

Specifications BORÉAL 52 3 or 4 CABINS

(June 2014)

Characteristics:

- LOA 15.86 m
- Hull Length 15.20 m
- LWL 13.82 m
- Beam 4.65 m
- Beam at waterline 3.64 m
- Draught 1.14/3.13 m
- Lead Ballast 4 800 kg
- Light displacement: 14 500 kg
- Displacement fully equipped: 17 800 kg
- Standard engine Vovlo D2 75 hp or Nanni 85 hp
- Sail area 130 m²
- Mainsail 61 m²
- Genoa 69 m²
- Staysail 26 m²
- Fuel: (standard + optional) : 879 + 378 l
- Fresh water: 1470l

Architecture and design: Jean-François Delvoye

CONSTRUCTION

Hull

Triple chines on a floating frame and rails
5083 and 5086 H111 aluminium
Mig and Tig welding in Argon controlled by sweating

Structure

100 X 10 Ribs, 12 X 40 rails, floor-plate thickness 8 mm
Water-tight collision bulkhead 2.30 m behind the bow
Water-tight bulkhead at the rear, before rudder port and dagger boards
Flat keel 120 X 10, enhanced to 300 X 30 at the forefoot
Chain plates and reinforcements under chain plates integrated into structure
Beams 100 X 10
Tube embedded in the beams to bring the roller chain to the anchor locker at the foot of the mast.
Engine cradle and sternpost

Skin

Bottom plate and keel: 12 mm
Lower chine 8 mm, middle and top chine: 5 mm
Deck, roof, cockpit: 4 mm
Transom: 6 mm
Deckline tube 50 mm

Appendages

Swinging centerboard

NACA profile centerboard, flat structures of 10 mm, 8 mm skin
Well 8 mm reinforced by ribs and a T-shaped structure of 50x50x5
Shaft in ERTALON diameter 120
4 ERTALON guides prevent the banging
Lifting System at mastfoot/(hydraulic with control in the cockpit optional)

Daggerboards

2 lifting dagger boards in polyester (fuse) in their casing at the rear

Rudder

Rudder NACA profile
Structure flats of 8 mm, 6 mm skin
Rudder stock diameter 100 mm, bearings in ERTALON

Ballast

4800 kg below the bottom plate in the keel core made of lead, insulated and embedded in sealing resin and welded in watertight compartments.

Tanks

Gauges built in
Decks filler (1 diesel, 2 water)
Visit trapdoors

Diesel

879 liters in the keel core
2 lateral tanks with total capacity of 378l optional

Fresh Water

1470 liters, two tanks built into the hull on both sides of the daggerboard casing.
Tanks painted with Food quality paint

Boréal sarl

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Deck

Bow fitting with double anchor roller and under deck aluminum tube bringing the chain to the anchor locker.
Anchor chain locker at base of mast, water drains into the sump, windlass, blocks, cleat mooring
8 welded deck cleats
Chain plates 80 X 20.
All reinforcements for attaching rails and winches.
8 Emplacements for hatches.
4 bookings for Plexiglas fixed in the upper skin
9 bookings for embedding the glass windows in the roof. (double glazing optional)
2 reservations for recessed Plexiglas in the dog house.
1 watertight door in aluminum in the doghouse
A large rear cargo with access panel
Separate storage for 2 gas bottles (13 kg)
Sail locker in the front with access by Lewmar hatch
Optional built-in compartement for life raft (in the stern)

STANDARD EQUIPEMENT EXTERIOR

Rigging and sails

Rigging

1 anodized aluminum mast with double spreaders; length 19 meters.
Rigging in single strand stainless steel
1 releasable and adjustable forestay for hooked staysail, furler optional
1 anodized aluminum boom
1 mast base
2 Winch 2 speed 44 AST
1 Winch 2 speed 40 AST
1 furling genoa Profurl LC 42
1 mainsail halyard
1 genoa halyard
1 mainsheet
1 mainsheet webbing on the cabin roof.
1 edge of the mainsail and 3 reefing lines
2 genoa sheets
1 boom vang
2 lines to down and lift the centerboard

Sails

Battened mainsail (Elvström) with 3 reefs: 61 m2
Furling Genoa with UV Strip (Evström): 69 m2

Deck Equipement

Hatches

1 Lewmar size 70 (forward sail locker)
2 Lewmar size 44 (forward cabin)
2 Lewmar size 20 (both heads)
2 Lewmar size 30 (saloon)
1 Lewmar size 30 (galley)

Portholes and windows

2 opening windows in the side of the roof Lewmar Size 2 (aft cabins)
2 opening windows in the side of the cockpit Lewmar Size 2 (aft cabins)

4 fixed hull ports (2 in forward cabin, 1 in each aft cabin)
2 smoked Plexiglas 15mm in the Dog House
9 glass 15 mm in panoramic roof (double glazing optional)

Recoveries of deck and bridges

Cockpit seating and rear deck covered with synthetic teak
Painting of bridge PU white until deck line
Anti Slip PU Sicomin Fullgripp on deck and roof

