



**RFI / 2024 OLYMPIC
MIXED KEELBOAT
OFFSHORE EQUIPMENT**

January 2020

Dear 2024 Offshore Equipment Working Party,

With pride and excitement, we submit our compliant answer to '2024 Olympic Mixed Keelboat Offshore Equipment' Request for Information (RFI) from manufacturers.

Only excellent teamwork can lead to amazing results. That is offshore as well as on shore. Our TEN team already works seamlessly together for a long time and we found perfect bi-continental modus to do so.

Before and during the development of TEN²- the 2nd generation Doublehanded One Design keelboat - we listened to the sailors, the needs of event organisers, some input of MNA's and added extra expertise from the best in class doublehanded champions.

TEN is a One Design class that started in 2008. Things change, mostly for the better and for the RFI we see a perfect match with the One Design requirements of TEN², our 2nd generation One Design Double handed keelboat. But we like to deliver much more than just a keelboat.

Please find herewith our submission; We look forward to discuss further.

Yours sincerely,

Mr. Martin Hingst
on behalf of Team TEN²

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team@Class-TEN2.com

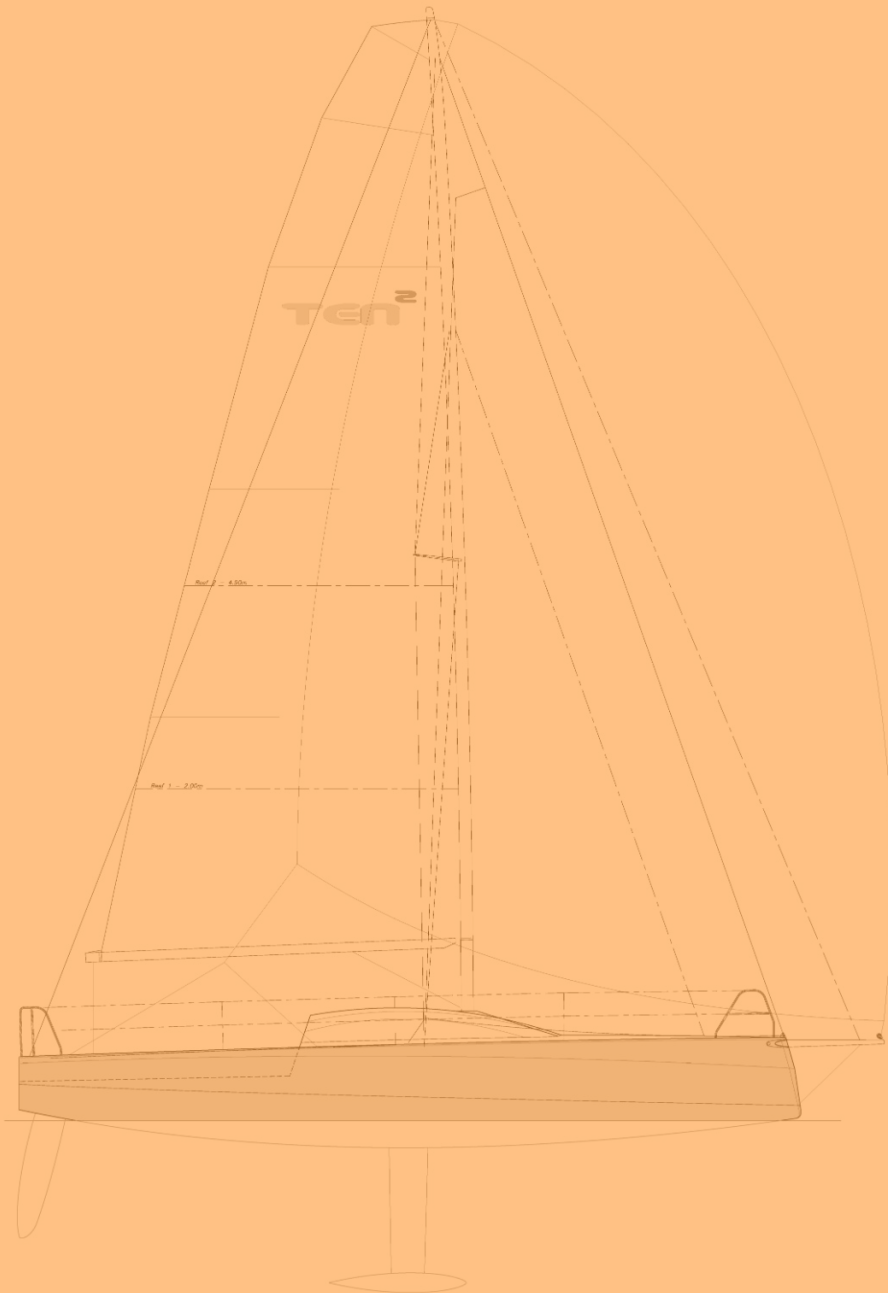


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WHO WE ARE

TEN has always been the best of both worlds in a cooperation between east and west. A compelling design, developed with award winning double handed sailors, the best designers, from a state-of-the-art high-tech facility kind to all budgets.

