

INTERNATIONAL SOTO 40 – OD CLASS RULES 2017



INTRODU	CTION	. 4
PART I – A	ADMINISTRATION	5
SECTIO	N A - GENERAL	5
A.1	LANGUAGE	5
A.2	ABREVIATIONS	5
A.3	AUTHORITIES	5
A.4	ADMINISTRATION OF THE CLASS	5
A.5	WORLD SAILING RULES	5
A.6	CLASS RULES CHANGES	6
A.7	CLASS RULES AMENDMENTS	6
A.8	CLASS RULES INTERPRETATION	6
	INTERNATIONAL CLASS FEE AND WORLD SAILING BUILDING PLAQUE	6
A.10	SAIL NUMBERS	6
A.11	MEASUREMENT CERTIFICATE	6
A.12	INITIAL CERTIFICATE	7
A.13	VALIDITY AND RE-ISSUE OF THE MEASUREMENT CERTIFICATE	.7
A.14	BOAT RE-CERTIFICATION PROCEDURES	7
A.15	RECORD OF MEASUREMENT	7
SECTIO	N B – BOAT ELIGIBILITY AND EQUIPMENT INSPECTION	8
B.1	CLASS RULES AND CERTIFICATION	8
B.2	CLASS ASSOCIATION MARKINGS	8
B.3	EQUIPMENT INSPECTION	8
B.4	EVENT LIMITATION MARKS	8
PART II –	REQUIREMENTS AND LIMITATIONS	9
SECTIO	N C – CONDITIONS FOR RACING	9
C.1	GENERAL	9
C.2	CREW	9
C.3	PERSONAL EQUIPMENT	9
C.4	ADVERTISING	9
C.5	PORTABLE EQUIPMENT	9
C.6	BOAT	0
C.7	HULL	0
C.8	HULL APPENDAGES	1
C.9	RIG	1
C.10	SAILS	3
SECTIO	N D – HULL1	14
D.1	GENERAL	4
D.2	MODIFICATIONS, MAINTENANCE AND REPAIR	4
SECTIO	N E – HULL APPENDAGES1	15

GEN	ERAL	15
SECTIO	ON F – RIG	15
F.1	PARTS	15
F.2	GENERAL	15
SECTIO	ON G – SAILS	15
G.1	GENERAL	15
G.2	MAINSAIL	16
G.3	GENOA	17
G.4	JIB	18
G.5	SPINNAKER	19
PART III -	APPENDIXES	21
APPEN	DIX 1	21
POSITI	ONING OF CORRECTOR WEIGHTS	21
APPEN	DIX 2	22
POSITI	ONING OF THE SOTO 40 OD CLASS EMBLEM	23
APPEN	DIX 3	23
RUNNI	NG RIGGING SPECIFICATIONS	23

INTRODUCTION

This introduction only provides an informal background and the International Soto 40 Class Rules proper begin on the next page.

The Soto 40-OD is a One Design Class of fast, monohull keelboats for high quality level racing, created to enhance and maintain equality above all boats, where the ability of crews is the determining factor.

The intention of these International Soto 40-OD Class Rules is to ensure the boats are as identical as possible.

Soto 40 hulls, hull appendages and rigs are manufactured controlled and shall only be produced by a manufacturer licensed by the Copyright Holder, Soto Acebal Naval Architects. Equipment is built in accordance with the Soto 40 Building Specification. These parts having left the manufacturer may only be altered to the extent permitted in Section C of the class rules.

Soto 40 sails are measurement controlled and may be made by any manufacturer. In order to confirm compliance with the class rules sails are required to be certified by an official measurer or by a manufacturer licensed under the World Sailing In House Certification scheme. These parts may only be altered to the extent permitted in Section C of the class rules after certification control has been performed.

PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

PART I – ADMINISTRATION

SECTION A - GENERAL

A.1 LANGUAGE

- A.1.1 The official language of the class is English, and in case of dispute over translation the English text shall prevail.
- A.1.2 The word "shall" is mandatory and the word "may" denotes permissive.

A.2 ABBREVIATIONS

- A.2.1 WS World Sailing
 - MNA World Sailing Member National Authority
 - MG Management Group
 - RCA Regional Class Association
 - ERS Equipment Rules of Sailing
 - RRS Racing Rules of Sailing
 - OSR Offshore Special Regulations (www.sailing.org/specialregs)
 - S40-OD International Soto 40 One Design Class
 - LM M Boats or Manufacturers Licensed by M Boats

A.3 AUTHORITIES

- A.3.1 The international authority of the class is World Sailing, which shall cooperate with the International Soto 40 One Design Class (S40-OD) in all matters concerning these **Class Rules**.
- A.3.2 In accordance with the S40-OD Class Bylaws, the Executive Committee is the governing authority of the class.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 World Sailing has delegated its administrative functions of the class to S40-OD.
- A.4.2 The S40-OD may delegate part of its functions to a RCA.
- A.4.3 The Management Group (MG) is the class executive body and it will be composed by:
 - (a) Two members of the Executive Committee (One of whom should be the class vice-president, who will be the MG president)
 - (b) A representative of Studio Soto-Acebal (the designer)
 - (c) A representative of the builder
 - (d) Two external consultants (technical advisers), appointed by the Executive Committee
- A.4.4 The MG shall appoint the Class Chief Measurer.
- A.4.5 **Boats** shall be measured only by **Official Measurers** approved by the MG.

