

MAT 13.40

IRC Competitive, Offshore and Inshore Racer Cruiser Sailing Yacht

Preliminary Specifications

February 2021

Design

Mills Yacht Design/Mark Mills

Composite Engineering

SDK Structures

Dimensions

Hull length	13.40 m
Beam max	4.24 m
Draft	2.65 m
Displacement	7150 kg
I	17.70 m
J	5.00 m
P	17.00 m
E	5.85 m
STL	7.00 m

Construction

ISO 12215 structural regulations category A
Hull, deck, bulkheads, interior components in PVC foam cored composite glass/carbon sandwich
Vacuum assisted resin infusion

Keel

Fully CNC shaped lead fin keel

Rudder and Steering

Prepreg carbon autoclave cured rudder and stock
Jefa self aligning high performance rudder bearings
1000 mm Carbonautica GFC composite twin wheels

Deck

7 x Harken Performa 50.2 STP racing winches
Harken mainsheet track and 2:1 mainsheet to winch
Harken transverse jib tracks and cars
Harken Black Magic halyard lead blocks
Harken Black Magic sheet and other primary blocks
Harken Carbo control blocks
Spinlock XXA and XCS clutches
Custom alloy fairleads
5 mm SS lifelines, Blue Wave terminals
4 opening Lewmar portlights
3 opening Lewmar hatches
Custom tempered glass coachroof windows
Custom stainless steel chainplates recessed in hull
Composite mast collar
Recessed companionway sliding hatch
Locker for gas bottle

Rig

Axxon Composites
HR standard modulus carbon fiber mast
Section 150x258
2:1 main halyard sheave box
Double masthead sheave box for spi/code 0
2 x mast head backstay to winches
Single sheave box @headstay height jib/genoa/solent
2 sets of aluminum spreaders
Structural staysail sheave box
Carbon gooseneck and vang bracket
Rigid vang
HR standard modulus carbon max depth boom
RAL 9005 black or RAL 9016 white finish
BSI Rod rigging
Prepreg carbon autoclave cured bow sprit

Engine

Yanmar 30 Hp diesel engine with sail drive
Engine compartment, soundproofing foam
Vetus rotomoulded 80 liter diesel tank
Vetus level indicator, fuel filter, water separator
Southco diesel fill on deck
Gori 2 bladed racing folding propellers
Teleflex Single lever engine control

Electricity

12V circuit
Victron Energy 2 x 140 A AGM deep cycle house batteries
Victron Energy 1 x 80 A starter battery
BEP Marine battery switches
BEP Marine distribution switch panel
Victron Energy battery management system
Frensch GmbH LED interior lights
Lopolight LED navigation lights
ISO wiring

Plumbing

Plastimo 200 l flexible fresh water tank
Jabsco pressurized water system
Can Marine hand basin in head, Whale mixer tap
Can Marine twin galley sink, Whale mixer tap
Jabsco manual bilge pump 3000 l/h cockpit
Jabsco manual bilge pump 3000 l/h cabin
Rule electric bilge pump 7570 l/h
Jabsco marine manual toilet
Southco fresh water fill on deck
Forespar racing marelon flush valves

Interior

Bulkheads and interior components in PVC foam cored composite glass/carbon sandwich
Honeycomb cored sandwich natural oak veneer cabin doors and cabinet doors
Lightweight composite nonskid floor boards
Custom alloy door frames, custom alloy cabinets, alloy handrails
Southco Marine door and cabinet handles
High density foam cushions, Sunbrella upholstery
Dometic gimbaling two burner gas cooker
GRP refrigerator compartment, Vitrifigo 12V cooling compressor
Lightweight composite companionway ladder for easy access to engine