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***elan* 410**



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ELAN 410

Elan 410 is an exciting cruiser racer with emphasis on style and outstanding performance. Her racing characteristics makes Elan 410 a contender at weekend regattas and yet perfect fast cruiser for sailing family during holidays.

Long waterline length enhances her performance under sails as well her interior volume. Below deck Elan 410 is designed to set new standards for comfort and superior finishing throughout allowing the crew of up to eight members to enjoy their stay onboard.

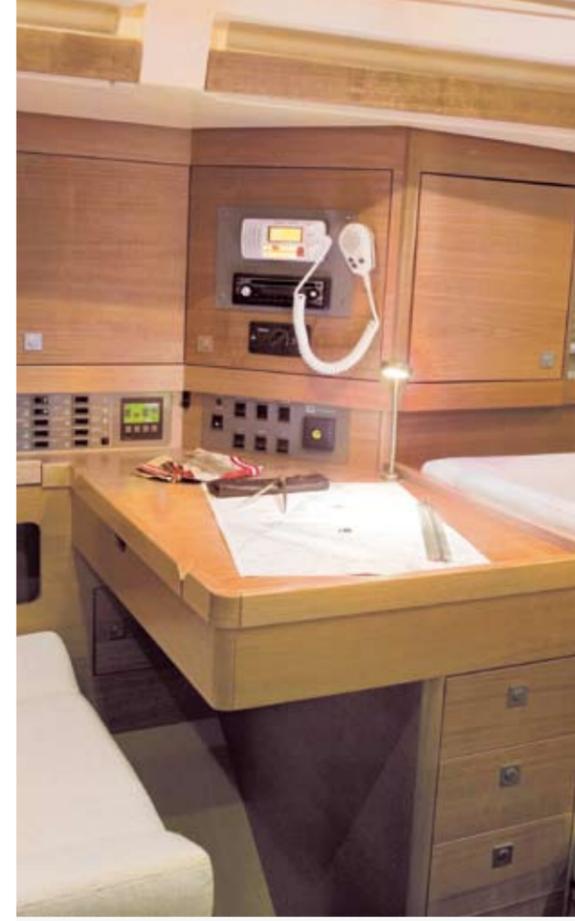
The fractional rig doesn't hide its competitiveness and the cruising oriented sailor additionally can use non-overlapping headsail for balancing the powerful mainsail.

Spacious open cockpit will find very affective both racing crew and cruising family. Large steering wheel speaks out racecourse but it makes her responsive and easy to control for a leisure helmsman.

Deep heavy lead keel with its very low centre of gravity enhances stiffness and safety – attributes that benefits all yachtsmen whatever their preferred kind of sail.







EXCELLENCY IN CONSTRUCTION

Inner structure

The hull structural strength is a key factor in overall boat safety, and in its resistance to ever-demanding ocean conditions.

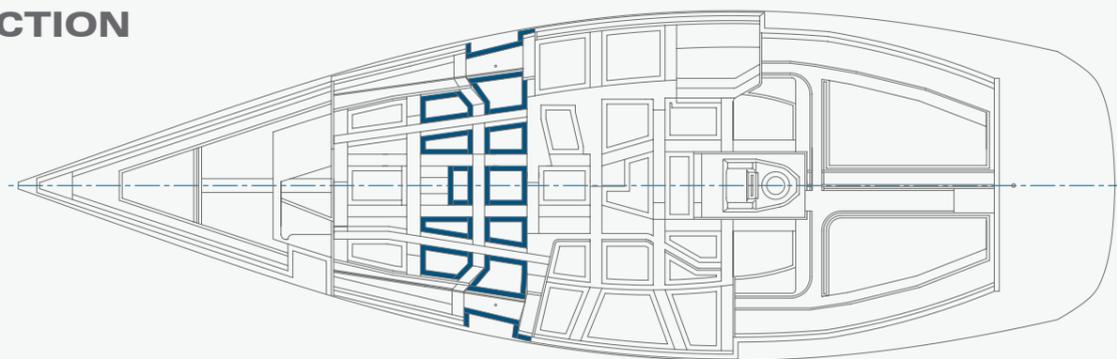
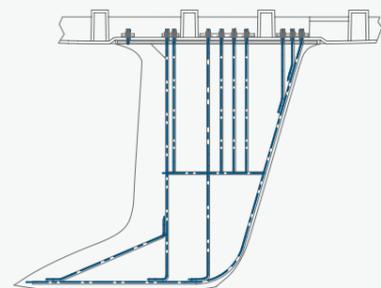
Maintaining the highest profile of structural frames among boat builders, and the highest number of longitudinal and transversal stringers, the Elan inner structure is one of the most comprehensive reinforced structure on the market today.