Dalian, better known as Port Arthur, has a long history of shipbuilding. Since 2010, Dalian became China's National Economic and Technical Development Zone. With knowledge centers fueling development and innovation.

Founded in 2001, Changmei Pleasure-Boat Manufacture Co. LTD. specializes in the production of high-tech sailboats and recently moved to a brand new manufacturing facility in Dalian.

Since the start of TEN in 2008, the Dutch design team is a steady partner in the successful sailing yacht designs and sail plans. Another Dutch partner is responsible for the quality control, compliments the naval craftsmen.

For TEN², award winning double handed champions from Europe have been added to the team to guarantee optimum double handed ergonomics and deck lay-out.

The newly build yachts are sold to North America, Europe, Australia, New Zealand, Asia and manufactured in strict compliance to European CE certification standards.

Specifications

Main dimensions

Length over all: 10.00 m.
Length Waterline: 9.00 m
Beam max: 2.73 m.

Draft: 2.20 m.
Displacement*: 2500 kg

Ballast: 300 kg
Crew weight: 160 kg

Mainsail: 34,70 m²
Jib: 26,00 m²
Assym Spinnaker/code3 100m²

Design

Kees van de Stadt / Satellite Yacht Design

Builder

Changmei Yachts

PRODUCTION

18000m²

brand new high-tech production facility

Over 100 dinghies and keelboats are produced annually

80

skilled yacht craftsmen

New facilities allow annual production of

500 dinghies and keelboats

20

senior engineers

Over 25

produced TEN yachts and over 100 DC22's

Over 12 years complementary partnership between east and west

Current production of 10 keelboat and dinghy models

HOW IT ALL STARTED



HOW IT ALL STARTED

In 2007 two Dutchmen – Frits Brattinga and Piet Bakker- initiated the development of TEN and the fruitful collaboration with Changmei Yachts and the wider international bi-continental team kicked off.

Changmei Yachts and the wider international team successfully launched and developed 1st Generation TEN full crew One Design.

In time, new insights sparked updates and improvements. To serve the growing offshore double handed sailors, an upgrade pack was introduced.

After more than a decade, the 1st generation TEN is updated. The 2nd generation TEN² is improved with the latest performance, safety and double handed insights, and optimized to the latest IRC and ORC rules.

Besides performance, also the exterior and interior of TEN² are future proof and ready for the next decade.

2008



TEN 1ST Generation
full crew One Design



Continuous class
improvements



Design update:
introduction double
handed pack



Continuous class
improvements

2020



2nd Generation TEN²
Double Handed One Design

DESIGN BRIEF

TEN² One Design is an optimized shorthanded racer designed for duos to perform in One Design, IRC and ORC handicap. And a functional interior allows it to be an excellent offshore racer.

TEN² is a 10 meter yacht, designed by Kees van de Stadt / Satellite Yacht Design. The lightweight hull has a sandwich construction of a glass epoxy laminate and a high-tech foam core. By using a modern vacuum method in a mould, the entire construction process is controlled.

Putting performance, ergonomics and safety of the sailors first, the deck layout is clean and with no compromise to boat handling and performance.

The choice of high-end deck-equipment as well as the choice for the right places and ratios makes the TEN² an

excellent boat to race, where boat speeds of 15-20 knots are no exception.

Every TEN² is equipped with a carbon mast to keep the weight and center of gravity as low as possible. Another 300 liter of water ballast allow the duos to increase stability and performance even further.

TEN² complies to Offshore Special Regulations Category 2.

The design considers easy transport in a 40tf container. The 2.2 meter draft liftkeel consists of a composite fin and a lead bulb. The lightweight hull and mast, in combination with the deep bulb keel, gives TEN² a high stability with a low weight.

TEN² is equipped with a 15hp saildrive engine; an e-engine is considered.

TECHNICAL SPECIFICATION

TEN² is a sporty offshore racing boat specifically designed for doublehanded racing.

Construction

TEN² is built in epoxy. The hull and deck are vacuum injected with epoxy in a mould. The result is a strong and stiff hull and extremely suitable for racing.

Also, all the inner parts have a laminate which is laminated with the same procedure

Keel

A retractable keel

Rudder

TEN² is tiller steered. Rudder is a glass fiber epoxy rudder.

Stainless rudder stock and self-aligning bearings.

Mast & Rig

Equiped with a carbon mast, boom ad bowsprit.

