



# Single piece sails of Unlimited size!

OneSails is the only sailmaker able to manufacture sails of any size in a single piece and using continuous yarns. Our technology allows an extraordinary degree of refinement. In high load areas like the corners, where multiple yarns come together, reinforcement patches are added internally.

The benefit of internal patches is that the corners remain soft and strong. Instead of the patches being

bonded to the external surface they become part of the membrane's structural integrity. Another important benefit, which OneSails offers to boat owners, is the possibility to order custom colours to personalise their own sails.

OneSails holds the world record for the biggest onepiece mainsail ever made. This was constructed for the Wally 130 and has a 46.6 metre luff.



### **Handcrafted** finishes

A history of deep expertise and passion for detail, makes our sails the ultimate combination of quality and style.

At the OneSails Group we adhere to rigorous, high quality standards. Each sail that we produce follows a strict design, manufacture, test and quality-check protocol to ensure that our sails are not only well made, but also durable and aesthetically pleasing. Our customers are exigent regarding both quality and aesthetics, something we bear in mind with every stitch as we strive to exceed their expectations.







**4T FORTE** 

# 100% recyclable membranes



## Fast, durable and reliable

# 4T FORTE™ continuous yarns composite technology.

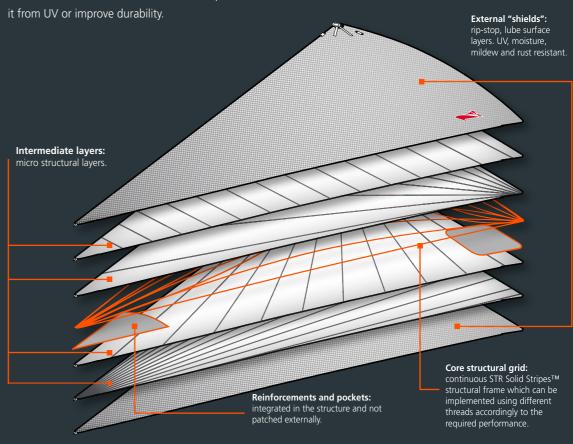


The 4T FORTETM composite structure incorporates high modulus fibres such as STRTM Solid Stripes, a new low stretch component of MMSTM technology which eliminates both glue and the mylar film, so often the weak element of a laminate sail.

The elements of the membrane are fused together

in a cross linked, polymerised matrix resulting in a stable, stretch resistant, and durable sail. Not only is 4T FORTE™ intrinsically lighter than alternatives, but weight saving is enhanced by the fact that a 4T FORTE™ membrane does not need to be covered with extra woven taffeta fabric to protect it from UV or improve durability.





# STR™ Solid Stripes

#### Replacing carbon and aramid yarns

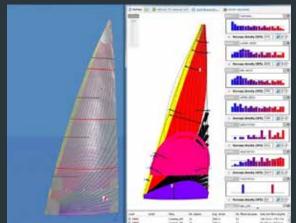


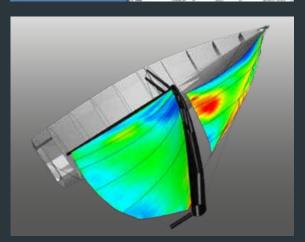
After many years of carbon and aramid being the ultimate fibre in sailmaking, OneSails has introduced STR Solid Stripes™ with a better strength/weight ratio than carbon and a huge number of other advantages including being more robust, having higher tenacity and a full resistance to the harsh factors of the marine environment such as UV, temperature and moisture.

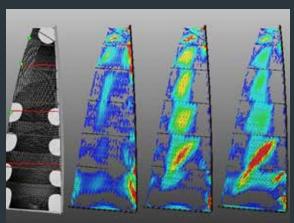
# Shape, Design and analysis

# **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.

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.

#### BSG

OneSails is a partner of BSG, one of the world's leading sail design and sail analysis software developers.

# Super yachts Boats Record (selected examples)

Wally 143	"Esense"
Wally 130	"Dreamer"
Wally 94 "	'Inti"
Wally 80 "	'Inti"
Wally 77 '	'Tuamata"
Wally 77 '	'Why Not"
J-Class "S	hamrock V"
Perini 45 ı	m "Heritage"
Frers 107	"Adesso"
Swan 120	"Audrey the First"
Swan 100	"Fantasticaa"
Swan 90 <i>"</i>	'Dsk"
Swan 80 <i>"</i>	'Astro"
Swan 70 <i>"</i>	'Flying Dragon"
Swan 70 <i>"</i>	'Bugia Bianca"
Swan 68 <i>"</i>	'Bandolera"
Swan 65 <i>"</i>	'Peak"
Swan 65 (	3 boats)
Beiderbec	k 80 "Bliss"
Advanced	80 "Apsaras"
Brenta 80	"Makai"
South. Wi	nd 100 "Thirty Nine"

South. Wind 100 "Mr. Seven"	
South. Wind 100 "Mariette cube	
South. Wind 100 "L'Ondine"	
South. Wind 100 "FarandWide"	
South. Wind 100 "Farewell"	
South. Wind 78 "Mrs. Marietta"	
Spirit 74	
Spirit 65DH	
Spirit 65C	
Spirit 63 Yawl	
Spirit 111	
Marten 82	
CNB 77 "Sahona"	
Baltic 72	
Felci Yachts 71 "Mardor"	
Felci Yachts 61 (5 boats)	
Maxi Dolphin 65 "Charis"	
Maxi Dolphin 75 "Karma"	
Milyus 76 "Grillo Parlante"	
Reichel-Pugh 78 "Ourdream"	
Starkel 78 "Alysee"	
Nelson Marek 92 "Locura"	

## Why choose OneSails

#### The next generation of sails™





#### 1. 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 the most important sailing venues of the world.

#### 2. 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.

#### 3. Performance

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

#### 4. Quality

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

#### 5. 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.

OneSails reserves the right to change descriptions, modify, or substitute products without notice in this product guide. One is a registered trademark of OneSails International; other names may be registered trademarks of their respective owners.



