



 Impression 514.
by *elan*



Impression 514



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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.

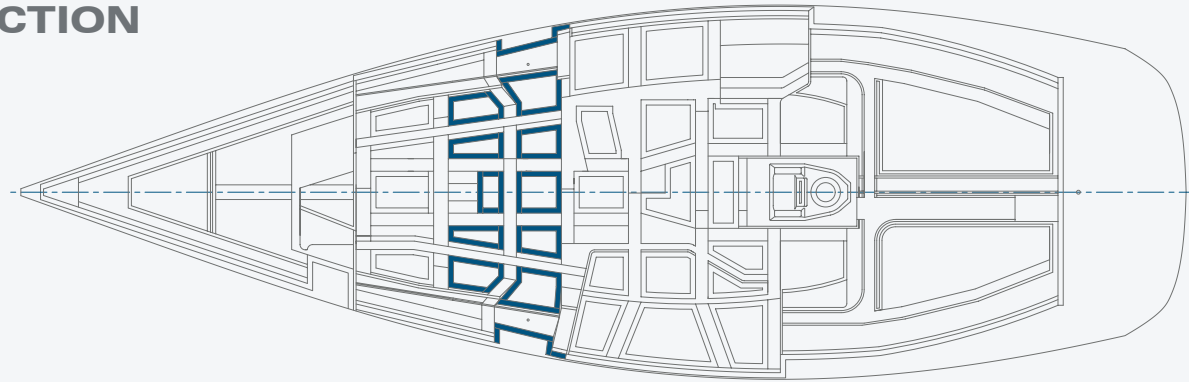
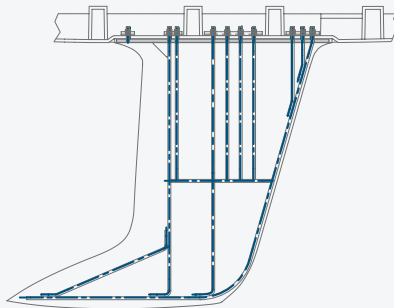
Maintaining the highest profile of structural frames among boat builders, and the highest number of longitudinal and transversal stringers, the Elan inner structure is one of the most comprehensive reinforced structures on the market today.

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

Keel joint

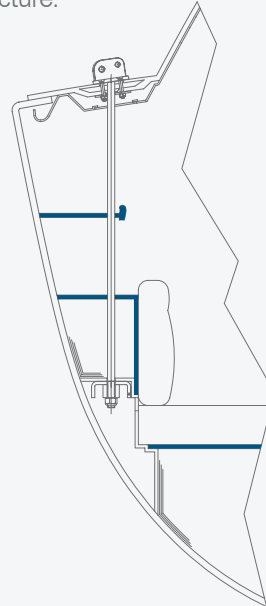
The cast iron or lead keel is attached to the hull by premium grade stainless bolts that are highly resistant to corrosion.

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.



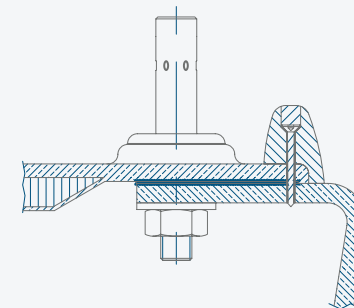
Chainplates

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 antiosmosis protection and superb mechanical properties to weight ratio.

Gelcoat spraying

Apart from the esthetic function, a layer of gelcoat 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 gelcoat is being sprayed by computer-operated nozzle in a carefully monitored production process.

3D VAIL

3D VAIL is controlled and repeatable vacuum assisted lamination process, where the hull and main stiffeners are laminated in one step. One shot lamination under vacuum force, increases hull stiffeners and ensure perfect joint between hull and stiffeners that reduces possibility of delamination failure even at high impact loads.

Gelcoat spraying



Inner structure



3D VAIL lamination means advance for all involved in lamination process and further phases of boat production because of it's »No resin contact and min. VOC & dust emissions« benefits. Elan shipyard is the leader among the serial sailing yachts manufacturers using vacuum hull lamination.

