



spidertech

Fullmarc
TENSO
CALVI
Alike group



spidertech



Spidertech

Technology in common for uncommon sails

Fiorenzi Marine Group was created by Alberto Fiorenzi and is dedicated to the sea and sailing. Over the last twenty years he and his company have helped sail makers with the use of design technology and the most advanced materials; if it's the best and is available on the market today, then it has surely been distributed by FMG.

Alberto's vision – as a naval architect – has always been that of integrating the, until now, two separate parts of yacht design – hull and sail. To do this we needed modern software systems that would allow the construction of 'the real thing' in a practical, realistic and completely reliable model.

Research and Development: key words that describe the work that has been done over the last five years. The period in which FMG began the most important design phase ever undertaken by the company: Spidertech Integrated System.

This project can be described as the new departure point of all sail makers: integrating sail design technology and production technology. For sail makers 'Spidertech Integrated system' represents the most reliable method of channelling experience gained at sea towards the design of a sail that integrates perfectly with the work of the boat designer.



THE SPIDERTECH PHILOSOPHY

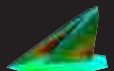
The Spidertech philosophy favours the natural and independent growth of each and every sail designer. We want that every sail is the fruit of hard work and self-determination of every sail designer.

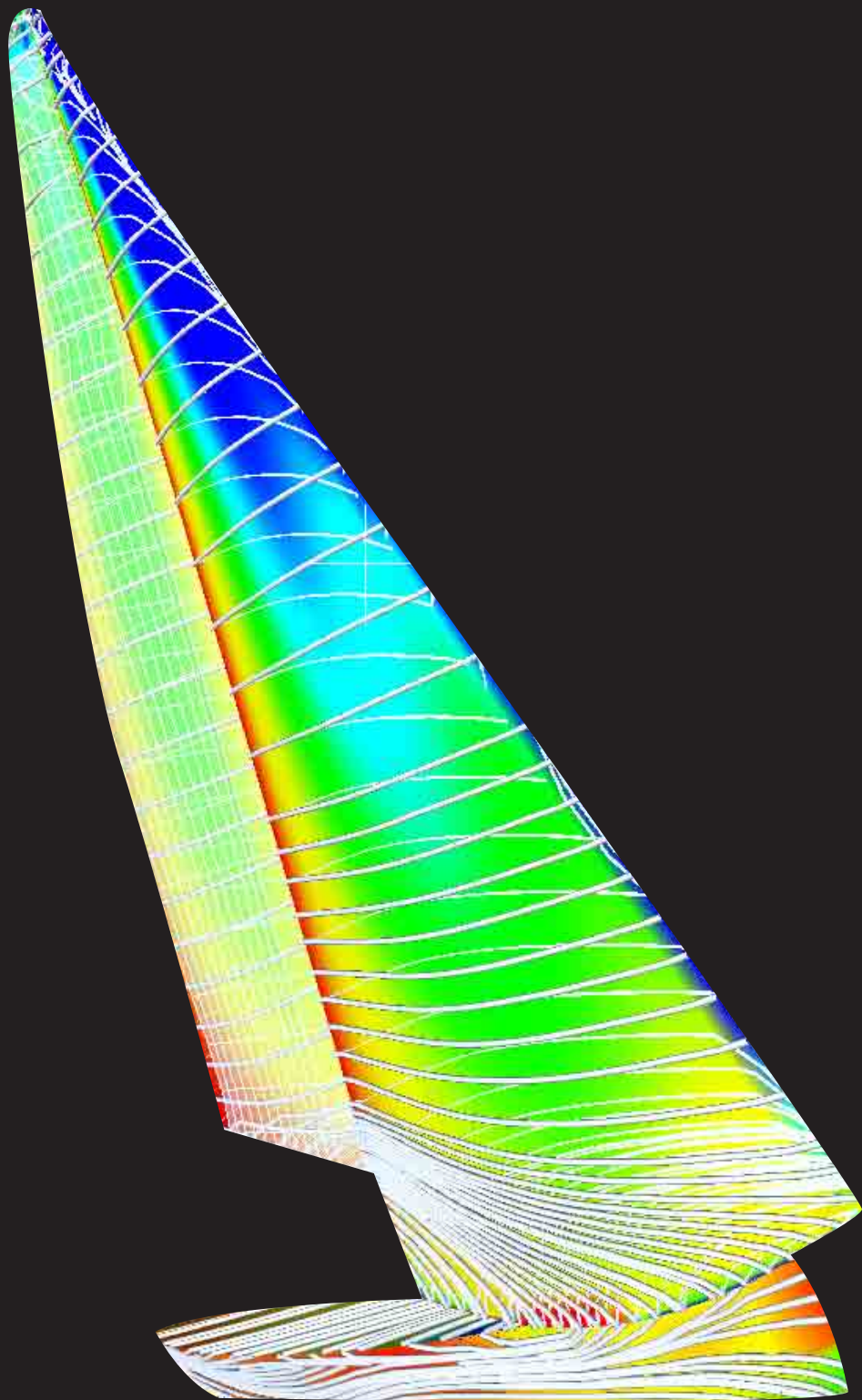
We are convinced that a healthy competition between designers, that is based on the knowledge developed using our innovative project methods, will give way to an ever increasing level of quality in the final product, and that can only benefit the owners.