A.5 WORLD SAILING RULES

- A.5.1 These **class rules** shall be read in conjunction with the ERS.
- A.5.2 Except where used in headings, when a term is printed in "bold" the definition in the ERS applies and when a term is printed in "italics" the definition in the RRS applies.

A.6 CLASS RULES CHANGES

A.6.1 At Official Class Events, World Sailing Regulation 10.5(f) applies. At all other events RRS 86 applies.

A.7 CLASS RULES AMENDMENTS

A.7.1 Amendments to these **class rules** are subject to the approval of World Sailing in accordance with the World Sailing Regulations.

A.8 CLASS RULES INTERPRETATION

A.8.1 Interpretation of **class rules** shall be made in accordance with the World Sailing Regulations.

A.9 INTERNATIONAL CLASS FEE AND WORLD SAILING BUILDING PLAQUE

- A.9.1 The licensed **hull** builder shall pay the International Class Fee.
- A.9.2 World Sailing, after having received the International Class Fee for the **hull**, shall send the World Sailing Building Plaque to the licensed **hull** builder.

A.10 SAIL NUMBERS

A.10.1 Sail numbers shall correspond to the identification **hull** number.

A.11 MEASUREMENT CERTIFICATE

- A.11.1 A measurement **certificate** shall be issued and signed by the Class Chief Measurer and the president of the MG, after receiving proof of payment of the fee and the documentation of the **Official Measurer** that shall contain, in addition to all measures taken, the following information:
 - (a) Sail number
 - (b) Owner / Member of the class
 - (c) Name of the boat
 - (d) World Sailing Plague No.
 - (e) Date of issue of initial certificate
 - (f) Date of issue of certificate
 - (g) Builder details
 - (h) Rig manufacturer details
 - (i) The Official Measurer identification
 - (j) Section D, E & F Modification, Maintenance and Repair details if any.

- A.11.2 A copy of the **certificate** shall be on board while racing.
- A.11.3 **Certificates** are available at request to anyone, from the Class Authorities. A fee may be asked for this service.

A.12 INITIAL CERTIFICATE

- A.12.1 A **boat** shall meet the following requirements prior to receive its first measurement certificate:
 - (a) The builder shall submit to the MG the Building Compliance Certificate (BCC) and the Rigging Conformity Certificate (RCA).
 - (b) The Official Measurer shall complete the measurement form.
 - (c) The documentation and proof of payment of the Certificate fee set by the class shall be sent to the **Class chief Measurer**.
- A.12.2 Upon receipt of all documents in a satisfactory manner, the **Class Chief Measurer** may issue the original Measurement Certificate.

A.13 VALIDITY AND RE-ISSUE OF THE MEASUREMENT CERTIFICATE

- A.13.1 A Measurement Certificate if invalid, may be re-issued by the Class Chief Measurer together with the President of the MG only if the **hull** conforms to the **class rules** and:
 - (a) When the Measurement Certificates expires. The Measurement Certificate expires on the 31st December of the year the Certificate was issued, except for provisional certificates which expire on the date specified in the certificate.
 - (b) When there is a change of owner / loss of membership in the class.
 - (c) When it is invalidated under A.11.1(k) at its discretion. Any remedial work shall be recorded on the re-issued **certificate**.
 - (d) When the **Official Measurer** detects anomalies during the measurement or inspection of a **boat**, after sending the relevant information to the Class Chief Measurer and in agreement with the MG.
 - (e) Upon the issue of a new **certificat**e.

A.14 BOAT RE-CERTIFICATION PROCEDURES

- A.14.1 During the period starting 15 days before the expiration date, the owner shall send to the Class Chief Measurer a **hull** re-certification application, together with the respective proof of payment of the fee set by the class.
- A.14.2 In case of change of ownership the new owner shall send a **hull** recertification application, together with the corresponding proof of payment of the fee set by the class.
- A.14.3 If at any moment, an **Official Measurer** observe that there are changes that invalidates the **Certificate** under A.11.1(k), the owner shall send to the Chief Measurer a **boat** re-certification application, along with the documentation from the **Official Measurer** concerning the changes done/observed on the **boat**, with the corresponding proof of payment of the fee if so set by the class. Any remedial work shall be recorded on the re-issued **Certificate**,

A.15 RECORD OF MEASUREMENT

A.15.1 The Class Chief Measurer and the **Official Measurer** involved in the measurement of a **boat** shall retain copies of all documents relating the measurements made for the issue of a **certificate**.

