



**Elan Marine d.o.o.**





 Impression 434.  
by *elan*





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## IMPRESSION 434

The Impression 434, the first of Elan's Cruising Range is absolutely stunning.

Distinct in design and style and destined to be the best in her class. The Impression 434 offers a host of features that will be greatly valued by the bluewater cruising family or couple.

The semi-deck saloon exudes supreme comfort with flowing space, welcoming ambiance, panoramic windows and light wood interior. The spacious cockpit steps down to a large swimming platform for days of relaxation, entertaining and pleasurable cruising.

The latest in design and technology, the strength of the hull, quality of the joinery and fine attention to detail combined with years of skilled craftsmanship are classic examples of Elan's commitment to quality. All that is encompassed in her distinctive style.

The emphasis is on both safe and fast passagemaking. Exceptional seaworthiness in her class, well thought design and layout of deck and hardware allows for easy handling. Her design pedigree is the best testament for any serious bluewater cruising.













## 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.

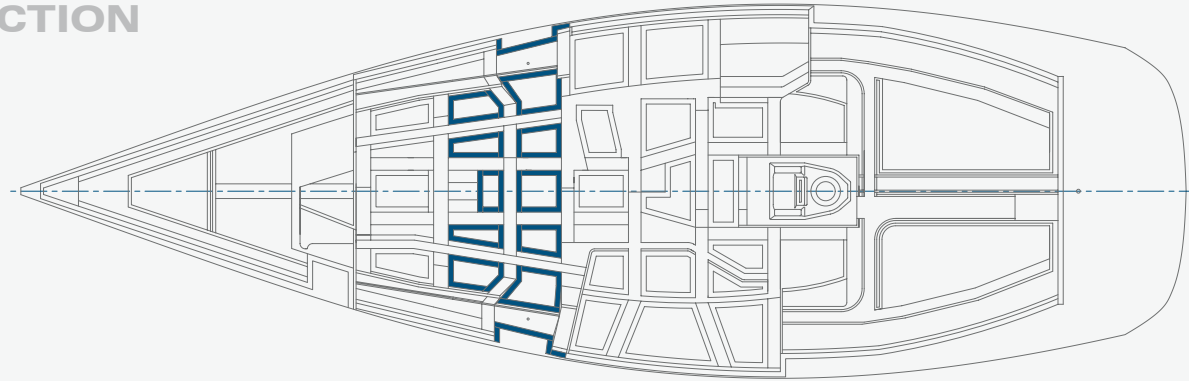
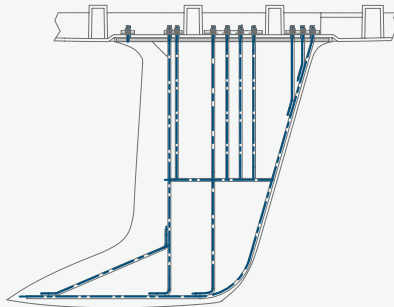
Maintaining the highest profile of structural frames among boat builders, and the highest number of longitudinal and transversal stringers, the Elan inner structure is one of the most comprehensive reinforced structure on the market today.

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

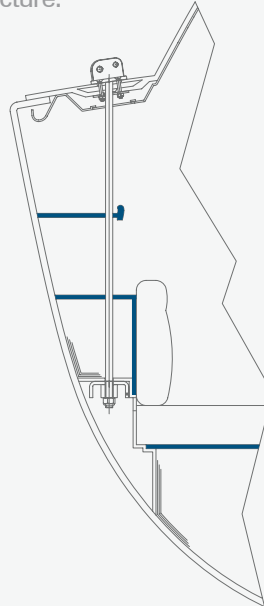
The cast iron ore lead keel is attached to the hull by premium grade stainless bolts that are highly resistant to corrosion.

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.



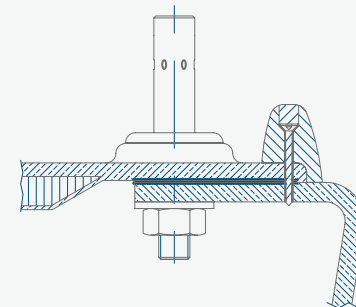
### Chainplates

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 antio-smosis 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*

