

Why choose One

The next generation of sails™

1. Exclusive technology

Since 2007 the OneSails design team have developed exclusive technologies to make one-piece continuous thread sails a reality for cruising and racing boats.

2. Performance

Features like weight, shape control and deformation resistance means better performance compared to traditional panelled sails.

3. Quality

M3™ and 4T FORTE™ membranes are exclusively made in Europe in our unique purpose built facilities ensuring that stringent manufacturing standards are maintained.

4. Design

The best sail shapes are the result of continuous analysis and experience. OneSails is at the forefront of the sailmaking industry, continually investing in research and development to ensure that the very best sail shapes are available. The success of this approach is confirmed by the vast array of racing trophies OneSails clients have won, competing at National, International and World Championship level.

5. Service

A core activity for every OneSails Loft is providing first class service, support and assistance. As part of our service commitment, each OneSails Loft has a team of experts on hand to ensure that we can deliver on our service pledge. In addition to a growing number of principle lofts, the OneSails Group has an extensive network of service centres strategically placed around world's coast line.



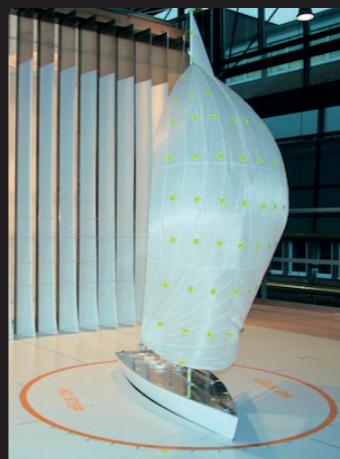
Shape, Design and analysis

Every membrane sail undergoes a full FSI optimisation

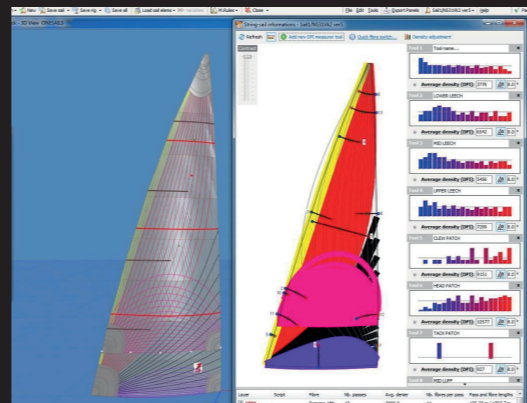
All of our lofts worldwide have access to a huge shared database updated in real time, containing thousands of sail designs from the World Champion Optimist mainsail to the biggest one-piece maxi yacht mainsail ever built.

Records include construction and finishing details specified to industry leading standards.

One Sails' philosophy is to always be at the forefront of technology, and one vital contribution to this comes from our FSI analysis laboratory. FSI, Fluid-Structure Interaction, is a step beyond aerodynamic analysis (CFD), allowing real-life simulation where all the factors affecting sail shape are taken into account. Rig and sail interaction, air flow characteristics, (attached, unattached, laminar, or turbulent), plus material deformation are considered.

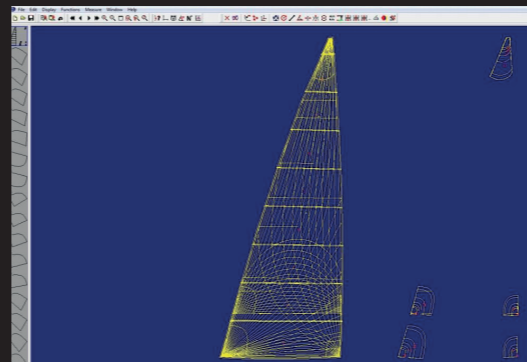
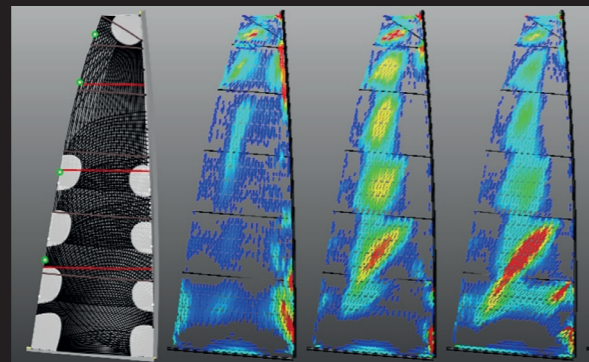


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After meticulous attention in developing the mold shape for the sail, the focus turns to engineering. With unlimited possibilities the structural map of the membrane is created and then, using unique tools, the fibre densities are measured at various strategic points along the sail. Everything from batten pockets to reefing positions receive personalised attention as the load bearing structure takes shape. Fibre properties form part of this process and the entire sail is carefully scrutinized before a single fibre is laid down.