Adding a unique combination of gluing and laminating techniques to the inner mould to the hull joint is the final proof Elan yachts are built to last.

Keel joint

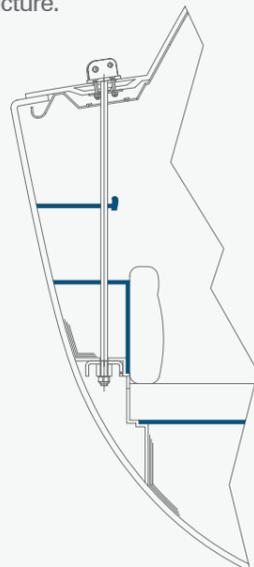
The cast iron ore lead keel is attached to the hull by premium grade stainless bolts that are highly resistant to corrosion.

The internal structure grid ensures the best possible strength and flexibility in beating to windward, or in severe groundings. Before fitting each Elan keel is sealed for protection and smooth finish.



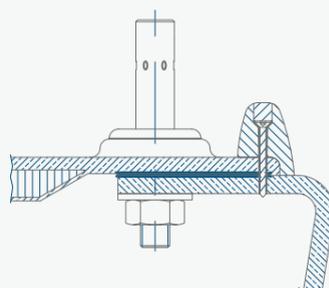
Chainplates

Chainplate loads are spread via High Quality marine stainless steel rods to metal plates incorporated into the inner structure.



Hull – deck joint

To preserve the design shape of the hull prior to the joint, specially designed metal jigs are used. Use of an in-turning wide flange offers a strong support for the deck on a large surface for bonding material. Hull and deck are joined together by a 3-way technique: Gluing of the hull and deck parts together, use of stainless steel bolts for mechanical shear, fastening and laminating of the joint at the bow and transom area to allow for even greater stiffness and sturdiness. 100% reliability with no recorded failure in thousands of miles of tough ocean conditions.



High Quality materials

Carefully selected materials are subject to our strict quality control. Use of high technology materials, from the latest research, enable us to optimise the laminate plan of each yacht. Quadriaxial- and multiaxial- glass fibre, Kevlar® reinforcements at the mast support and bow area, Aramat® and Dyvinacell® all contribute to the well known strength of an Elan yacht.

Use of Vinyl ester pre-laminate and Isophthalic polyester laminate which insures perfect antisiphon protection and superb mechanical properties to weight ratio.

Gelcoat spraying

Apart from the aesthetic function, a layer of gel coat is used to prevent water penetration into the laminate and preserve its stiffness over long periods of time. In order to achieve the highest level of consistency in quality and thickness, the HQ gel coat is being sprayed by computer-operated nozzle in a carefully monitored production process.

VAIL

The proper goal in hull construction is to produce the required strength and stiffness with the least weight of material. Unnecessary weight makes a yacht more difficult to manage, and less enjoyable to sail. With our own system of Vacuum Assisted Infusion Lamination - VAIL the results were more than promising.

Gelcoat spraying



Inner structure

Germanischer Lloyd

All our yachts are under constant supervision of Germanischer Lloyd. With its long history of more than 150 years Germanischer Lloyd is setting the highest demands in boat building industry today. Each ELAN yacht is carrying a GL certificate as ultimate proof of her quality, durability and safety.

