



# Aluminum Sailing Yachts

*Designer & Builder*

## **VK45 Aluminum Performance Sailing Yacht**

*Elegant Challenger*



**VK Yacht** proudly presents the **VK45** aluminum sailing yacht, an aesthetic combination of **Open 60's performance and aluminum strength.**

Sail her to the limits of your sailing capabilities and experience her potential for ultimate sailing performance.

Relay on her advanced design and superior aluminum construction to face any weather and sea condition.

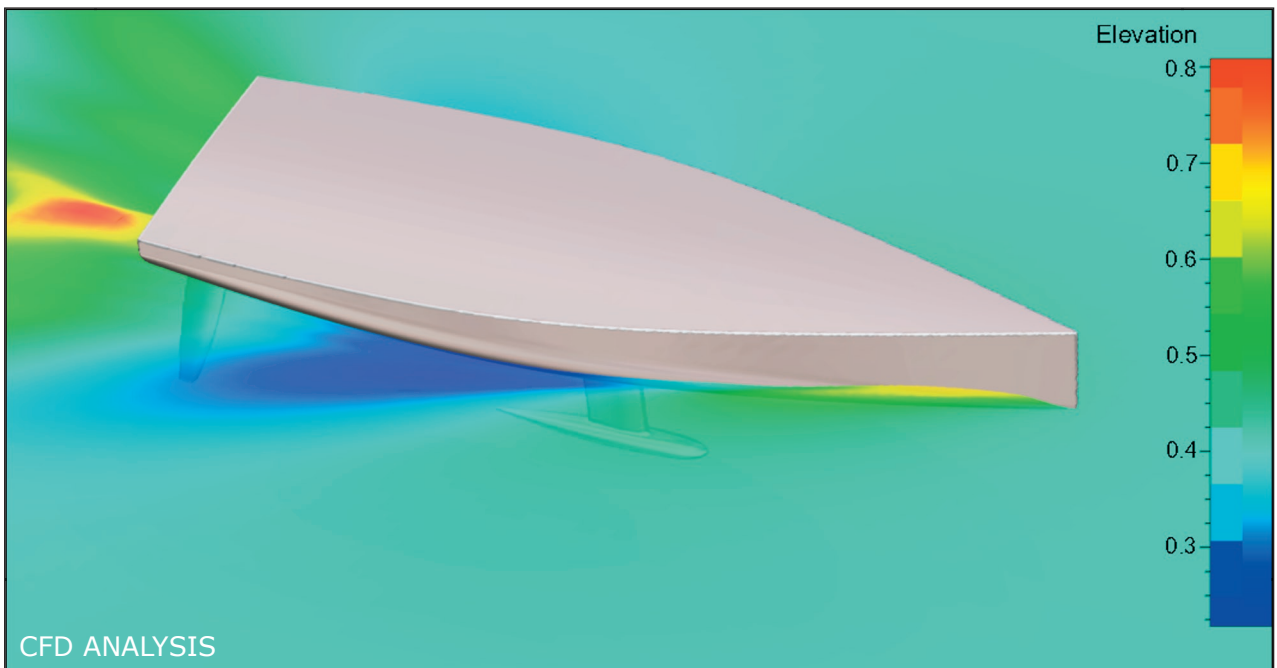
Feel safe on a quality investment that preserves both her value and your desire to sail her in long term. Enjoy her ergonomic and spacious interior arrangement which is well lighted and ventilated.