1 set Aluminium spreaders and rigging

Double backstay to accommodate the square top mainsail

Windex

Dyneema halyards and trim lines

Outtrigger to improve sheeting angles and reaching performance (for One Design only)

Deck

High-end A-brands deck package.

High-end A-brand winches, stoppers for Halyards and reefing lines.

High-end A-brand jibtracks and mainsail traveller

High-end A-brand forward hatch and portlights in cockpit sides.

High-end A-brand sheets and trim lines

Safety

Stainless stanchions, pulpit and pushpits.

Stainless lifeline to ISAF and OSR specifications.

Dedicated life raft locker underneath cockpit floor.

Safetykit compliant with OSR Category 2

General

1x12V house/service battery (110 Ah)

1x12V start/engine battery (70 Ah)

Led interior and navigational lights.

Switchboard

VHF

Engine

15 Hp inboard Saildrive engine (an e-engine is considered).

Saildrive fitted with a 2-blade folding race propeller

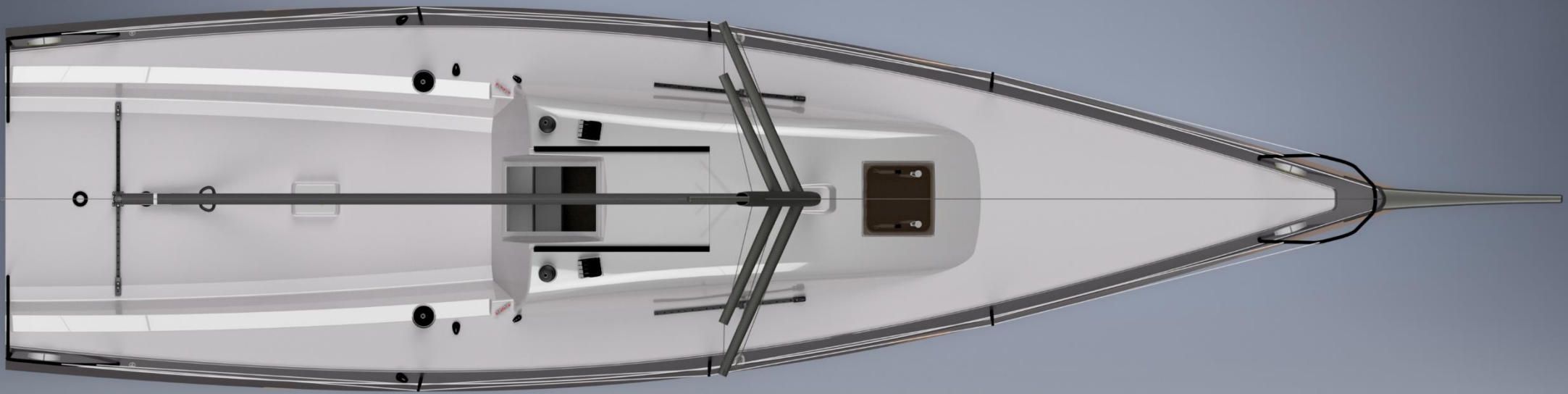
35-liter polyethylene fuel tank

Navigation

High end A-brand navigation system and autopilot package required and specifically for double handed offshore sailing