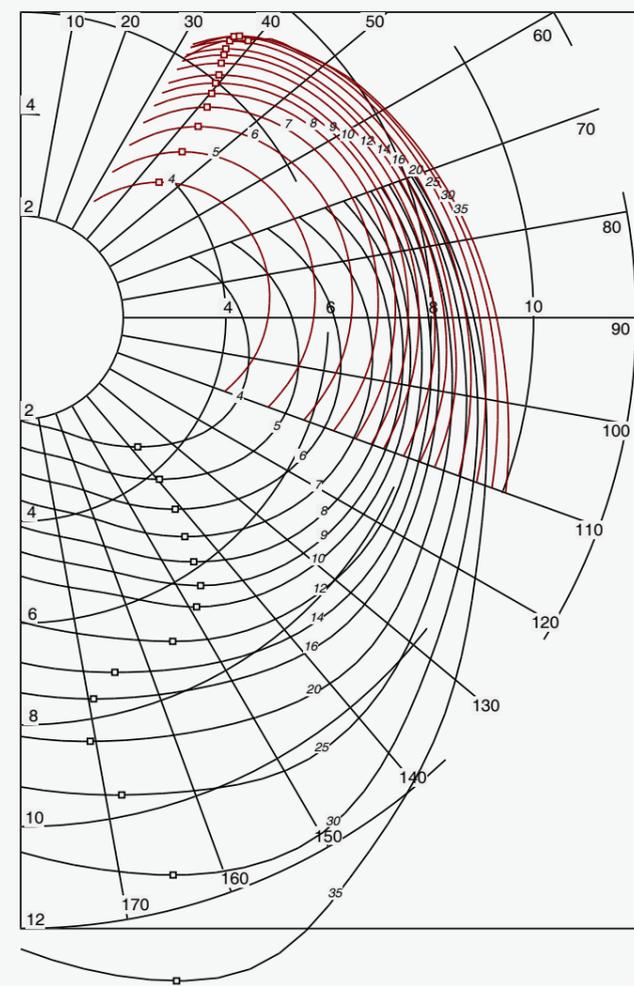
Only in that way do we know we have fulfilled the owner's expectations.

The Elan range of performance cruising yachts and Impression cruisers are all built under permanent technical supervision of Germanischer Lloyd for Sailing Yacht specification on a hull structure designed to give any sailor confidence.

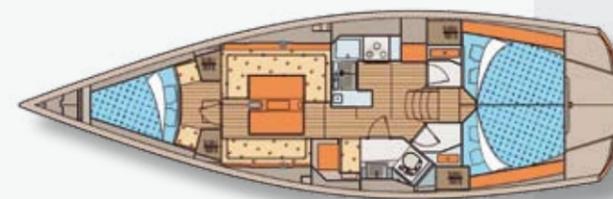
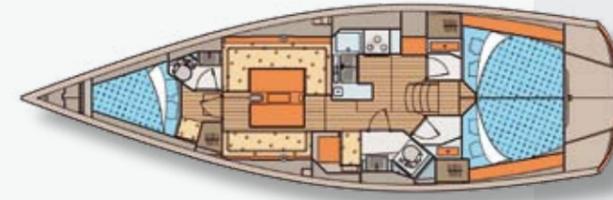
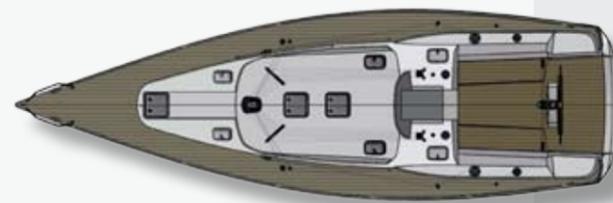
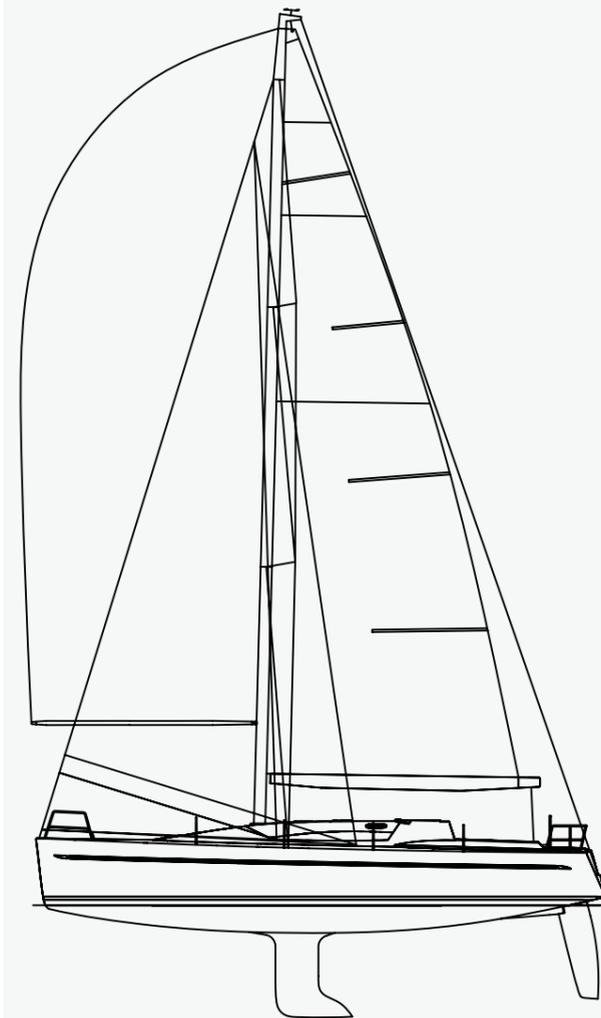
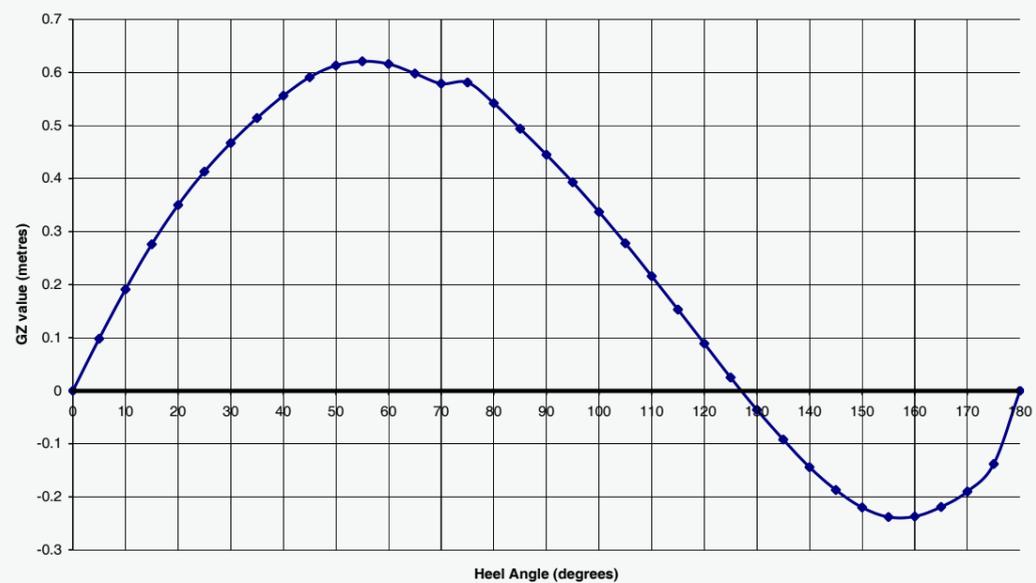


