



Aluminum Sailing Yachts

Designer & Builder

VK Yacht AB, Sweden

Designer & Builder of Aluminum Performance Sailing Yachts

VK Yacht AB was established as a share holders company in Sweden in 2010.

Behind us, there is an over 20 years experience in the design and construction of traditional wooden boats, classic racers, motor yachts, cruisers and custom designed aluminum sailing yachts.

Today VK Yacht AB focuses in the production of its own designed series of aluminum performance sailing yachts, starting with four models **VK35**, **VK45**, **VK55** and **VK55cc**. The main elements of these yachts are:

- Beauty in the form
- Quality in the construction
- Strength and lightness in the structure
- Speed under sail and motor
- Good performance in all sea conditions
- Functionality in the cockpit
- Comfort in the interior
- Safety in every aspect
- Attention to the detail
- High value for money

The yachts of the VK series are made to offer exciting sailing performance in all conditions from a sailing competition, sailing holidays or sailing around the world, even single-handed. Our design office is in Sweden and our yard in Poland. The prefabrication of the construction aluminum alloy is done in the Netherlands. Our providers of the equipment are well established companies like JEFA, VETUS, HARKEN, ZSPARS and SEAHAWK.

VK series of Aluminum Performance Sailing Yachts

An aesthetic combination of Open 60's performance and aluminium strength



VK35 - TRUE STALLION

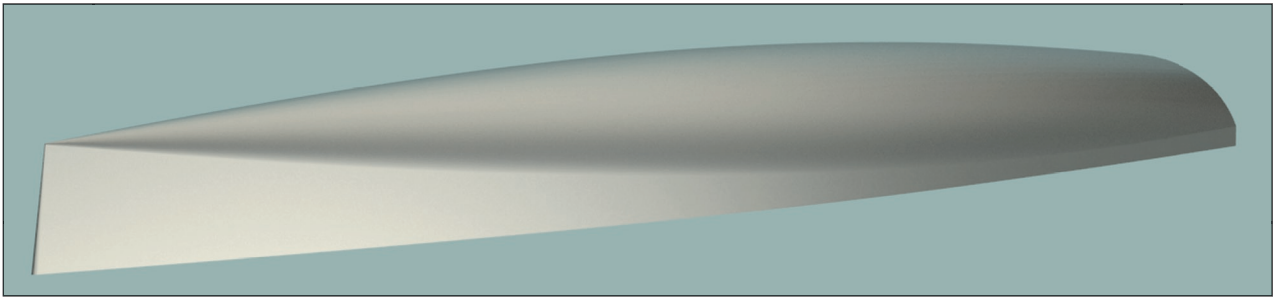


VK45 - ELEGANT CHALLENGER



VK55 - COMPETING LUXURY

Hull design

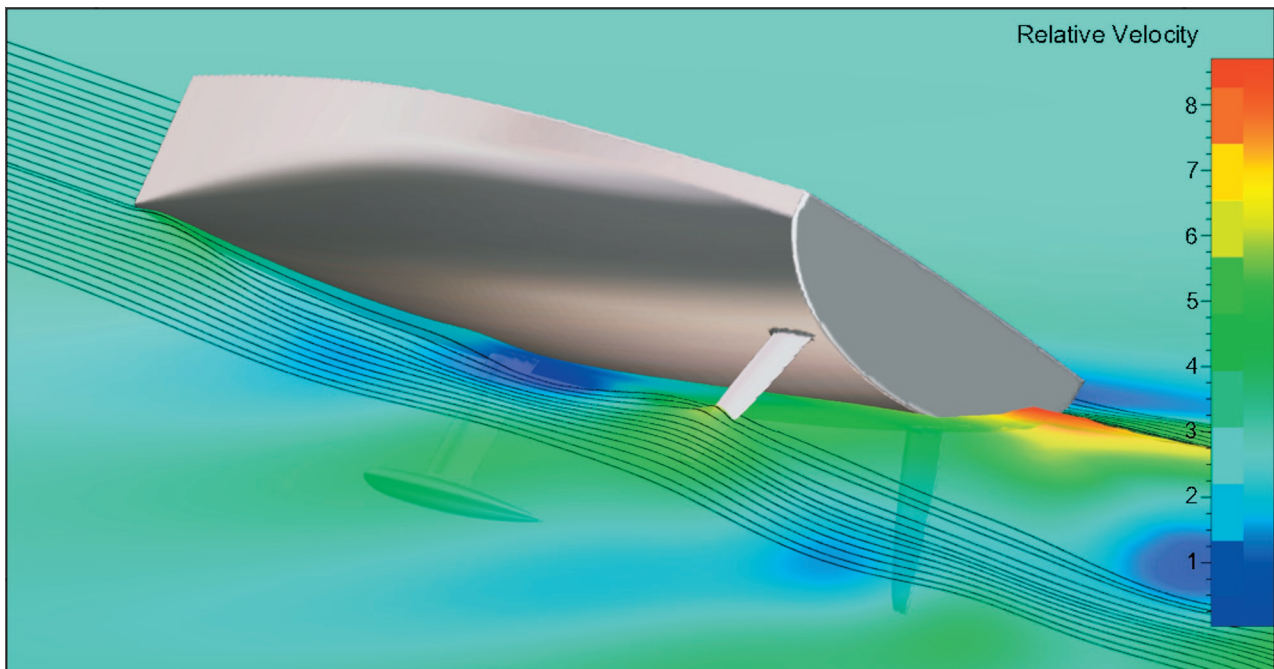


The design of the hull in the VK series of aluminum performance sailing yachts is based on a geometric form which has been developed through years according to theoretical studies, experience and modern concepts.

The result is a balanced combination of the following elements:

- Good stability for safety
- Low resistance for speed
- Good seakeeping capabilities for smooth sailing
- Seakindliness for long ocean crossing
- Good internal space for accommodation

CFD analysis

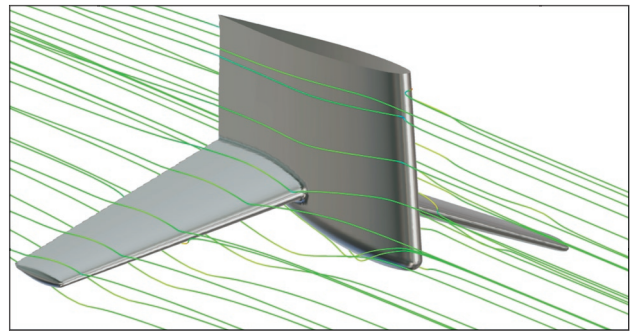
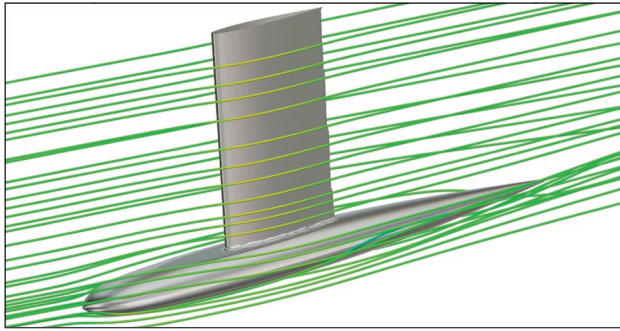


All models in the VK series of aluminum performance sailing yachts have been studied extensively with the usage of state of the art Computer Fluid Dynamics technology (FINE/MARINE CFD Suite for Marine Applications). The main studies include :

- Upright condition
- 15 degrees sailing condition
- 30 degrees sailing condition
- Dynamic motion

The above studies have developed a valuable know how platform about the behavior of the yachts in different sailing conditions, which allowed the optimization of all design elements (hull, keel, rudder) in order to produce true performance sailing yachts.