On completion of the design process the manufacturing commences, with the assistance of computer aided cutting machines accurate to 1/10mm. The end result is a truly custom made sail designed and engineered for your boat and the type of sailing that you do. Vektor2™ Sails are robust, performance oriented sails at a very competitive price. Contact your OneSails loft or dealer to find out more.



THE NEXT GENERATION OF SAILS™



www.onesails.com

Cost effective **continuous fibre** technology.

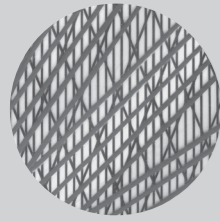
VEKTOR2



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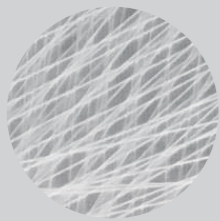
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VEKTOR²™ for Cruising and Racing



Carbon

It is the most performing Vektor2™ style. Carbon is an high performance fiber sporting a very low weight / stretch ratio. It is suited to high performance racing yachts.



Endumax®

OneSails is one of the first sailmaker developing a process to build sails with continuous Endumax® UHMWPE (Ultra High Molecular Weight Polyethylene) yarns. Endumax® offers unbeatable performance and durability and is far more resistant to stretch, flexing and UV degradation than all other fibers in the exact environment in which sails operate. Endumax® is a high performance fiber and suited to performance racing and cruising yachts.

Base scrims

Grand Prix

Racing and Grand Prix sails

Hi-performance scrim with a random array of non-woven filaments that provide considerable abrasion resistance at minimal weight gain, perfect for racing sails. Very light weight, durable and low stretch.



Racing

Racing and one design sails

This scrim base perfect for furling code sails and small one design racers. Light weight and low stretch with zero water absorption.



Endurance

Cruising and performance cruising sails.

A combination of film on one side and light taffeta on the other makes for a very robust sail with excellent longevity. A variety of fibre options is available to suit every end use.



VEKTOR²™ cost effective continuous string technology.

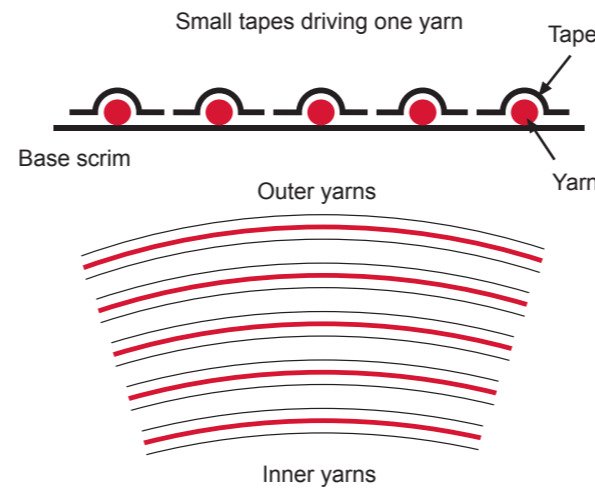
Vektor2™ represents the development of more than twenty years of experience in the construction of sails from a grid of continuous yarn on an adhesive film. This technology shares components and techniques used in the manufacturing of the M3™ sails and this permits the production of sails with an optimum cost / performance relationship for both cruising and racing sails.

Whereas in M3™ the structural grid, under pressure and temperature, is fused to the layers of Mylar that form the laminates, in Vektor2™ the grid is applied with reinforced fibre tape at high pressure to the film that constitutes the sail, in turn reinforced with the secondary grid at high pressure. Unlike how it is done for similar products in the market the reinforced tape of Vektor2™ is not made up of more yarns in line but of a single yarn.