TEN²

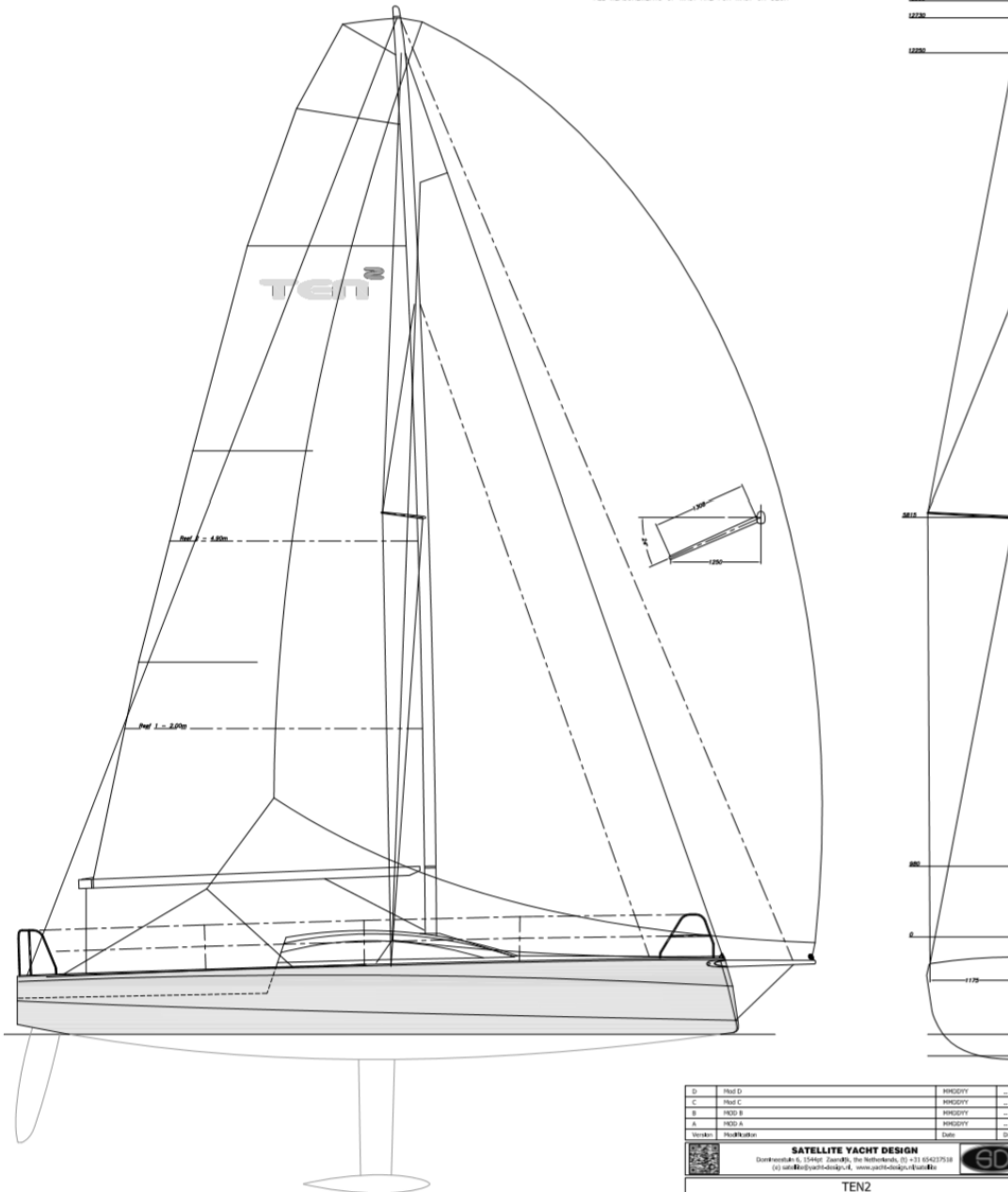
DECK PLAN



MANDATA		SAIL DATA	
Loa	10.00 m	- Mainmast ORC	34.700 m ²
Lwl	9.00 m	MGI	1.800 m
B	2.73 m	MGIU	3.940 m
Draft	2.30 m	MGIJ	2.710 m
Displacement	2500 kg	MGT	1.500 m
Bilgeal	650 kg	MF	25.700 m ²
Crew Weight	150 kg	- Foretriangle IODE	26.600 m ²
IC	12.65 m	- High aspect Jib IRC	4.25 m
ISP	13.15 m	LFL	11.500 m
IP	13.15 m	Leach	10.500 m
J	4.00 m	Foot	4.200 m
Jabl	5.35 m	Headboard	0.400 m
p	11.75 m	Asymmetrical spinnaker	100 m ²
E	4.60 m	code 3 IRC	14.75 m
IRS	1.335 m	SLJ	12.61 m
HU to cw	0.805 m	SL	8.83 m
HU to sw	1.080 m	Headboard	0.02 m
		SMG	8.21 m
RM-30	19.250 mNm		

NOTES FOR SAILMAKER:
 CHECK ALL MEASUREMENTS WITH YARD AND SPANNAKER
 FOR REEFING SYSTEM SEE RIGGING PLAN, 2001-9-0
 MANGSAL AS PER SAILPLAN, MAX ROACH TO BE DEPENDING ON CLOTH PROPERTIES
 2 REEPS, FLATTNER AND CUNNINGHAM IN MAIN
 CLOTH WEIGHTS AND MATERIALS TO BE FINALIZED BY SAILMAKER / OWNER

NOTES FOR SPANNAKER:
 CHECK ALL MEASUREMENTS WITH YARD AND SAILMAKER
 FOR STANDING AND RUNNING RIGGING SEE RIGGING PLAN, 2001-9-0
 MAST HIG TO BE CALCULATED WITHOUT BACKSTAYS
 FOR REEFING SYSTEM SEE RIGGING PLAN 2001-9-0
 ALL MEASUREMENTS OF MAST ARE FOR MAST ON DECK