Safety

Tubular handrails in aluminum on the roof and vertical part of dog house
2 Pulpits with support beam
2 Granny bars at mast.
2 Pushpits
6 simple and 6 entrance stanchions
4mm single strand lifelines with fixed clevis and pelican hooks

Winches

2 primary winches 2 speed self tailing Lewmar 58 AST,
2 secondary winches Lewmar 50 AST
1 roof winches 2 speed self tailing Lewmar 40 AST
2 winch handles

Ground tackle

A windlass 12 v 1500 watts for 12 mm chain gypsy and wrapping end

Deck fillers for water (2) and diesel (1)
1 webbing system for mainsail sheet
2 genoa sheet lead track 3 meters length with roller cars
rail for self tacking jib,
5 jammers on piano roof
2 flat deck blocks at the back for the genoa
Steering system with wires,
1 steer column with compass, compass housing and engine
single control lever
Steering wheel diameter 1400mm

STANDARD EQUIPEMENT INTERIOR

General

Insulation: Extruded polystyrene with a thickness of 80 mm under the bridge and 80 mm along the hull above the waterline
Joinery made of solid wood and veneer Ash
Main bulkheads in 15 mm plywood
Plywood furniture in 10 mm plywood
Bathrooms made of lacquered white Comacell
Soles in chocolate coloured and lined 15 mm plywood
Inspection traps - wherever possible - fixed part fitted around the bulkheads and furniture to facilitate the opening and prevent friction
Linings in white Comacell
Quality Marine Hardware
Hooks (magnets) and hinges on each of the doors
Upholstery & mattress foam thickness of 100 mm fabric covered

2 Aft cabins

Either two similar cabins

either starboard cabin modular 1 or 2 bunks vs storage

in case of symmetrical cabins: 1 double berth with storage closets and 2 individual mattresses covered with removable, washable fabric

In each cabin : wardrobe and/or closet

Port cabin : seat between bed and closets
lockers down the side

1 ceiling light

2 lights (1 at each headboard)

1 socket 12 V

Forward Cabin

1 double berth with storage under bed & drawer

1 office desk (starboard)

1 halogen ceiling spot on each side

1 light at each headboard

2 wooden bed frames and 2 individual mattresses covered with removable, washable fabric

1 socket 12 V

Deck saloon

1 Central bench seat with upholstery, backrest optional

1 bar furniture

1 L-bench with upholstery with storage volumes

1 Library Shelving

2 cabinets

1 fixed central table with toe

4 ceiling spotlights

Galley

2 Stainless steel sink bowls

Single lever hot and cold water under pressure

1 sea water foot pump and spout

1-gimballed 3 burner gas oven with wooden door handle of a glass door, pot holders and electronic ignition

1 fitted refrigerator 100 liters

(larger tailor made fridge optional)

1 Stainless steel handrail

2 furniture dresser & 2 low furniture storage

3 ceiling spotlights (1 red)

1 socket 220 V

1 gas stopcock

Watch Post/Chart table in doghouse

Panoramic chart table

Modular seat (open two persons, closed one person) with its cushion & storage

wet gear storage above the engine

Instrument Panel anthracite color

Halogen ceiling spotlight, 1 fixed light for night passages

1 x 12V and 1 x 220V socket

Space between Front cabin and Galley

Location for Refleks heater (optional) and :

Either crew cabin with 2 bunks,

Either modular area : storage, freezer, work bench...

Forward heads with separate shower

1 Manual marine toilet Jabsco

1 Large separated shower with seat door and tray

1 Sink cabinet with mixing faucet, mirror and storage

1 Mirror

1 Ceiling spotlights

1 separate location for washing machine or storage

Starboard heads

1 Manual marine toilet Jabsco

1 cabinet with mixing faucet / shower and storage

1 shower tray

1 mirror

1 ceiling spotlights

WATER AND DRAINAGE SYSTEM

Pressurized central water unit

Water Heater 220V, 40-litre (10.5 gals) engine with heat exchanger

4 electric bilge pumps 12V

1 manual bilge pump

1 holding water tank (black waters) connected to the front bathroom, pumping system

1 holding tank grey water with pumping system

Shower in the cockpit

ENGINE

Engine Volvo Penta D2-75 hp or Nanni 85 hp

Electrical bipolar installation, mounted on flexible "Silent Blocks"

Acoustic insulation with absorbent foam and visco-elastic mass

Ventilation ducts for fresh air

Control panel with alarms in the companionway

Access through aft cabins and companionway

Engine control

Fixed three-bladed propeller

ELECTRICITY

1 alternator on engine 12V/105A

1 shore supply 220V

1 battery charger 220V / 12V

1 charge distributor

3 batteries 115Ah (1 dedicated engine, 2 service)

1 panel 220V

Circuit 12V and 220V

1 electric panel 15 functions with bipolar leakage tester, voltmeter and circuit breakers

1 electric panel 12 V in doghouse

1 gauge gas oil & 1 water gauge

CATHODIC PROTECTION

1 sacrificial anode behind the keel embryo

1 sacrificial anode behind on the rudder