Germanischer Lloyd Yacht Plus

As sailing has become more and more competitive and prestigious, increasing emphasis has been placed on size, speed, manoeuvrability, overall performance and comfort of a yacht. However, beside expectation of a good value for their money, the owners are also concerned with safety issues of a yacht. This is where Germanischer Lloyd comes in and set an owner's mind at rest.

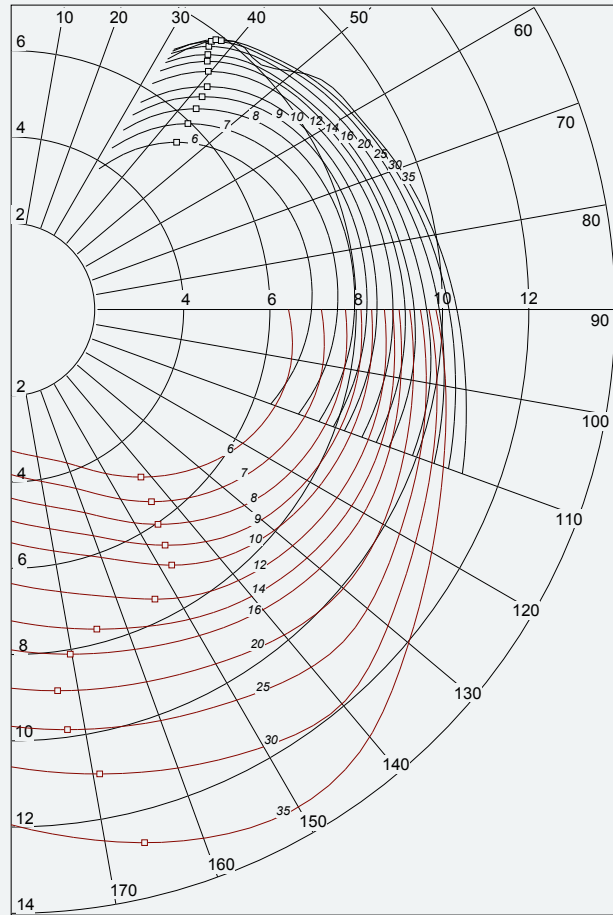
Adequate structural safety of a yacht can only be confirmed impartially by a classification society as Germanischer Lloyd who is one of the world's most thorough classification societies, having a long tradition(reachingback140years)intheexamination, checking of design and construction of ships, yachts and boats.

The structural designs of ELAN yachts are examined and approved by Germanischer Lloyd. The production facilities of ELAN Marine fulfil highest demands of Germanischer Lloyd for production of GRP yachts.

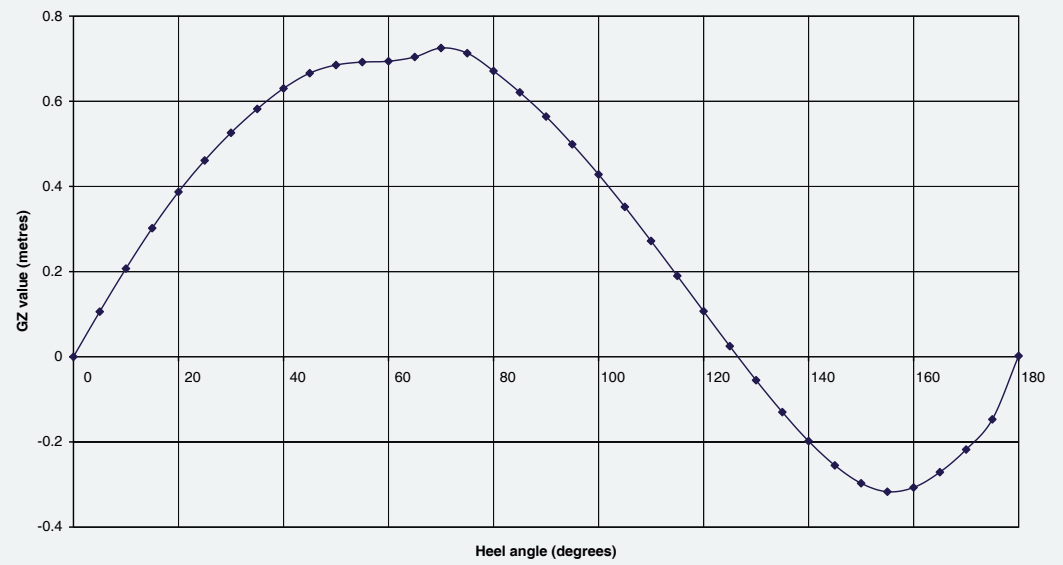
Furthermore, sailing yacht ELAN 340 fulfils all essential safety requirements of the Recreational Craft Directive 94/25 EC and its amendments 2003/44 EC. A continuous compliance with respective design and safety standards has been supervised and certified by Germanischer Lloyd according to its newest and unique guarantee of quality and safety - "GL Yacht Plus".