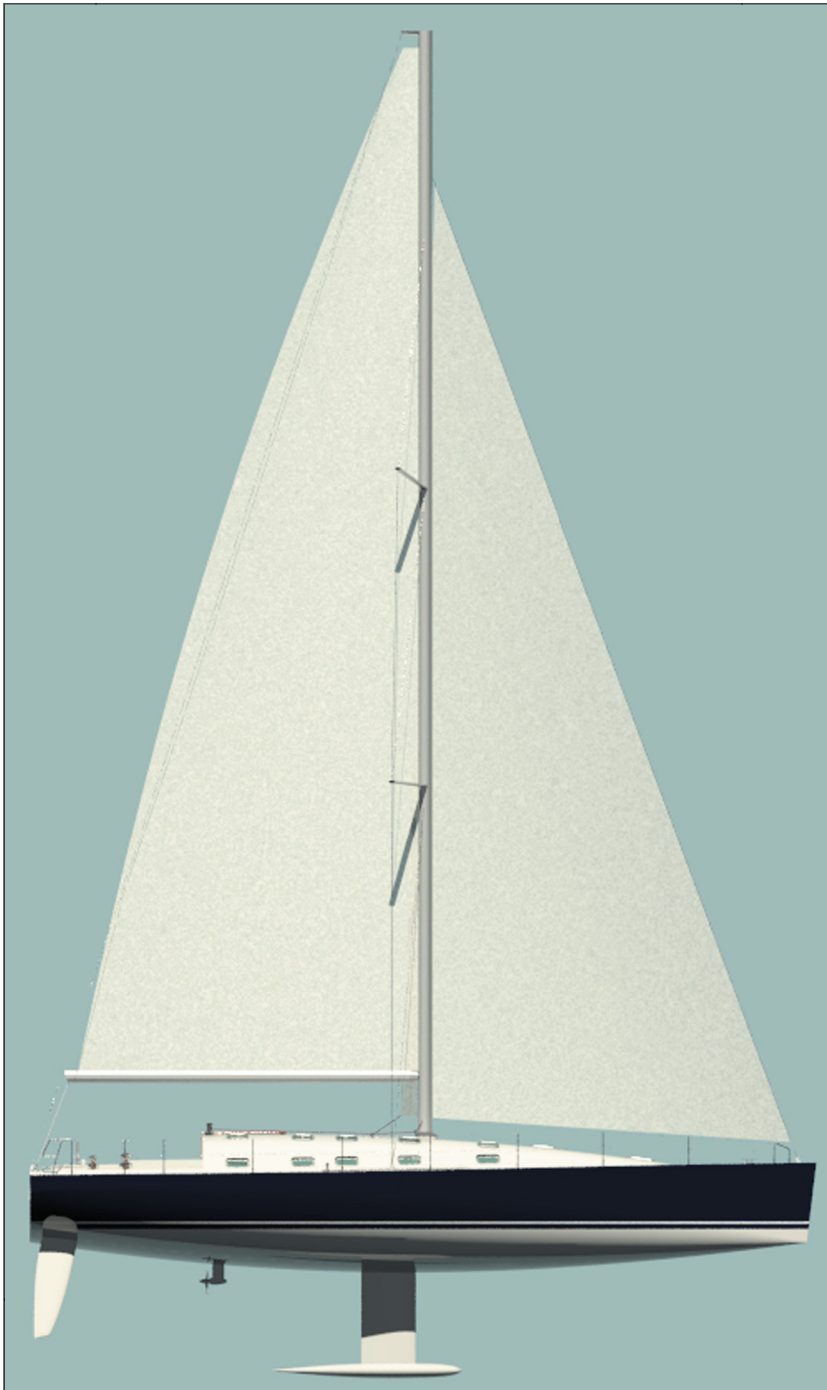
GENERAL ARRANGEMENT



FIXED SPRAYHOOD - WINGLET KEEL



CFD ANALYSIS



## VK45

Length overall	13,6m
Length waterline	13,1m
Beam overall	4,15m
Beam waterline	3,1m
Depth midsection	3,7m
Free board midsection	1,4m
Draft	2,32m
Displacement	7950kg
Ballast	2350kg
Engine	M4.55-38.3kW(52hp)