SECTION B- BOAT ELIGIBILITY AND EQUIPMENT INSPECTION

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

B.1 CLASS RULES AND CERTIFICATION

- B.1.1 The **boat** shall:
 - (a) Be in compliance with the class rules.
 - (b) Have valid manufacturer's declaration.
 - (c) Have an annual declaration sticker on all sails used for class racing.

B.2 CLASS ASSOCIATION MARKINGS

- B.2.1 A valid Class Association Sticker, if required by the NCA or the S40-OD, shall be affixed to the **hull** in a conspicuous position.
- B.2.2 Sails shall carry an International Class Association Sail Label.

B.3 EQUIPMENT INSPECTION

- B.3.1 In the case of a dispute at an event alleging non-compliance with **class rules**, building specification and/or construction manual where specific measurements are not stated, the Event **Equipment Inspector** shall adopt the following procedure:
 - (a) A sample measurement of the disputed item shall be obtained by taking the identical measurement from a randomly selected group of **boats** or items of equipment (control group).
 - (b) The measurement of the disputed **boat** or items of its equipment, taken using the same technique as above, shall be compared to the sample.
 - (c) If any of the measurements obtained from the disputed **boat** or item of equipment lie outside the corresponding range of measurements found in the control group, the matter together with the details of the measurement methods and any other relevant information shall be referred to the Race Committee.

B.4 EVENT LIMITATION MARKS

B.4.1 If an event uses **event limitation marks** these marks shall not be removed during the event. If the **event limitation mark** becomes damaged or lost this shall be reported to the race committee as soon as possible.

PART II - REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

The rules in Part II are closed class rules.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

- (a) OSR Offshore Special Regulations, changed as indicated on C.5.1shall apply.
- (b) RRS 50.4 does not apply.
- (c) The ERS Part I Use of Equipment shall apply.

C.2 CREW

C.2.1 HELMSMAN ELIGIBILITY

At Class Events (see RRS 89.1(e)), it shall not be helmsman in a S40-OD **boat** who in the past 10 years from the day of the first race:

- (a) has been competing as **crew** in an America's Cup event/Americas Cup Classification Series, or
- (b) has been competing as a crew in an Olympic Sailing Competition, or
- (c) has been competing as **crew** in a Volvo Ocean Race.

C.2.2 CREW WEIGHT

The maximum weight of the **crew** dressed in shorts and T-shirts shall not exceed 770 kg.

C.3 PERSONAL EQUIPMENT

C.3.1 **Personal equipment** shall comply with the minimum standard World Sailing OSR Category 4.

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with the World Sailing Advertising Code. (See World Sailing Regulation 20).

C.5 PORTABLE EQUIPMENT

C.5.1 ISAF OFFSHORE SPECIAL REGULATIONS

The **boat** shall be equipped with the minimum standard World Sailing Offshore Special Regulations Category 4.

(a) EXCEPTIONS

The following are exceptions to the aforementioned safety equipment:

(1) Rule 3.18.2: A permanently installed toilet or a fixed bucket. It is allowed a bucket.

- (2) Rule 3.19.2: Bunks permanently installed. The bunk beds shall not be modified, except that it is allowed to NOT carry the associated mattresses.
- (3) Rule 3.20.1: Kitchen permanently installed or fixed for safe sailing.
- (4) Rule 4.01.2 Sail numbers and letters to be displayed by alternative means when none of the numbered **sails** is set.
- (5) Rule: 4.26.4g: A trysail, or manner to reduce the area by more than 40%.
- (6) Rule: 4.26.4f: A storm jib, with an alternative system of attachment to the forestay.

C.5.2 MANDATORY

(a) One anchor of not less than 12 kg in weight and with not less than 25 m of line.

C.5.3 OPTIONAL

- (a) FOR USE
 - (1) Any electronic or mechanical timing devices
 - (2) No more than one magnetic compass
 - (3) Any mooring lines
 - (4) Water Bottle Holders
 - (5) Any instrument to measure wind direction or wind speed, as long as it is not positioned more than 1 meter away from any part of the **boat**.
 - (6) Any binoculars
 - (7) Any navigation instruments
 - (8) Any tools
 - (9) Any **sails** Repair Kit
 - (10) Any spare Parts
 - (11) Water and food in reasonable quantities for the number of **crew** and the duration of the race.