Around twenty authorised designers (as at the end of 2007) is just the beginning of the story, alternative ideas strengthened by solid technology that will soon be proved outside the boundaries of Italy and Europe.

INDEPENDENCE FOR SAIL MAKERS

The sail maker using “Spidertech Integrated System” is a structuralist who, whilst creating a tight ‘net’ of high mechanic-resistant fibres, also determines the shape and long-term duration of the sail. Thanks to the highly versatile software realized by the FMG Research and Development team, both the sail maker and the sail designer have complete control over each and every structural component of the material realized with Spidertech production. The results from an analysis undertaken by sail makers and sail designer from every individual boat, is contained in just one file, it may be small but it’s worth its weight in gold for the highly confidential information contained within, information which Spidertech then transforms into the most reliable material currently available on the market.





INSTRUMENTS FOR THE DESIGN PROCESS

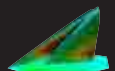
Different to all the other textile producers, FMG has a clear idea of the boat in all of its complexity presented by the system. It is for this reason that we have developed instruments capable of keeping the designer of the boat and all of its applications, the mast designer and the sail designer in touch with each other's wants and needs. We are talking about a software that allows the flow of geometric and structural information which will soon be the new way of communication between the technicians involved in the design process. Spidertech software is made up of 6 integrated modules, and allows;

- yacht designers to create a 2D sailing plan (SpiderPlan), to control three-dimensional geometric interaction between sails, hull and rig (Sail/Rig Configuration)

- sail designers to define the shape of the sail (Sail Mould Design), to set out the structural lines on the three-dimensional surface of the sail (SpiderFibre) and then control the shape in-sail by on-board photographs (Sail Photo Analysis).

the sail designer to preview the shape the planned-structure will form thanks to the aero-elastic analysis programme (SpiderSim).

Being able to finish the optimal structure of a sail based on the geometry and the boat's rig is one of the distinctive points for a number of the technicians using our software.





ITA 44

TENSO

Alkè group

BETTER STRUCTURAL TYPOLOGY

As long as the sail maker does not want to repeat a project, each structure is given a shape that is in harmony with every single “boat system”: structures that are, therefore, potentially all different from each other, depending on the optimisation planned by each sail designer.