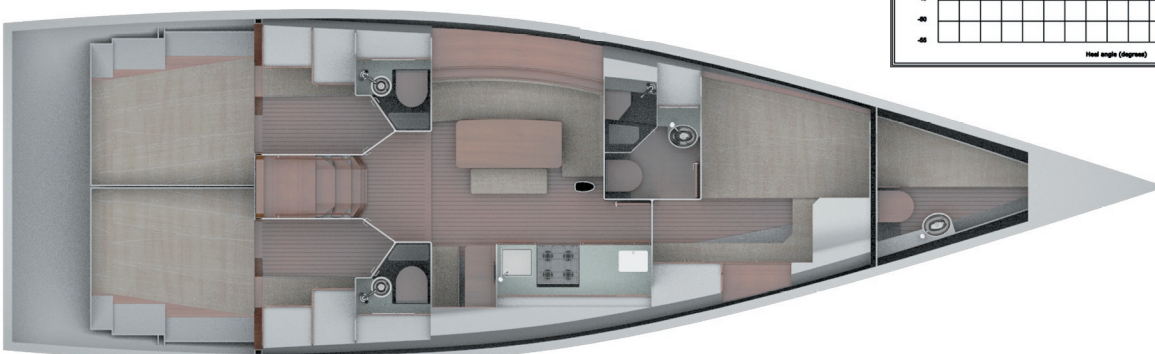
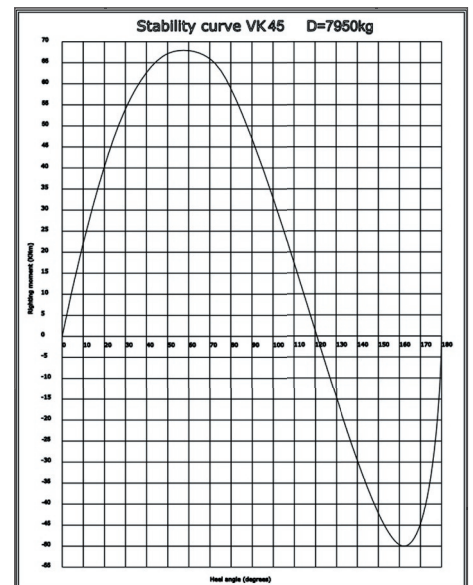
Mainsail	61m2
Genoa	57m2
Spinnaker	170m2
I	16.5m
J	6.1m
P	17.6m
E	5.9m

Windward balance point at RM30:	
RM30	53,6kNm
Yaw	5.4degrees
V_wind	18.3knots
V_hull	8.4knots

Water	264l
Calorifier	45l
Fuel	122l
Gray&black	120l

Boat design category CE: A  
 Certification: Ocean plus  
 Design: VK Yacht

Recommended price (ready to sail,  
 painted) : 375,000euro



## VK45 Aluminum Performance Sailing Yacht



The yacht is built according to the ABS rules for building and classing offshore racing yachts.

The design and construction of VK45 results to a light and strong quality aluminum yacht which is fast and safe, with excellent sea-keeping characteristics and comfortable interior.

The construction of VK45 incorporates specialized integrated and solid members which increase strength and improve construction quality.

Every single member of the construction of VK45 is designed down to the last detail thus developed a complete construction kit that is cut and formed by CNC machines. The assembly of the construction kit and the final welding is performed by technicians with long practicing experience under the supervision of approval authority.

VK45 will reliably offer to her owner an exciting sailing performance in all conditions from a sailing competition, sailing holidays or sailing around the world, even single-handed.

### VK45 TECHNICAL SPECIFICATION

Length overall = 13,6m  
Length at waterline = 13,1m  
Beam overall = 4,15m  
Beam at waterline = 3,1m  
Depth at midsection = 3,7m  
Free board at midsection = 1,4m  
Draft = 2,32m  
Displacement unloaded = 7950kg  
Ballast = 2350 kg  
(bulb= 2000kg, solid aluminum fin = 350kg)  
Engine M4.55: 38.3KW (52hp)  
Mainsail area = 61m<sup>2</sup>  
Genoa area = 57m<sup>2</sup>  
Spinnaker area = 170m<sup>2</sup>  
I = 16500mm  
J = 6100mm  
P = 17600mm  
E = 5900mm  
Righting moment (RM) at 30 degrees heeling RM30 = 53,6kNm  
Sailing balance point at RM30:  
yaw=5.4 degrees, V wind=18.3knots, V hull=8.4knots  
Water capacity: 264l  
Calorifier capacity: 45l  
Fuel capacity: 122l  
Gray & black water holding capacity: 120l

