



M.A.T. 12⁴⁵ IRC 12.45 m Racer Cruiser

Specification

January 2021

Type

12.45 m production dual purpose yacht aimed at providing competitive IRC performance and comfortable accommodation.

Design

Mills Yacht Design, Mark Mills

www.mills-design.com

Design Category

CE category A 10

Dimensions

Hull length	12.45 m
LWL	10.66 m
Beam max	3.75 m
Draft	2.65/2.55 m
Displacement	6.780/6.940 kg
Ballast	3.220/3.380 kg
I	16.97 m
J	4.82 m
P	16.58 m
E	5.90 m
ISP	18.40 m
STL	5.50 m

Construction

E-glass, PVC core, epoxy vinylester resin
Vacuum assisted resin infusion
Gelcoat finish on hull, deck and internal structure
Composite structural IGU for interior arrangement

Keel

580 kg SG iron fin with 2640/2800 kg lead/antimony bulb, total 3240/3380 kg (approximate), adjustable draft and bulb weight.

Rudder and Steering

Carbon fiber rudder stock
Jefa self-aligning rudder bearings
Carbonautica 1000 mm composite twin wheels

Deck

Harken winches:
2 x primary winches 50.2 STA
2 x main sheet winches 46.2 STA
2 x halyard winches 46.2 STA
Harken deck gear package:
2:1 mainsheet to winch
Mainsheet traveller and track, blocks for 6:1 windward sheeting traveler purchase system
Longitudinal jib tracks, ball bearing cars and blocks for 12:1 purchase system
Spinnaker sheet and deflector blocks
Halyard lead blocks
7 Spinlock clutches
Custom alloy fairleads
6 opening portlights
3 opening hatches
1 opening round foredeck hatch
SS stanchions, pulpits and pushpits
5 mm 1x19 SS lifelines
Custom stainless steel chainplates recessed in hull
Anchor locker with drain, provision for mounting the windlass in the locker
40 mm molded toe rail to mast
Composite mast collar
Recessed companionway sliding hatch
Locker for gas bottle
Plastimo 135 mm compass

Mast and Rig

Axxon Composites carbon fiber mast
Alloy spreaders
Rod rigging
Integral hydraulic mast jack
Carbon fiber boom
Carbon fiber spinnaker pole
Hydraulic integral backstay adjuster
Racing head stay foil twin groove Harken Carbo black
Provision for:
1 main halyard 2:1
2 masthead spinnaker halyard
1 wing spinnaker/jib halyard to spectacle at I height
1 CI I height jib halyard
1 pole lift 1 m below I

Engine

Yanmar 30 Hp diesel engine with SD25 sail drive
Vetus 110 l diesel tank, level indicator, fuel filter, water separator
Diesel fill on deck
Radice 2 bladed folding propellers
Single lever engine control

Electrical

12 volt DC
Victron Energy 2x100 Ah AGM house batteries
Victron Energy 1x70 Ah starter battery
LED interior lights
LED navigation lights

Plumbing

200 l flexible fresh water tank
Pressurized water system
Hand basin in head
Galley sink, mixer tap
Jabsco manual bilge pump 3000 l/h
Rule electric bilge pump 7570 l/h
Jabsco marine toilet
Fresh water fill on deck

Interior

All bulkheads and other interior components in PVC foam cored composite
White colored gelcoat surfaces for ease of maintenance, lightweight and modern appearance
Honeycomb cored satin varnished natural oak cabin doors and cabinet doors
Custom lightweight alloy cabinets to match alloy door frames, alloy portlights trims
Custom alloy handrails
Southco satin polished door handles
High density foam cushions, Sunbrella upholstery
Central salon area with settees port & starboard, large wet locker starboard, cabinets with doors on P&S
Enclosed head to port forward of mast, s/s hand basin, shower, china bowl, cabinet
Forward cabin with double berth, wardrobe, large space under the bed, naturel light from foredeck hatch
Large double berth cabin port & starboard aft, hanging lockers, double portlights
Galley to port by companionway, s/s sink, gimbaling cooker, refrigerator compartment
Navigation station to starboard of companionway
Lightweight composite companionway ladder for easy access to engine