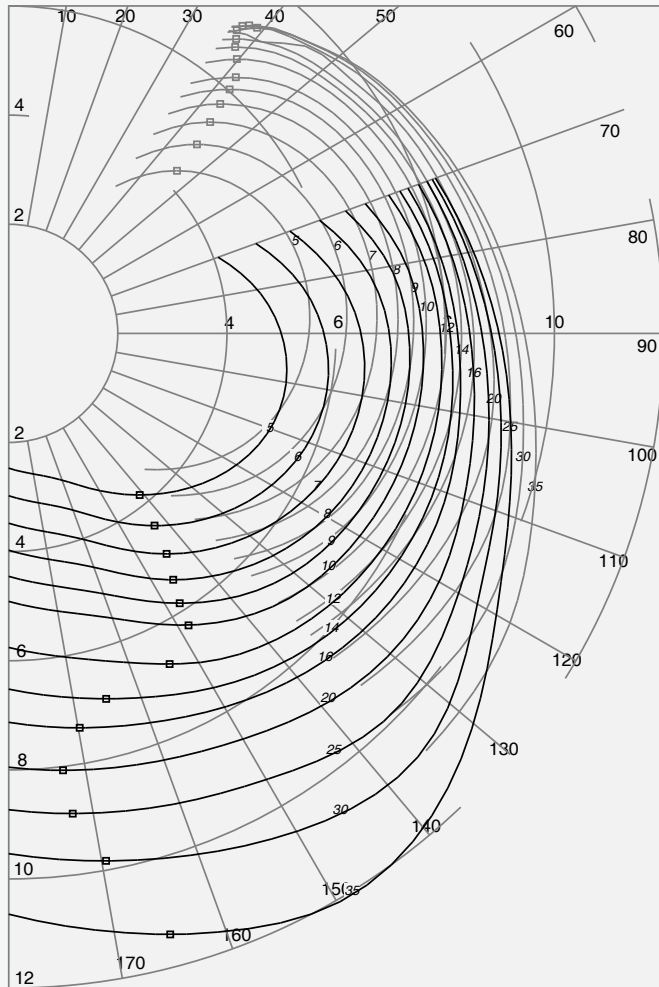
## Germanischer Lloyd

All our yacht 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.