Boat design category CE: A

Certification: Ocean plus

Design: VK Yacht

### VK45 STANDARD EQUIPMENT AND INVENTORY

#### DECK FITTINGS

Non-slip deck covering (VETUS)  
Bow roller stainless steel for anchor passage (LEWMAR)  
Vertical electric windlass 1000W on deck (V3 LEWMAR)  
Anchor DELTA 20kg stainless (LEWMAR)  
Anchor chain 10mm 40m stainless (LEWMAR)  
IMO specifications navigation lights (LEWMAR)  
Stainless stanchions (VETUS) with double lifelines and port and starboard side openings  
Two stainless steel bow mooring cleats (VETUS)  
Two stainless steel stern mooring cleats (VETUS)  
Aluminum chain plates with St316 stainless steel ring  
One anodized aluminum opening hatch 474x474 in forward cabin (VETUS)  
One anodized aluminum opening hatch 474x474 in the fore peak (VETUS)  
Four anodized aluminum opening hatches, 390x260 in saloon, galley and chart table (VETUS)  
Two anodized aluminum opening hatches 390x260 one in each aft cabin (VETUS)  
Two anodized aluminum opening hatches 390x260 one in each aft toilet (VETUS)  
Ten anodized aluminum portholes port lights 399x190 on coach roof (VETUS)  
One Main sail sheet track with traveler kit and two end sheaves (HARKEN)  
Two Genoa sheet tracks with slider and lead cars (HARKEN)  
Two 60 STA Genoa sheet winches (HARKEN)  
Two 50 STA Main sail sheet winches (HARKEN)  
Two 46 STA winches for halyards (HARKEN)  
Two deck organizers (HARKEN)  
Two double clutches (HARKEN)  
Ten pieces cruising ESP blocks (HARKEN)  
Two winch handles (HARKEN)  
Water, fuel and waste deck entries stainless steel (VETUS)  
Splash-Stop for fuel entry (VETUS)  
No-smell filter (VETUS)  
Air vent nipples for tanks stainless steel (VETUS)  
Two round air suction ventilation hoses stainless steel (VETUS)  
Transom exhaust connection with check valve (VETUS)

#### RIGGING

Fully battened main sail system (ZSPARS)  
Mast in anodized aluminum alloy with double swept back spreaders (Z701 232x145 ZSPARS)  
Anodized aluminum alloy boom with single line reefing system (Z690 232x145 ZSPARS)  
Masthead light, deck light  
Anodized aluminum alloy spinnaker pole (80 ZSPARS)  
One Rigid Vang (500 ZSPARS)  
Stainless steel standing rigging (ZSPARS) :  
One fore stay  
One V-shaped insulated back stay with adjuster  
Two upper shrouds  
Two lower shrouds  
One Main sail halyard  
One Genoa halyard  
One Spinnaker halyard  
One boom topping lift + spinnaker boom topping lift  
Three reefing lines

#### SAILS

Main sail full battened (DP AP360, TRIRADIAL)  
Furling Genoa (DP AP360, TRIRADIAL)  
Asymmetric spinnaker (TRIRADIAL)

#### ENGINE COMPARTMENT

M4.55 52hp turbo diesel engine with sail-drive (VETUS)

Three-blade stainless steel folding saildrive propeller (Slipstream)  
Sound deadening plates (ISO 4589) (VETUS)  
Extraction ventilator for engine room  
Inlet ventilation for engine room  
One 12V 55 Ah maintenance free battery (VETUS)  
One 12V 108 Ah maintenance free battery (VETUS)  
One 12V 120 Ah maintenance free battery (VETUS)  
Combined battery charger/splitter (VETUS)  
45 liters double-walled calorifier (water heater) (VETUS)  
Goose neck (VETUS)  
Muffler (VETUS)  
Water lock (VETUS)  
Exhaust hose silicon (VETUS)  
Exhaust temperature alarm (VETUS)

#### DOUBLE RUDDER SYSTEM

Two aluminum rudder stocks (JEFA)  
Two composite rudders blades (JEFA)  
Self aligning rudder bearings (JEFA)  
Autopilot drive unit 375kgm and lever (JEFA)  
Tube and gaiter sealing system (JEFA)  
Quadrants, tiller levers, sheaves, drag link, chain and wire (JEFA)

#### TANKS AND PUMPS

Three electric bilge pumps (VETUS)  
Bilge water/oil separator (VETUS)  
Gray water discharge system (VETUS)  
Pressurized water system with adjustable pressure switch (VETUS)  
Two rigid tanks for diesel fuel with an inspection lid 61 liters each (VETUS)  
One waste water tank system 120 liters (VETUS)  
Three rigid tanks for drinking water 88 liters each (VETUS)