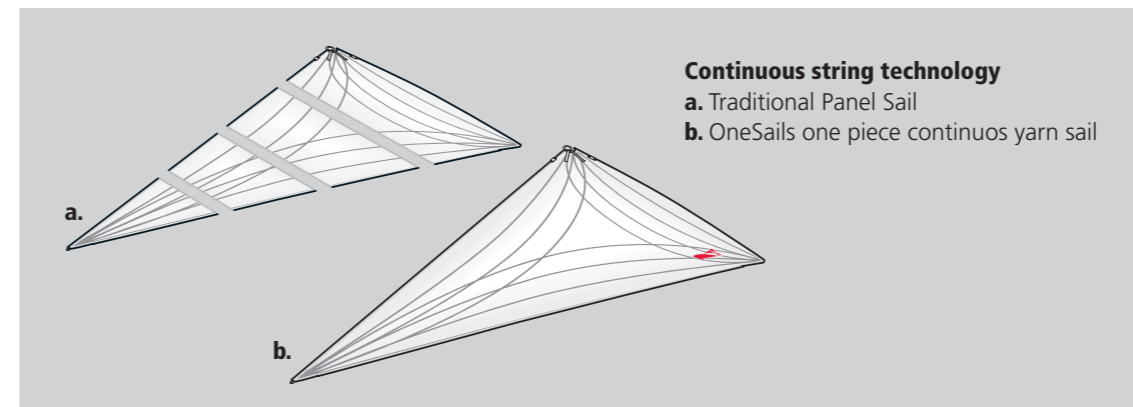
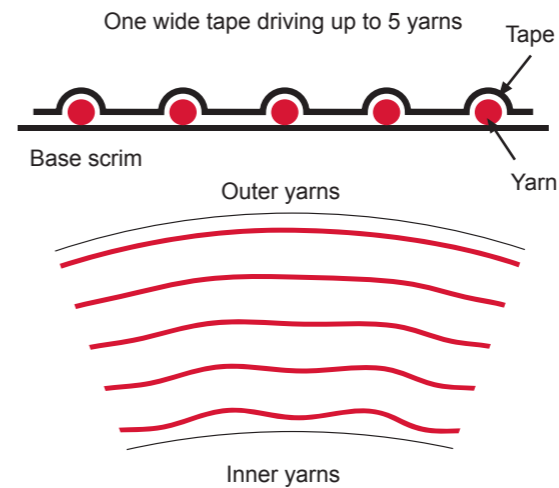
This permits the complete utilization of the structural capacity of the fibres used in the grid with wide freedom of lay-out and complete control of the shape-holding in all the areas of the sail on the strength of the wide microdistribution and independence of each structural element. General parameters of the sail being equal (particularly the weight) a better structure is achieved for the efficient distribution of the loads.

The very latest innovation introduced by OneSails is the use of Endumax® as the fibre for the structural grid, that guarantees characteristics distinctly superior to the aramid fibres both in terms of durability and of performance. With greater stretch resistance and strength, together with a significantly reduced weight. As well as Endumax®, Vektor2™ sails are available with the structural grid in Carbon when maximum performance is required. Vektor2™ presents an optimum price / performance relationship and allows access to continuous yarn technology (a one piece sail) at competitive prices and conditions with respect to sails constructed with traditional panel technology.

Vektor2™ fibre layout



Conventional fibre layout



Which Sails is Right for You?

Your OneSails sailmaker will guide you on the most suitable fabric for your new sails.

Hi-Performance Dacron

All Dacrons are not created equal. OneSails woven cross-cut sails are built using only the very best quality premium Dacrons.

Triradial

Tri-radial construction creates a more sophisticated means of distributing the loads in a sail than can be achieved with a cross-cut sail.

VANTAGE ONE

Vantage One™ membranes feature complex arrays of curved fibres that distribute loads evenly across the sail reducing localised distortion and improving overall shape retention.

VEKTOR²

The continuous fibre grid is comprised of reinforced fibre tapes applied under high pressure to the film that constitutes the sail.

M3™

Using continuous high modulus fibres, the 'resin free' lamination process creates sails which are highly stretch resistant, yet are soft, flexible and which represent a major advance from other 'mould production' sail technologies.

4T FORTE™

4T FORTE™ differs from the other membrane styles in that it is a composite construction rather than a laminate. 4T FORTE™ sails incorporate the latest high modulus fibres but without mylar films and adhesives that characterise laminate constructions.