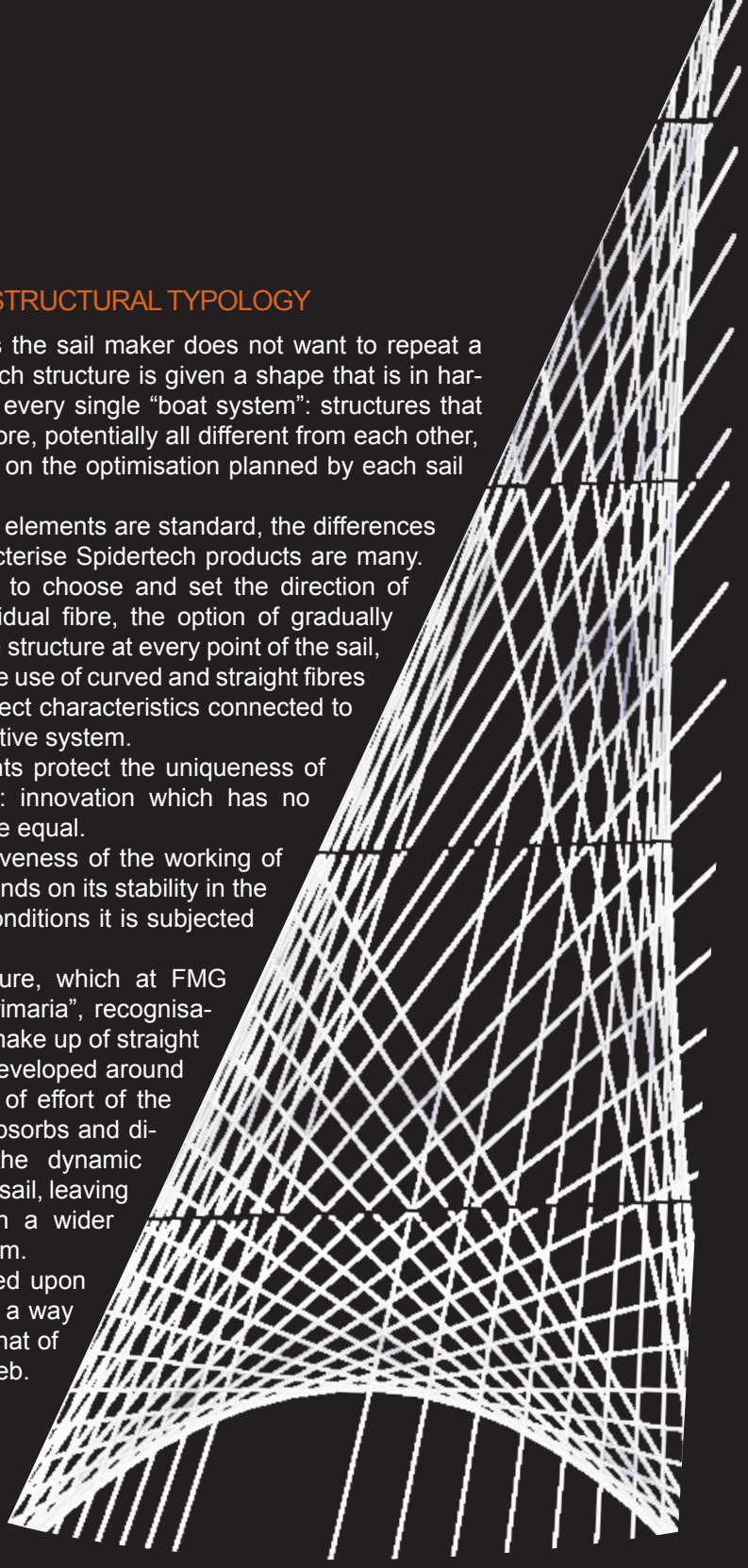
If the base elements are standard, the differences that characterise Spidertech products are many. The ability to choose and set the direction of each individual fibre, the option of gradually varying the structure at every point of the sail, gauging the use of curved and straight fibres are all project characteristics connected to our productive system.

Four patents protect the uniqueness of Spidertech: innovation which has no comparable equal.

The effectiveness of the working of a sail depends on its stability in the adverse conditions it is subjected to.

The structure, which at FMG we call “primaria”, recognisable by its make up of straight fibres, is developed around the centre of effort of the sail: this absorbs and distributes the dynamic load of the sail, leaving it stable in a wider range of trim.

When called upon it reacts in a way similar to that of a spider-web.





SPIN ONE
ITALIAN CHAMPION X 35 OD 2007



SAGOLA
EUROPEAN AND ITALIAN CHAMPION IMS 2007



THE SPIDERTECH TEAM. WHAT DO WE DO

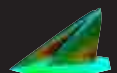
At Fiorenzi Marine Group we follow sail designers on their road to design and project growth, but our services do not finish there.

The team is made up of expert researchers in the field of structural engineering, in flow-dynamics, in experimental analysis and in predicting and optimising the performance of a yacht. The Spidertech Team is at the disposal of the entire design process, and its goal is to make the integration of the entire “boat system” more effective.