Keels



The models in the VK series of aluminum performance sailing yachts are designed to be equipped with two different keels :

- Deep bulb keel
- Winglet keel

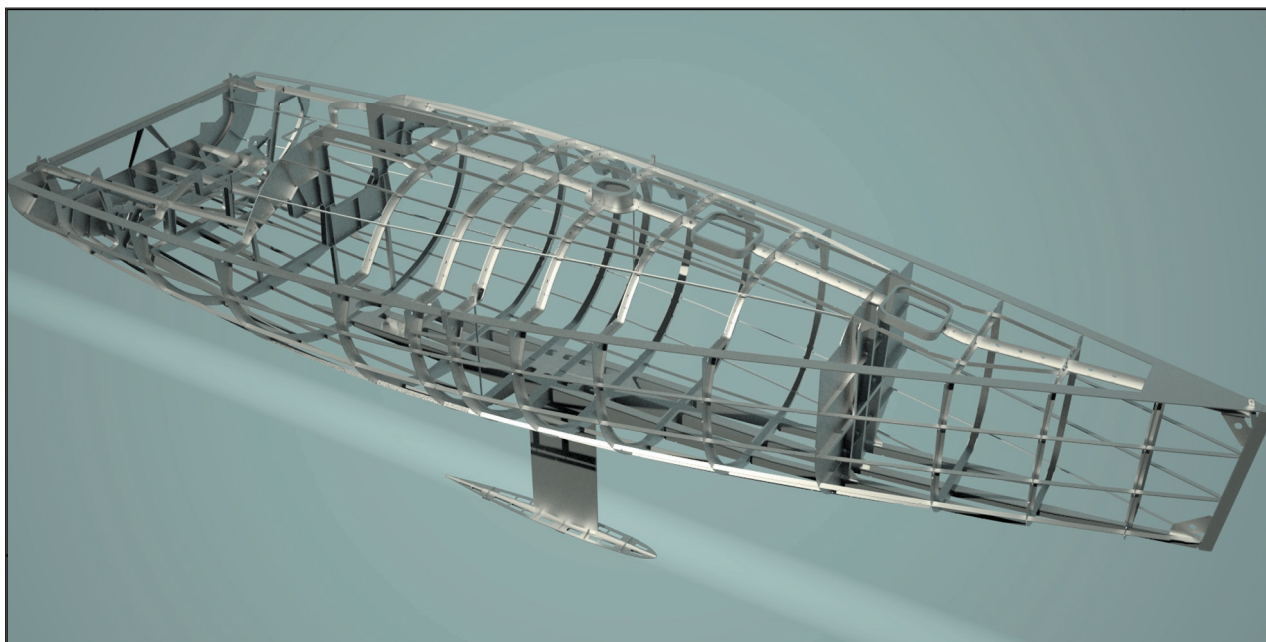
Both keels have been studied for optimum performance.

Overall design



VK Yacht pays great attention to the overall yacht design including exterior, interior and equipment. Engineering, aesthetic, experience and photorealism are the contributing elements to this delicate process that results to functional, nice looking and enjoyable yachts.

Construction design



The design of the construction in the VK series of aluminum performance sailing yachts follows the American Bureau of Shipping rules for building and classifying offshore sailing yachts. The above rules in combination with the building experience of VK Yacht produce light and strong constructions.

The construction incorporates specialized integrated and solid members which increase strength and improve construction quality :

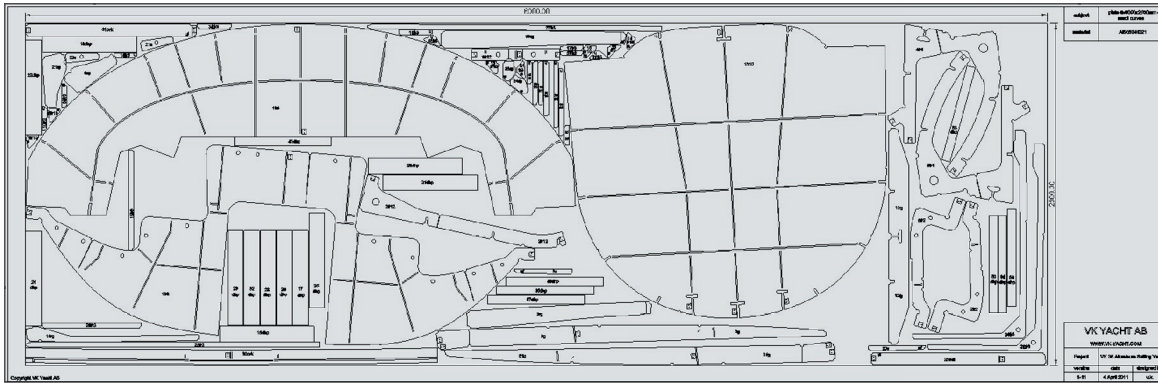
- The fin of the keel is made from a solid aluminum alloy formed by a CNC milling machine
- The bottom internals are integrated through a unifying top plate properly shaped in a high accuracy laser cutter.
- The bow is made from a solid aluminum alloy block, formed by a CNC milling machine

Great attention has been paid to the continuity of the internals in order to avoid stress concentration points and to allow the flow of the stresses through the structure. Highly loaded areas (mast base, chain plates, winches etc.) are typically reinforced.

