

# Specifications BORÉAL 47 three CABINS

(August 2012)

## Characteristics:

- LOA	14.55 m
- Hull Length	14.04 m
- LWL	11.63 m
- Beam	4.30 m
- Beam at waterline	3.40 m
- Draught	1.02/2.48 m, 3' 3" to 8' 1"
- Lead Ballast	3 800 kg
- Light displacement:	10 430 kg , 26, 638 lbs
- Displacement fully equipped:	12 350 kg , 26, 840 lbs
- Standard engine 55 hp (optional 75 hp)	
- Sail area	105m <sup>2</sup>
- Mainsail	45 m <sup>2</sup>
- Genoa	55 m <sup>2</sup>
- Staysail	22 m <sup>2</sup>
- Fuel:	600 l or 158 gals
- Fresh water:	760 l or 200 gals

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, 10 X 40 rails, floor-plate thickness 8 mm
- Water-tight collision bulkhead 2.10 m behind the bow
- Water-tight bulkhead at the rear, before rudder post 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: 10 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 (2 lines) at mastfoot
- Keelbox and centerboard treated anti-fouling

#### Daggerboards

- 2 lifting dagger boards in epoxy (fuse) in their casing at the rear
- Keelbox treated anti-fouling - daggerboards treated epoxy and anti-fouling

#### Rudder

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

#### Ballast

3800 kg below the bottom plate in the keel core made of lead, insulated and embedded in sealing resin and mostly welded in watertight compartments.

#### Tanks

- Gauges built in
- Diesel 600 liters in the keel core
- Fresh water 760 liters, two tanks built into the hull on both sides of the daggerboard casing.
- Deck fillers (2 diesel, 1 water)
- Visit trapdoors
- Freshwater tank painted with food quality paint

## Boréal sarl

## 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 support and blocks
- 8 welded deck cleats
- Chain plates 80 X 20
- All reinforcements for attaching rails and winches.
- 9 Emplacements for hatches.
- 4 bookings for Plexiglas fixed in the upper skin
- 7 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 with access by Lewmar hatch
- Large scoop with build-in stairs (2X2) with liferaft compartment in between

## STANDARD EQUIPEMENT EXTERIOR

### Rigging and sails

#### Rigging

- 1 anodized aluminum mast with double spreaders; length 16.3 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 40 AST Lewmar
- 1 Winch 2 speed 30 AST Lewmar
- 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 lower and lift the centerboard

#### Sails

- Battened mainsail (Tasker sails) with 3 reefs 45 m2
- Furling Genoa with UV Strip (Tasker sails) 55 m2

### Deck Equipment

#### Hatches

- 1 Lewmar size 60 (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)
- Goïot hatches optional

#### Portholes and windows

- 2 opening windows in the side of the roof Lewmar Size 3 (aft cabins)

- 2 opening windows in the side of the cockpit Lewmar Size 4
- 4 fixed hull ports (2 in forward cabin, 1 in each aft cabin)
- 2 smoked Plexig 15mm in the Dog House
- 7 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
- 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 50 AST,
- 2 secondary winches Lewmar 45 AST
- 1 roof winches 2 speed self tailing 30 AST
- 2 winch handles

#### Ground tackle

- A windlass 12 v 1500 watts for 10 mm chain gypsy and wrapping end

- Deck fillers for water (1) and diesel (2)
- 1 webbing system for mainsail sheet
- 2 genoa sheet lead track 3 meters length with roller cars
- rail for self tacking jib,
- 3 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 50 mm under the bridge and 80 mm along the hull above the waterline
- Joinery made of solid wood and veneer Ash (optional Oak)
- Main bulkheads in 15 mm plywood
- Plywood furniture in 10 mm plywood
- 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 imitation leather and Comacell
- Quality Marine Hardware

- Magnet and hinges on each of the doors
- Upholstery and mattress foam thickness of 100 mm fabric covered

## **2 Aft cabins**

- Either two identical 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
- 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
- 2 individual mattresses covered with removable, washable fabric
- 1 desk
- closets and/or wardrobe
- 2 ceiling spots
- 2 lights (1 at each headboard)
- 1 socket 12 V

## **Deck saloon**

- 1 central bench seat with upholstery removal backrest optional
- 1 bar furniture
- 1 L-bench with upholstery with storage volumes
- 1 library Shelving
- 2 cabinets
- 1 fixed central table with toe
- 3 ceiling spotlights

## **Galley**

- 2 Stainless steel sink bowls
- Single lever hot and cold water under pressure
- 1 sea water foot pump and spout
- 1 gimbaled 3 burner gas oven with door handle of a glass door, pot holders and electronic ignition
- 1 fitted refrigerator 100 liters (larger tailor made fridge optional)
- 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
- 1 curved seat with its cushion and its storage
- 1 ceiling spotlight
- 1 fixed light for night passages
- 1 x 12V and 1 x 220V socket

## **Forward heads**

- 1 manual marine toilet Jabsco
- 1 sink cabinet with mixing faucet / shower and storage
- 1 shower tray
- 1 mirror on closet
- 1 ceiling spotlight

## **Aft starboard heads**

- 1 manual marine toilet Jabsco
- 1 cabinet with mixing faucet / shower and storage
- 1 shower tray
- 1 mirror
- 1 ceiling spotlight

## **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 grey water tank and its electric pump 12V
- Shower in the cockpit

## **ENGINE**

- Engine Volvo Penta D2-55CV or Nanni N4.60
- 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 port aft cabin 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 12 V, 15 functions with bipolar leakage tester, voltmeter and circuit breakers
- 1 electric panel 12V in doghouse
- 1 gauge gas oil
- 1 water gauge

## **CATHODIC PROTECTION**

- 1 sacrificial anode behind the keel embryo