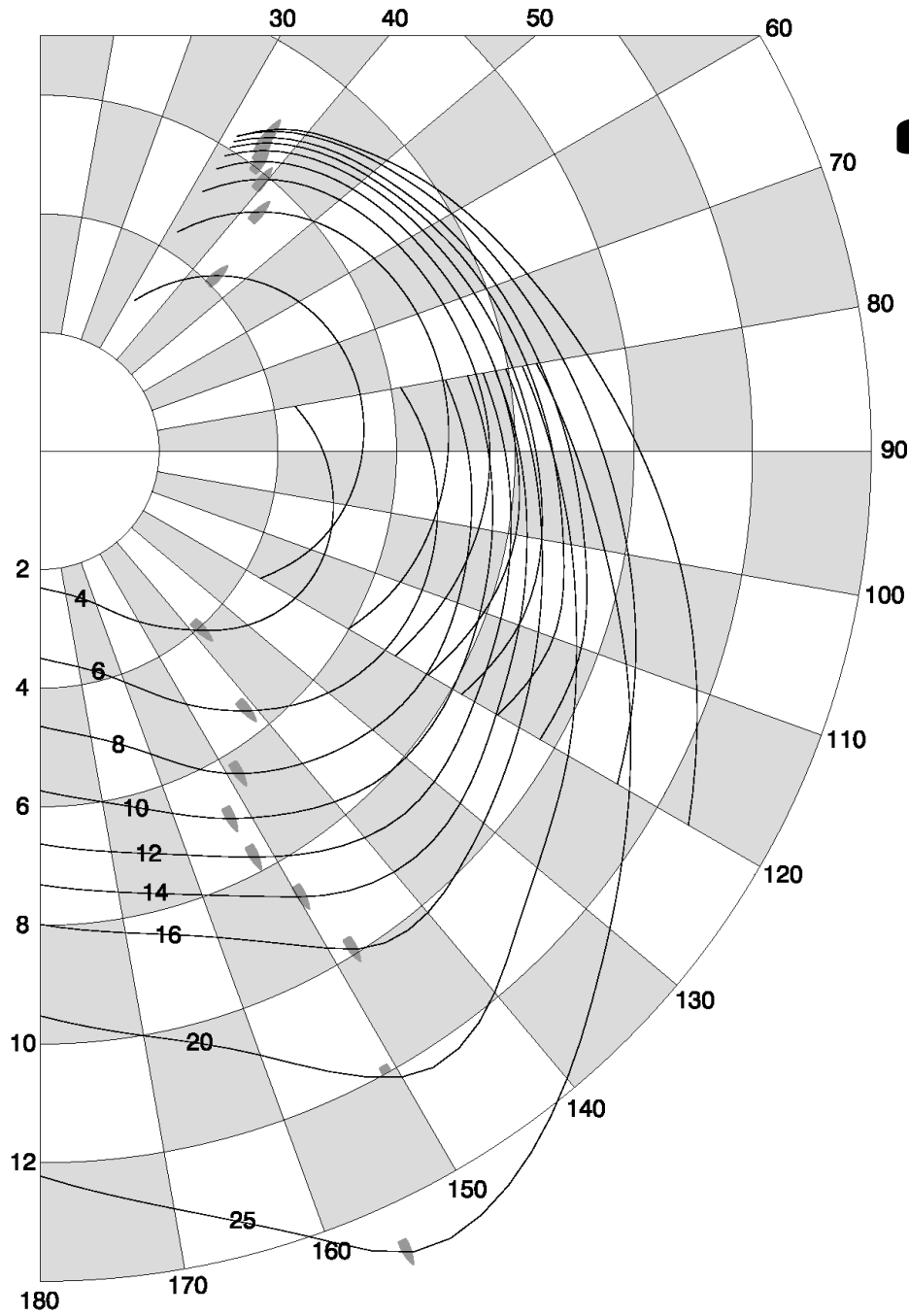


TEN² SAIL PLAN

D	HEAD D	HRIDDY	..
C	HEAD C	HRIDDY	..
B	HEAD B	HRIDDY	..
A	HEAD A	HRIDDY	..
Version	Modification	Date	Drawn
SATELLITE YACHT DESIGN Dordrechtse 4, 3298P Dordrecht, the Netherlands, (t) +31 64275138 (e) sat@satyacht-design.nl, www.satyacht-design.nl			
TEN2 PRELIMINARY SAILPLAN		Scale: 1:25	
Date: 14 JAN 2020		2001-0-8-0	