PERFORMANCE

Polar diagram



Stability curve



elan 410

Technical specifications

Length overall	12,27 m
Hull length	12,27 m
Length at waterline	11,28 m
Beam	3,91 m
Draft	2,10 / 2,45 m
Displacement	approx. 8300 kg
Ballast	2500 kg
Water capacity	355 l
Fuel capacity	145 l
Engine	40 HP
Mainsail	50,7 m ²
Genoa	55,2 m ²
Spinnaker	138,89 m ²
I	16,66 m
J	4,63 m
P	16,16 m
E	5,43 m
Boat design category	CE A
Interior design	Boris Lubej
Design	Rob Humphreys

EXCELLENCY IN DESIGN

In designing the Elan 410 we set out to create a boat that, while it offers the very best in fast and comfortable cruising, has more than a little racing pedigree that will quicken the pulse of any sailor looking for some excitement out on the start line.

While the 410 is the natural successor to the Elan 40, it is in fact a considerably larger boat with over a metre of additional waterline length greatly enhancing her performance as well as her interior volume. The fractional rig gives the spectator an instant clue as to her competitive inclinations, yet for the cruising sailor we have added the option of balancing the powerful mainsail with non-overlapping headsails making her easily managed by a small or family crew. The large wheel again speaks of the racecourse, but it also makes her easy to control for the leisure helmsman who likes to give the autohelm some occasional time off. We also included a combination iron / lead keel with its very low centre of gravity for enhanced stiffness, another attribute that benefits all yachtsmen whatever their preferred kind of sailing.

The 410 is instantly recognisable as an Elan with her streamlined coach roof and large cockpit, and to that we have added the feature, usually found on much larger boats, of running all her control lines under the deck to the cockpit to give her a smooth, eye-catching finish both when under sail and at rest in harbour. Down below we have made



Rob Humphreys

the best use of the interior volume to provide a comfortable saloon with plenty of space for meals and relaxation, and three double cabins with a choice of layouts in the forward section allow for plenty of privacy for families and guests.

We are delighted with the way this project evolved, and are confident that the graceful and versatile sailing yacht that resulted will give a great deal of pleasure to sailors however they choose to enjoy their time spent on the water. We believe she really extends the ethos we have been trying to define for the Elan range, exuding power but with finger-tip sensitivity. If she were a vehicle she would be described as a driver's car, but no passenger would complain.