PERFORMANCE

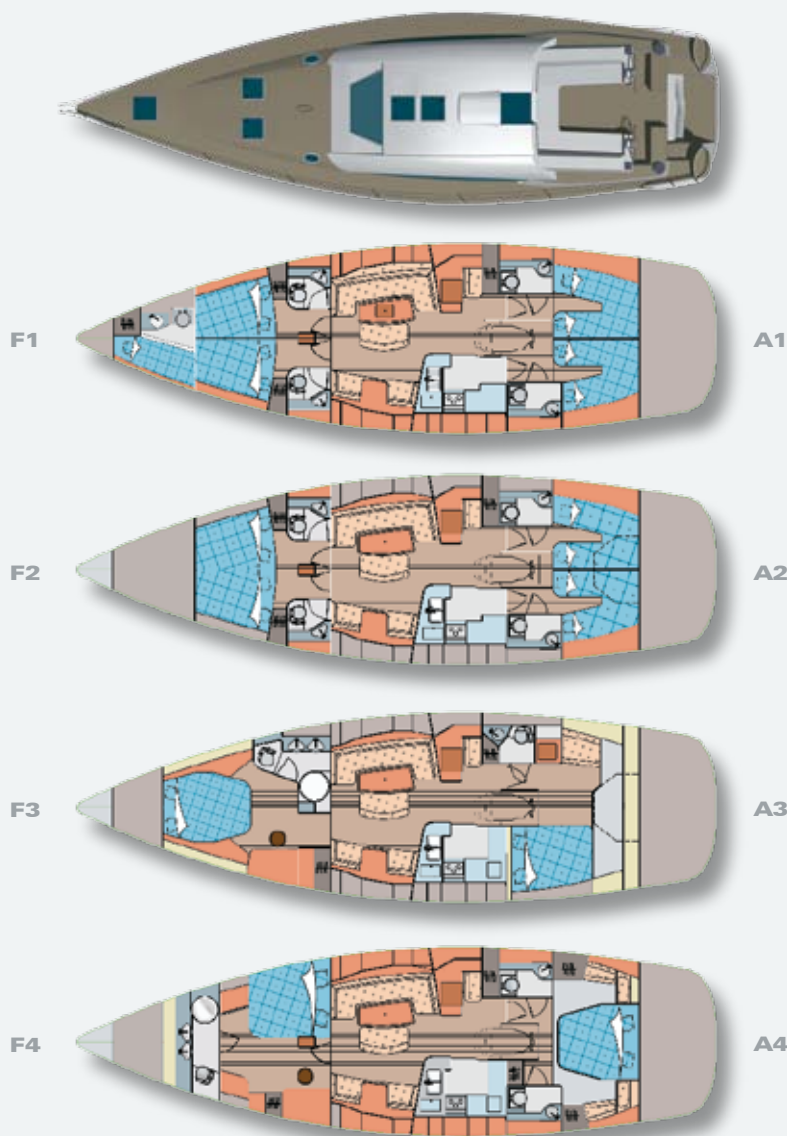
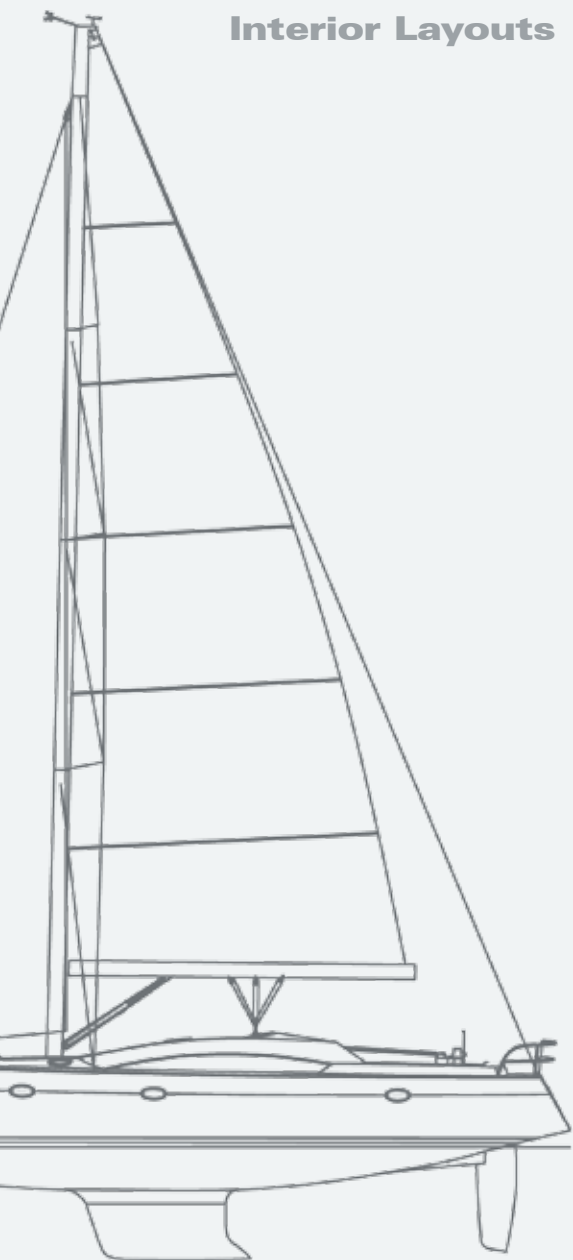
Polar diagram



