminated bases
5 mm SS lifelines, Blue Wave terminals
Optional black composite stanchions and fluorescent synthetic lifelines
1 opening Lewmar foredeck hatch
2 opening Lewmar portlights
4 opening Lewmar flush hatches
Big Lewmar flush hatch in the back, size 70
Custom laminated tempered security glass coachroof windows
Recessed companionway sliding hatch

Electrics:

48 V system
20 kWh Lithium battery, 4 st x 5 kWh each
Batteries are movable - with 3 different mounting points - depending on rating system.
3 st 1.6 kW 220 V to 48 V chargers with separate stern connectors to charge from multiple sources.
Victron Cerbo display
48 V to 12 V Victron converter
12V 120 Ah Lithium battery
Piccolo 5 3.3 kW 220 V removable diesel power plant
Galvanic Isolator
Shore power
Victron Smart BatteryProtect 12/24V-220A
Victron LiFePO4 Battery 12,8V/200Aha – Smart - 2020
Victron VE.Bus BMS
Victron Cyrix-Li-ct 12/24V-230A combiner
Blue Smart IP22 Charger 12/20
IP300P/DSP BEP Fuse ANL 300A
1 x USB 12V outlets + 1 x 12v outlets
Almost all the electrical wiring has been renewed in 2022

Electronics:

BG 12" Nemesis mast display
BG H5000 Hercules processor
BG H5000 display
BG Precision 9 Compass
BG Depth, Speed and Wind sensor
BG V60B VHF and AIS
2 st Navstations with 27" 4k displays with wireless keyboard and trackball.
POE Ethernet system
Acksys AirWan17 industrial Wifi, Router and 4G modem
Nuvo5000 industrial Windows PC with Expedition

Interior:

Bulkheads and interior components in PVC foam cored composite glass sandwich

Forward Cabin:

Removable double bed
Two lockers with removable oak doors
Radiator
Step to get out through the hatch
Bed lights
Prepared for 12 V phone charging

Central cabin:

Lightweight composite companionway ladder for easy access to engine
2 mesh pipe cots over bunks serve as backrest when folded down
Lightweight composite nonskid floorboards
Aluminium handrail
Table
Cabinet removable
2x Radiators
2x bunks
Oak floorboards and a racing floorboard
White and red LED light

Galley:

Aluminium handrail
Storage under sink
Cabinet removable
Gas stove and furnace
Refrigerator
Hot water system 30 L removable

Enclosed heads:

Aluminium handrail
Shower
Waste tank with cover and deck suction connection.
Radiator
Cabinet removable
Oak door removable
Can Marine hand basin
Jabsco marine manual toilet

Aft cabins:

Extra window
4k navigation screen
Big storage compartment in the middle.
2x bunks
2x beds with sea bunk solution. Can be extended to double beds.
Phone fast charger on starboard.
Bed lights

Mast and rigging:

Fractional sloop
Selden Carbon mast and boom.
Carbon mast, with carbon spreaders
Carbon boom - outhaul in boom with purchase system
Reef system with jammers included
Carbon rodkick with double windward sheeting
VHF antenna in mast top

Divisible mast for transportation
Alfalock halyard lock Main, Jib and Code 0
Halyards 2 jib, 1 fractional, 1 Code 0, 2 gennark, 1 main
Deck lightning - flood light
Mast Jack hydraulic
Antal rail for rope and batcar system on mast
All Seldén deck gear - winches - blocks - winch handles
2 tacklines
Solution for spinnaker staysail
Solution for genua staysail
Jib cunningham for Helix North Sails
Jib barberhaul - double system - windward trimming
Liros Ropes - racing professional lines

Sails:

North 3Di pinhead mainsail for transport
Albatross Jib M for transport

All sails from North Sails, 2023 in very good condition

Square Top Mainsail	3Di RAW 870 16.800 Dpi
Jib 1 Light/Medium	3Di RAW 870 12,600 Dpi
Jib2 Medium/Heavy	3Di RAW 870 76,800 Dpi
J3 Heavy	3Di RAW 870 19,600 Dpi
Jib3.5 Heavy Weather OSR Max	NPL SportXi Aramid NL.Xi18Tv2
A 1 Asymmetric	Airx 600 – 500 N
A 2 Asymmetric	Airx 600 – 500 N BAIN
A6 Asymmetric	Superkote SK 130
Code Zero (75% smg)	3Di Downwind 706, 7,560 Dpi
Spinnaker Staysail	NPL Code Xi Xi04 CD U

Others:

Baltic recovery sling
Jon Bouy inflatable horseshoe 1 x horse with light, draught and whistle
Heaving line
Manual bilge pump with double pump system (one in cockpit one in port cabin, connected, but can be used only from outside as well) and 1 electric pump installed
Shower drain with a split so that can be used for pumping water out of the bilge as well
Fenders
Mooring lines

Option:

Cradle for storage with splashes

Annual inspection and services done since new. Blue Ocean Oy Ab reserves the right to changes in this specification list. The boat and mast are stored in a boathouse when she is launched.