#### COCKPIT

Open transom self-draining cockpit  
Cockpit seats covered with synthetic teak  
Cockpit floor covered with synthetic teak  
Double pedestal WP800 (JEFA)  
Engine control panel and mechanical engine remote control with low friction push-pull cable (VETUS)  
Wind direction/wind speed indicator digital instrument and sensor (NASA)  
Speed/Distance and Echo Sounder (NASA)  
Electronic compass digital instrument and sensor (NASA)  
GPS repeater - NMEA 0183 (NASA)  
GPS sensor (GARMIN)

#### COMPANIONWAY

Smoked Plexiglas sliding hatch  
Smoked Plexiglas washboard in two parts with ventilation and lock  
Solid teak frame  
Two handrails  
Companionway steps with non-slip synthetic teak  
Access to engine through hinged companion way steps panel

#### NAVIGATION AREA

Chart table with chart storage space and chart table light  
Storage space  
Navigator's seat with storage below  
Two switch panels for 12 positions each with automatic fuses (VETUS)  
Remote control panel for battery charger/splitter (VETUS)  
Battery selector (VETUS)  
Tank level graphic display and four ultrasonic sensors (VETUS)

#### SALOON

Gamma-shaped sofa and small sofa  
CuStorage space under seats of sofa and small sofa  
Storage space behind backrest  
Wooden saloon table  
Spotlights  
Sides and top surfaces covered by a combination of synthetic leather, wood and epoxy paint  
Laminated teak striped floors

#### GALLEY

Linear bench with sink and pressurized hot and cold-water tap  
Cupboard under bench with laminate interior for easier cleaning  
Stove with oven  
Refrigerator  
Freezer with top opening  
Hanging cupboards at bench length  
Spotlights  
Laminated teak striped floors

#### FORWARD CABIN

Cabin door with lock and stopper  
Double berth with mattress  
Sitting bench with cushion and storage space under seat  
Ventilated hanging locker  
Two storage lockers  
Spotlights  
Sides and top surfaces covered by a combination of synthetic leather, wood and epoxy paint  
Laminated teak striped floors

#### FORWARD CABIN TOILET – SHOWER COMPARTMENT

Cabin door with lock and stopper  
Electric porcelain toilet (VETUS)  
Locker with top bench and storage space under bench  
Sink and pressurized hot and cold-water tap/shower on the bench  
Cupboard with shelves along bench length  
Shower cabin with removable floor for access to the holding tank under  
Mirror  
Spotlights  
Epoxy treated surfaces

#### AFT CABIN (TWO)

Cabin door with lock and stopper  
Double berth with mattress  
Sitting bench with cushion and storage space under seat  
Ventilated hanging locker  
Storage lockers  
Spotlights  
Access hatches to engine, rudder system and transom compartment  
Sides and top surfaces covered by a combination of synthetic leather, wood and epoxy paint  
Laminated teak striped floors

#### AFT CABIN TOILET – SHOWER COMPARTMENT (TWO)

Cabin door with lock and stopper  
Electric porcelain toilet (VETUS)  
Locker with top bench and storage space under bench  
Sink and pressurized hot and cold-water tap/shower on the bench  
Cupboard with shelves along bench length  
Washbasin with removable floor for access to the holding tank under  
Mirror  
Spotlights  
Epoxy treated surfaces

#### SPECIFIC FEATURES

Architect : VK YACHT AB, SWEDEN  
Construction : Combination of 5083H111 and 5083H321 3.2  
Lloyd's approved aluminum alloys MIG welded in an Argon/  
Helium sealed atmosphere  
Interior : Foam core with sides laminated surfaces  
Three zing-anodes for hull protection  
Cast lead ballast encapsulated in epoxy resin  
Painted yacht (sandblasting, epoxy primer, epoxy filler, paint - INTERNATIONAL)

#### OPTIONS

Tiller version  
Furling genoa  
Skipper cabin at fore peak

Please contact us for optional equipment and pricing

VK YACHT AB reserves the right to upgrade the specifications without notice



To learn more about VK Yacht, please visit

[www.vk-yacht.com](http://www.vk-yacht.com)

In the above site you can also find more about the  
**VK Yacht Series of Aluminum Performance Sailing Yachts.**

To request information about a specific yacht or  
to arrange a test sail of the VK35,  
please contact us  
e-mail : [info@vk-yacht.com](mailto:info@vk-yacht.com)  
telephone : +46 141 440 995  
postal address : Brastorpsv. 6, 59150 Motala, SWEDEN