LAMINATE AND THE DUE GUARANTEE

Twenty years experience in the field of sail cloth has led us to the development of the most trustworthy laminate available on the market today. The best shape that works with both mast and rigging together with the longevity of that sail shape - which depends on the most efficient use of reinforcement, are the sole responsibility of the sail designer's work. Instead the quality of the structural hold of the laminate is the privilege of FMG. Spidertech material is usually guaranteed against de-lamination* for one year.

* Please check our website: www.spidertechsails.eu for conditions of guarantee.





SPIDERTECH INTEGRATED SYSTEM IN THE FIELD OF REGATTA

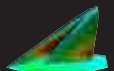
Spidertech Integrated System is a material that is entirely given over to maximum performance.

The class Mumm 30 launched the product in the world of One Design, in Italy 16 boats in 20 use the Spidertech membrane to race on the Italian Circuit, with great results: they have been winning for the last two years.

Spidertech Integrated System Sails, designed by one of the sail designers in the "Spidertech phenomena" are the 2007 World Champions.

Three other important class One Designs are proving the quality standard of Spidertech Integrated System. Airis, one Italian Melges 24, took 2nd place at the European Championship 2007. Calvi, the Light Bay Sailing Team's yacht, and the first Farr 40 of the International Circuit raced using our technology, and, even if they are still 'teething' in this ferociously competitive class, stood out for their speed at the recent 2007 World Championship.

The first RC44 yacht sailing with Spidertech technology immediately demonstrated glimpses of speed and durability previously unseen by other sail makers. In the X 35 OD class, one year after the launch of the yacht, can already count a gold medal in the Italian Championship. Even the world of mass-production yachts trusts in Spidertech.



MATRIX ARCA TX ACTIVE
WORLD CHAMPION
MUMM 30 2007



PALMARES

2007

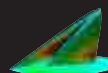
- 1° Moby MUMM30 World Championship · Montefusco (Matrix)
- 1° X 35 OD National Italian Championship · Olympic Sails (Spin One)
- 1° IMS Italian Championship · Olympic Sails (Sagola)
- 2° Melges 24 European Championship · Montefusco (Airis)
- 4° Copa Del Rey · Banks Sails Italia (Libertine)
- 3° X Gold Cup Palma · Banks Sails Italia (Vikesh)
- 3° IMS European Championship (CRO) · Montefusco (Costa Del Salento)
- 2° IMS European Championship (CRO) · Di-Tech (L'Altra Claudia)
- 1° IMS European Championship (CRO) · Olympic Sails (Sagola)
- 5° Oeiras Cup · Ullmann Sails (Hiroshi RC 44)
- 1° Minialtura Italian Championship · Banks Sails Italia (Grande Evento)
- 1° Rolex Capri · Banks Sails Italia (Libertine)
- 1° Audi MUMM30 Italian Circuit · Montefusco (Cheyenne)
- 1° Primo Cup · Montefusco (Parimor Thule)
- 3° Akura Key West · Montefusco (Hiroshi)

2006

- 1° Audi Mumm30 Italian Circuit · Montefusco (Parimor-Thule)
- 1° Over all - IMS Italian Championship · Banks Sails Italia (Nur)
- 2° Race Class - IMS Italian Championship · Banks Sails Italia (Frà Diavolo)
- 4° Cruising Class - IMS Italian Championship · Speed Sail (AriaTx Active)

2005

- 1° European Minialtura IMS Championship · Olympic Sails (Chardonay)
- 1° Minialtura Italian Championship · Olympic Sails (Chardonay)
- 1° XXI Regata Pesaro-Rovigno-Pesaro · Montefusco (Pegaso)
- 3° European MUMM30 Championship Punta Ala · Montefusco (Parimor Thule)
- 3° IMS Central European Championship (CRO) · Montefusco (Shaula)
- 1° III Class - Barcolana · Supreme Sails (Paiea)
- 3° Maxi Class - Barcolana · Montefusco (Pegaso)





spidertech

Spidertech is a Sailmaker International SpA registered brand - patent pending
ph. +39 071 22163 - fax +39 071 2210017
www.sailmakerint.com
info@sailmakerint.com



FMG