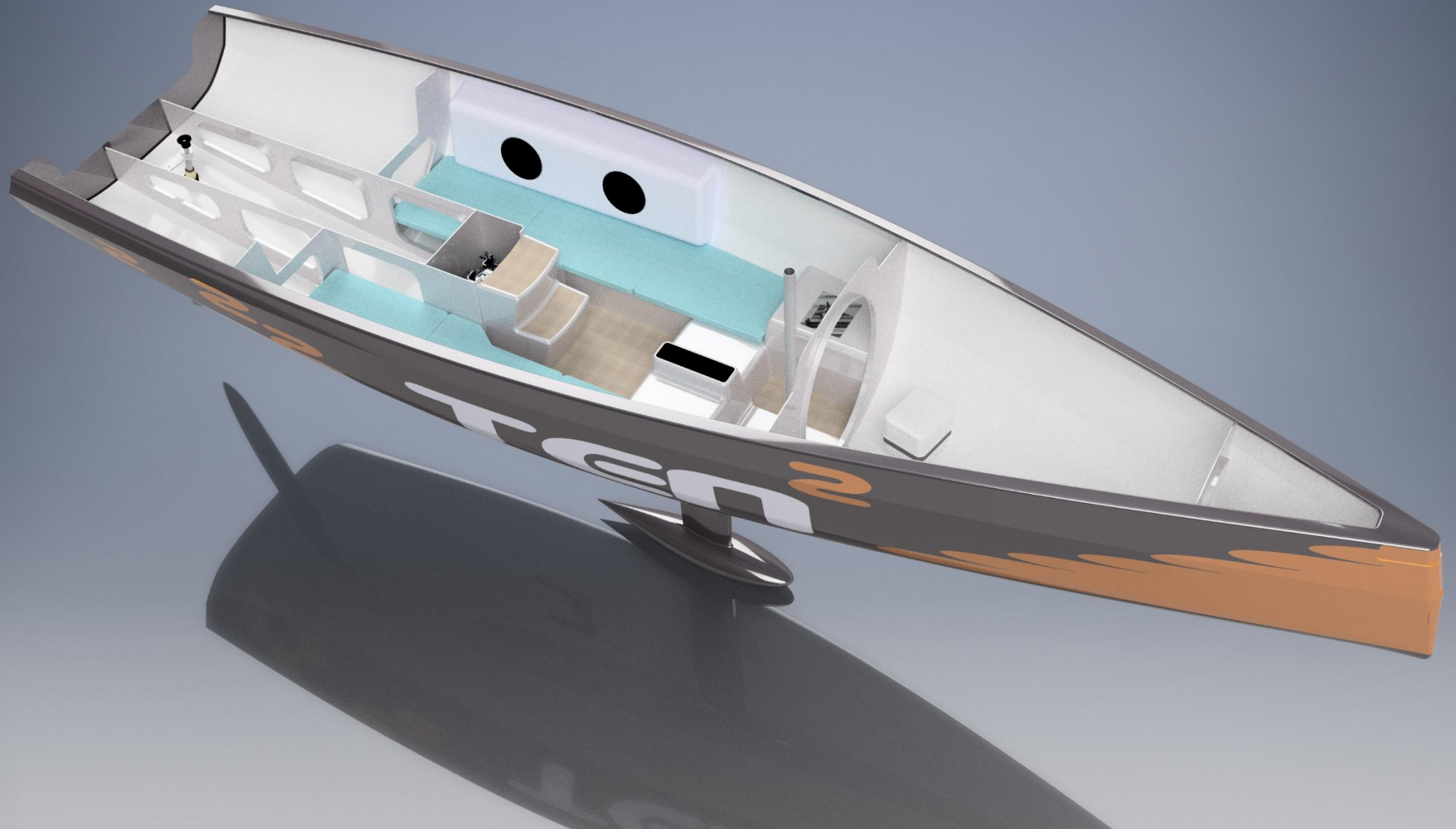
TEN²

POLAR / VPP



TEN²

INTERIOR



OFFSHORE PROPOSITION as a whole

Affordable One Design Offshore Class

High-end offshore racers within budget reach of sailing duos, MNA's and event organizers. All to stimulate large fleets worldwide.

Availability

The brand new high-tech facility has more than enough capacity to increase the supply of TEN² yachts...

By and for Doublehanded winners

European doublehanded offshore champions are actively involved in the design: ergonomics, navigation equipment selection, learnings and deck-layout

IRC and ORC optimized

TEN² is not only a One Design Class optimized for doublehanded sailing. The specialists envisioned an extension of offshore race options and optimized

TEN² to compete successfully in worldwide IRC and ORC offshore races.

Mobile

With the design, easy handling and transportation has been considered. TEN² is easily transported in a 40ft container or can be trailered to its next event.

Events

We will actively support sailors, events and MNA's to allow a good preparation, fair qualification and level playing field for the sailing duos.

Quality

TEN² is designed in accordance with the Offshore Special Regulations Category 2 and all newly build yachts are manufactured in strict compliance to European CE certification standards. Including a World Sailing / ISAF building plan review certificate issued from a notified body recognized by World Sailing.

Engagement with the fans, friends and wider audience

By design we include video points to allow the public to virtually experience offshore sailing with the sailing duos.

WHAT SAILORS ARE SAYING

Lars Bergkvist* (Torshälla, Sweden)

"I am the owner of TEN number 2. I bought it early 2019 in Holland and brought it home to Sweden.

We have competed in a number of regattas, mostly doublehanded.