Stability curve



Interior Layouts



Impression 514_® by *elan*

Technical specifications

Lenght overall	16,10 m
Hull lenght	15,69 m
Beam	4,68 m
Draft	2,20 m
Displacement	approx. 18000 kg
Engine	75/110 HP
Water capacity	780 l
Fuel capacity	440 l
LWL	13,76 m
Main sail	68,3 m ²
Genoa (135%)	78 m ²
Gennaker	133 m ²
I	19,40 m
J	5,48 m
P	17,98 m
E	6,65 m
Boat design category CE	A
Design	Rob Humphreys
Interior styling	Boris Lubej

EXCELLENCY IN DESIGN

The largest yacht in Elan's Impression range to date, the Impression 514 is a spacious and stylish yacht designed for leisurely warm-water cruising with family and friends. Below decks the boat is fitted out to the highest standards, with cabins capable of sleeping up to XX individuals in comfort, while a generous saloon area provides the ideal area for relaxation with its large windows ensuring that it is flooded with natural light when the sun is up and offering excellent views of its surroundings by both day and night.

On deck the large cockpit with its twin wheels provides a secure and commanding environment to enjoy the performance of this highly capable yacht while under sail. When at anchor, the transom folds down to reveal the dinghy stored under the rear of the cockpit, and to act as a convenient swimming and barbeque platform.

The Impression 514 will delight at sea as well as at rest, with her sleek lines, powerful yet easily handled sail plan and excellent stability, making her a pleasure to sail and giving her exceptional range for those with less time available for cruising than they would wish.

The perfect size of boat for those who like to sail with confidence and in comfort, the Impression 514 is guaranteed to be a welcome and popular addition to the sport of warm-water cruising.



Rob Humphreys







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