In general the strength of the construction is according to the distribution of the loads without any compromise in the dimensioning of the material but with great attention not to add unnecessary weight.

Short saying, the yachts in the VK series of aluminum performance sailing yachts are light and strong quality constructions.

Construction kit



Every single element in the construction of the VK series of aluminum performance sailing yachts is designed down to the last detail. The construction elements are then grouped according to their thickness and type of aluminum alloy. Each group is nested on plate forms that will be used for cutting by CNC laser and/or plasma cutters.

From the above procedure a construction kit is developed that is ready to go to the production. For the assembly of the construction kit, the sequence and the type of welding, a special construction manual is made by VK Yacht to be used at the yard.

The metal used in the construction of the VK series aluminum performance sailing yachts are Lloyd's 3.2 approved aluminum alloys:

- AL 5083-H32 for the internals (AlMg4.5Mn)
- AL 5083-H0 for the plating (AlMg4.5Mn)
- AL 6082-T6 for bars (AlMgSi1)

Assembly and welding

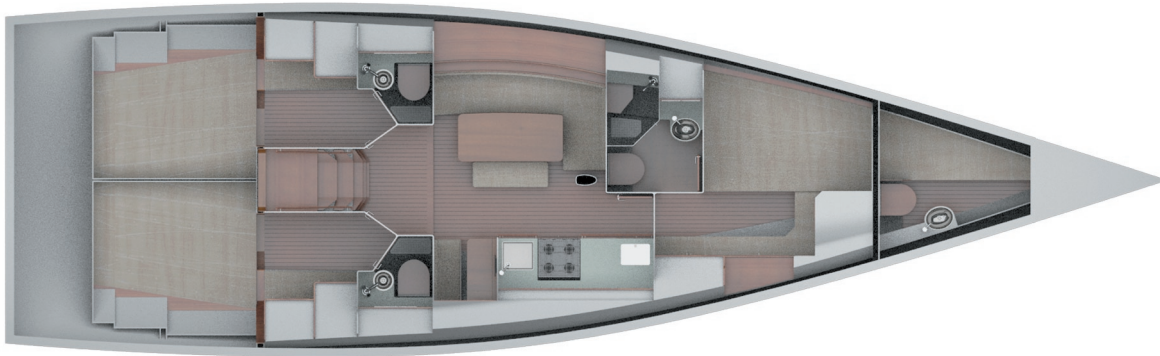


The production yard of the VK series of aluminum performance sailing yachts is in Gdansk, Poland. The yard had a long practicing experience in aluminum marine constructions already before starting the collaboration with VK Yacht.

In the yard, prior to the assembly of the construction kit, the elements that need to be curved are formed with specialized roller machines. The final assembly and welding is performed by approved and well experienced technicians.

The total construction is supervised and approved by Classification Authority.

Interior



The interior in the VK series of aluminum performance sailing yachts is a core foam construction. This is light and can be well integrated with the aluminum construction.

Since the aluminum structure is self standing, there is no need for structural bulk heads which give us great freedom in the design of the general arrangement. This is very favorable for custom solutions.

The visible sides of the interior surfaces can be painted, covered with veneer, leather, carpet or any other applicable choice of the owner.

Wet surfaces, like the bench in the kitchen and the bench with the sink over the locker in the toilet can be covered by stainless steel plate or glass.

The furnitures are a combination of wood and core foam constructions.

In general the interior is designed to be light, pleasant, functional, ergonomic, with an open feeling, good aesthetic and above all to be practical and safe.



To learn more about VK Yacht, please visit

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
telephone : +46 141 440 995
postal address : Brastorpsv. 6, 59150 Motala, SWEDEN