I believe it to be a very good doublehanded racer as is it very easy to sail on two people, the cabin is well planned for sleeping during long races where you have to rest. The boat is very stable, we race it with two people in 40 knots of wind with a jib 3 and only one reef in the mainsail.

The boat goes easy up to plane and is stable in boat speeds around 16-20 knots.

The rig is easy to handle, and we have our boat on a trailer, so we have her behind our car and goes to different regattas. To put her in the water, put on the mast and sails is taking us 2 hours, which is easy to handle.

** Contact details will be shared to the technical committee upon request*

Regarding results:

On the Around the Baltic Race (Gotland Runt) , we raced on 6 people. 350 Nm, started Sunday, finished Tuesday afternoon. The last 40 hours the wind was between 30 and 42 knots. The boat functioned very well and we came 5th of 47 boats. Overall for the regatta there were 210 boats starting and only 105 finishing, due to the rough seas and high wind speeds. This race is an offshore race.

On Nordic Yachts Open, a doublehanded regatta, we won the whole regatta - 112 boats were starting. High wind between 20 and 28 knots.

We also won the last regatta for the year: Byxelkroken. 38 boats participated. OK winds during Saturday and high winds (up to 42 knots) on the Sunday. This regatta is 2 x 31 Nm, half is inshore and half is offshore.

Overall, a well built and very well-functioning doublehanded boat. Safe, fun and very quick."

WHAT SAILORS ARE SAYING

Ren Xiujuan* / Dalian Tuo En Sailing Team (Liaoning Province, China)

We have sailed TEN actively for 2 consecutive years in the racing circuit. With its 33feet, TEN has been the little brother of all 56 teams. Reflecting back on those 2 years, I believe in comparison with the larger sailing boats, TEN is more direct and you are more in touch and allows more to benefit from the elements, like tidal effects. Driving TEN stimulates sailors to really benefit and get in touch with the elements. Feeling the charm of the sea, without fearing it's challenges.

Hans, one of the Dutch sailors in our crew put it nicely: "I am thrilled to drive TEN in this years offshore competition TEN is a small, but very fast boat. The crew managed to sail 20 knots downwind (two Dutch sailors, together with the Chinese crew). It was challenging and we gave it our best. We are excited that we won the offshore championship.

Li-Xin, a crew member from Shanghai, China, said: "This is my second time participating in offshore racing competition. Sailing on a newer type of TEN. After racing I concluded her performance, speed, smoothness and operability are superior. Her stability is great, even when sailing 20knots at 35 knots of wind. It is one of the fastest and competitive racing boats I have sailed in full-crew configuration. It was fun, hard work, and the overall sailing was comfortable.

** Contact details will be shared to the technical committee upon request*

Our achievements in 2019:

Hainan International Round the Island Regatta 2019

Haikou to Sanya: 2nd place in IRC3

Haikou-Sanya: TEN Class Champion

Sanya-Haikou: 2nd place in IRC3

Sanya-Haikou: 2nd place TEN Class

Overall competition

IRC3 Champion

TEN Class champion

3rd in IRC3

2019 China-Korea International Rally

Leg 1 - Champion of the Round Liugong Island

Leg 2 – 2nd place of the Sinwanjin International Long-distance Race

Leg 3 - 2nd place of the Sinwanjin International Regatta

The 6th China Bohai Rim Sailing Rally

1st place and champion

Last but certainly not least: I hope that very soon we have a chance to experience the optimized and upgraded TEN2 and I look forward to her arrival!

WHAT SAILORS ARE SAYING

Hong Gao* (China)

“

My TEN story and recommendation:

I came across Ten at 2011's Shanghai Boat Show. It was a love at first sight.

At the time I was a novice sailor.

We trained with our team in Sanya . At the Sanya stop-over of the Volvo Ocean Race we were invited to visit the Volvo racers. It was magnificent! And I realized, to me, TEN is like a mini Volvo Ocean offshore racer! Since then, TEN class is part of the annual China Cup and Round Hainan Regatta, the biggest sailing events in China. In the China Cup, we sail TEN from Sanya to Hong Kong, back and forth multiple times, adding to a 520

NMs offshore race. During the Hainan Regatta, in week we sail Round Hainan Island offshore Races.

We sail TEN on a weekly basis. To many Chinese novice sailors, the first encounter and evolving love to sailing is through TEN yachts. Quite some of them have proceeded a fulltime job in the field of sailing.

TEN sails beautifully. It gives a comfortable sense of control and is also easy to maintain. We as new sailors have learnt everything from the boat.

Feel free to contact me if you have any questions about our experience with Ten.”