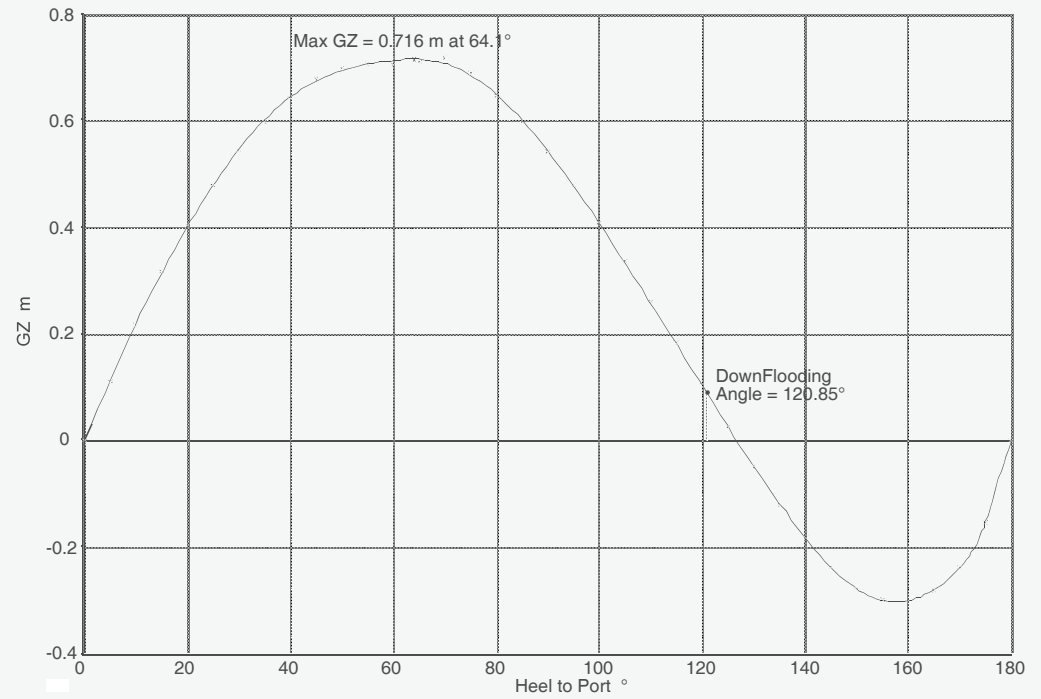


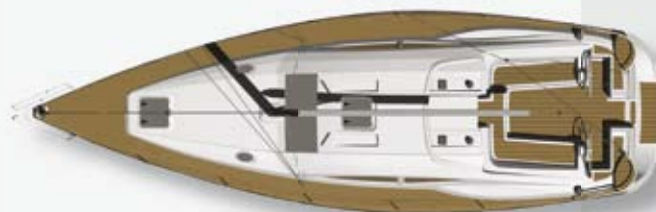
# PERFORMANCE

## Polar diagram

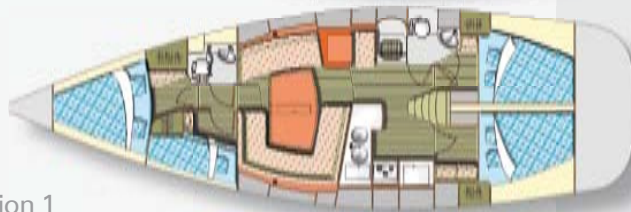


## Stability curve

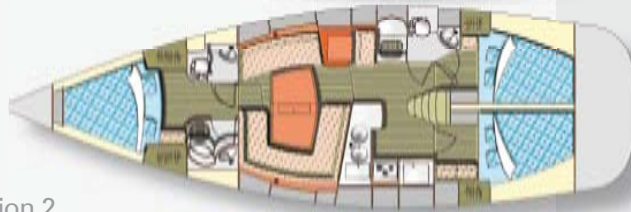




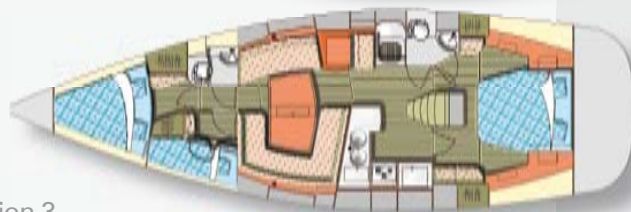
version 1



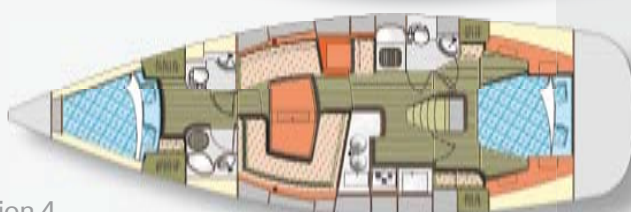
version 2



version 3



version 4



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**Technical specifications**

Lenght overall	13,41 m
Hull lenght	13,00 m
Beam	4,18 m
Draft	1,90 m / 1,60 m
Displacement	approx. 10.900 kg
Engine	55 HP/75 HP
Water capacity	516 l / 788 l
Fuel capacity	270 l
Air draft	18,37 m
Main sail	46,47 m <sup>2</sup>
Genoa	52,47 m <sup>2</sup>
Spinnaker	135,45 m <sup>2</sup>
I	15,90 m
J	4,78 m
P	14,80 m
E	5,37 m
Boat design category CE	A
Design	Rob Humphreys
Interior styling	Boris Lubej

## EXCELLENCY IN DESIGN

Rob Humphreys is an award-winning designer known internationally for his expertise in designing sailing yachts that successfully combine fast, modern hulls with all the comfort and convenience demanded by today's cruising sailor. The Humphreys design team has an enviable track record of designing racing boats for the world's leading events, including the America's Cup and the Whitbread Round the World Race, as well as for leading sailors such as Ellen MacArthur. In parallel with its ground-breaking racing work Humphreys Yacht Design has built a reputation for consistently creating popular and capable cruising boat ranges for internationally known builders such as Elan Marine, Oyster Marine and Northshore Yachts.

The new Impression 434 by Elan is the first of a new dedicated cruising range, evolved out of the company's highly successful cruiser/racer range but with features that are greatly valued by anyone seeking comfort at the head of their priority list.

With generous internal volume and extremely spacious accommodation the lines are nevertheless performance-minded with emphasis on easy and rapid passagemaking.

The Impression 434 is a good load-carrier, designed to be mindful of the robust Germanischer Lloyd approved construction schedule



*Rob Humphreys*

that ensures structural longevity, and capable of carrying an abundance of stores and equipment that can accompany some prolonged cruising. The fresh water tankage, for example, is pretty exceptional for this size of yacht, giving her a level of independence that only watermakers would otherwise provide.

With Elan's efficient volume production keeping a lid on sailors needs, the Impression 434 offers a significant range of attributes for her price range, and I'm not surprised how fast she became a significant contender in a family cruising market.



**HARKEN**



**Raymarine**



Island Style

Active and Relax solutions