** Contact details will be shared to the technical committee upon request*

WHAT SAILORS ARE SAYING

Wang Jun* / team Anqi (Heilongjiang Province, China)

Every year we take part in China's Hainan Round Island Regatta, as well as the Sinan Cup and the China Cup with TEN 'Anqi'

The 2019 Hainan Round the Island Regatta was an edition with winds of around 30 knots, where we managed to reach a boat speed of 20 knots. At that time, the mainsail was not retracted, and an A2 sail was used. Team Anqi finished third in IRC3 and reached an overall 3rd place in the TEN class.

In 2018, we raced in the Sinan Cup in China. With wind speeds of about 25 knots we managed boat speeds of about 18 knots. We sailed with a trimmed mainsail and the A4.

Every year, we sail the offshore race Dalian and Sanya. Last edition we experienced a maximum of about 40 knots of visual wind, which allowed us to reach boat speeds of 22 knots. With two helmsmen and a crew on board, we sailed at an average speed was 10 knots and we covered 360 Nautical Miles in 36 hours.

To summarize our TEN experience so far: a very strong and durable hull, there is no resonance at high speeds, the rudder is very strong, the lift-keel is easy to dismantle for transportation. We would like to consider a special trailer for transportation.

** Contact details will be shared to the technical committee upon request*



WHAT SAILORS ARE SAYING

Martin Hingst* (Joure, The Netherlands)

I

bought my TEN in 2009 and sailed her in The Netherlands for 4 years. The circuit I active raced in were full crew, doublehanded as well as singlehanded races.

Results:

Schuttevaer Race / a 3 days race on sea.

2nd place and line honors (2010), and line honors (2011)

Round North Holland Race / a 100 NM inshore and offshore race .

3rd place ORC and 5th on line honors (2011)

2nd place ORC and 2nd on line honors.(2012)

50 miles Doublehanded Race (boats <35ft)

1st place each consecutive year in 2009, 2010, 2011 and 2012

24 hours race (more than 850 boats participated!)

1st place (2010)

200 Miles Solo:

2nd place and line honors (2011)

** Contact details will be shared to the technical committee upon request*

100 BOATS RESULTS

In addition to the listing in the recommendations of the sailors, below a limited selection of results mainly from Swedish, Dutch and Chinese teams:

China Cup

The Ten has participated in the China Cup the last seven years and conquering five years a podium position of which 2x number one positions (2016, 2018), 2x a second place (2011, 2018) and 1 bronze position (2017).

Hainan Round Island Offshore Race:

For the last 5 years TEN participates successfully in the Hainan ocean race (480 NM race around the island of Hainan, China). Each year was a podium success, and in 2019, 1st, 2nd and 3rd place were won by TEN teams.

1st place (2019), 2nd place (doublehanded in 2017, 2019) and 3rd (2016, 2018, 2019)

Gotland Runt

On the Around the Baltic Race (Gotland Runt), 350 Nm, started Sunday, finished Tuesday afternoon. The boat functioned very well and we came 5th of 47 boats.

Overall for the regatta there were 210 boats starting and only 105 finishing, due to the rough seas and high wind speeds. This race is an offshore race.

On Nordic Yachts Open

Number one and winner out of 112 boats participating in this Doublehanded regatta.

Byxelkroken

Winner of doublehanded Byxelkroken regatta of 2 x 31NM, half inshores and half is offshore. (out of 38 participants).

50 miles Doublehanded Race

Doublehanded racing in The Netherlands for boats <35ft, in large fleets >100 yachts.

1st place each consecutive year in 2009, 2010, 2011 and 2012

200 Miles Solo

2nd place and line honors (2011) in The Netherlands

24 hours race

1st place (2010) a Dutch race with a fleet of more than 850 yachts!

Recommendation

HAINAN REGATTA SUPPORT LETTER

Date: January 14, 2020
To: Offshore Equipment Working Party
From: Hainan Ocean Race CO., Ltd

Dear 2024 Offshore Equipment Working Party,

We, the Hainan Ocean Race CO., Ltd are the second largest sport event organization in China. In more than a decade we had the honor to host events with the world's best sailors.

The current TEN fleet is not unknown to us. With this letter we support the TEN2 mixed offshore submission. We trust the suitability of TEN2 class as an exciting, sustainable, doublehanded keelboat for the next decade.

To underpin our support, we propose TEN2 class test event and thus encourage the mixed offshore sailing teams on their road to the Olympic Games in 2024.

It remains our ambition to continuously organize the 'best-in-class' events to facilitate the best sailors of the world achieving impressive achievements.

Yours sincerely,

CHEN Xiaohua
General Manger of Hainan Ocean Race CO., Ltd





TEN²

LET'S GET IN TOUCH!
team@Class-TEN2.com

CLASS TEN² INTERNATIONAL PARTNERS:

CHIANGMEI YACHTS

SATELLITE YACHT DESIGN

WILFERSAILS

PROJECT MADE IN HOLLAND.COM