(b) NOT FOR USE

- (1) Laser guns, radar or any other device to calculate distances to a competitor
- (2) Modems, telephones, telemetry or any other device used in order to access the internet and/or transmit or receive data from the **boat**
- (3) Any form of ballast, other than those indicated at the measurement certificate
- (4) The movement of any equipment from its position, other than for its use.

C.6 BOAT

C.6.1 WEIGHT

The **boat weight** taken in dry condition, excluding **sails** and all portable equipment as listed in C.5 shall be no less than 4290 kg.

C.6.2 CORRECTOR WEIGHTS

In case a **boat** does not reach the construction minimum weight of 4290 kg, official S40 **corrector weights** shall be permanently fastened in accordance with

Appendix 1 Corrector Weights. These S40 lead plates are standard and the Official Measurer together with the owner shall choose the best combination of them to reach the necessary amount. Installation shall be approved by the Official Measurer, recorded on the Measurement Certificate and not be altered by the Owner.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without the approval of the MG:

MODIFICATIONS

- (a) The installation of shell valves for the equipment described in C.5.3 (a).7, and the installation of windows for viewing the **keel** and **rudder** in the locations specified by the builder. The shell valves installed by the builder shall not be removed unless permitted by the **Class Chief Measurer**.
- (b) Holes and local reinforcement in the **hull** for the fitting of electronic navigational systems
- (c) Placement of additional fairleads on deck.
- (d) The addition of rope bags on deck
- (e) The addition of winch handles holders/pockets on deck.
- (f) The addition of footrests on deck.
- (g) The addition of cleats & clam cleats on deck.

MAINTENANCE

- (h) Cleaning and **hull** surface work like light sanding, painting and polishing which do not change the shape of the **hull** or other parts.
- (i) Waxing and polishing of the **hull** external surfaces may be done only above the waterline.
- (j) Light sanding of the **hull** topside gelcoat surface prior to painting.

REPAIR

(k) Minor repairs.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without the approval of the MG.

MODIFICATIONS

(a) The **hull appendages** may be lightly sanded for the purpose applying paint.

MAINTENANCE

(b) The **hull appendages** may be lightly sanded for keying and then repainted or recoated.

REPAIRS

(c) Minor repairs

C.8.2 LIMITATIONS

(a) Only one **rudder** and one **keel** shall be used during an event, except when and item has been damaged beyond repair. The replacement shall be made with the approval of the Race Committee.

C.9 RIG

C.9.1 MODIFICATIONS MAINTENANCE AND REPAIR

The following is permitted without the approval of the MG MAINTENANCE

(a) The **mast**, **boom** and **bowsprit** may be lightly sanded and repainted or recoated.

REPAIRS

(b) Minor repairs.

C.9.1 MAST

- (a) LIMITATIONS
 - (1) The **mast** shall not be adjusted while racing.
 - (2) The foretriangle Base (J), shall not be more than 4850 mm.
 - (3) The horizontal distance between the forward end of the **Foretriangle Base** to its closest point of the boat's stem shall be Min 175mm and Max 185mm.
 - (4) Only one **mast** shall be used during an event, except when it is damaged beyond repair. The replacement shall be made with the approval of the Race Committee.

C.9.2 BOOM

(a) DIMENSIONS

	minimum	maximum
Limit mark width	25mm	-
Outer point distance	-	5800mm

(b) LIMITATIONS

- (1) The intersection of the aft edge of the **mast** and the top of the **boom**, each extended as necessary, shall not be below the upper edge of the **mast lower limit mark** when the **boom** is at 90° to the **mast**.
- (2) Only one boom shall be used during an event, except when it has been lost or damaged beyond repair, and the race committee has approved the substitution.

C.9.3 BOWSPRIT

(a) DIMENSIONS

	minimum	maximum
Length including attachments		1590 mm
Weight including attachments	3 kg	5 kg
Bobstay Length	1605 mm	

C.9.4 STANDING RIGGING

- (a) LIMITATIONS
 - (1) Rigging screws (turnbuckles) shall not be adjusted while racing.
 - (2) Backstay adjustment is permitted
 - (3) Only one set of **standing rigging** shall be used during an event, except when an item has been lost or damaged beyond repair. A

replacement shall only be made with the approval of the race Committee.

C.9.5 RUNNING RIGGING

LIMITATIONS

- (a) It shall comply with the specifications in Appendix 3 (Running Rigging Specifications).
- (b) The main halyard shall have a 2:1 purchase and shall be capable to be hold below deck with a jammer attached to the mast. It may be redirected to one of the Genoa winches through a block attached to the mast base.
- (c) The bow halyards for the Genoa and two asymmetric spinnakers at the top shall be blocked only using the jammers that are on deck behind the mast.
- (d) There shall be two backstays fitted, with a maximum length of 18570 mm each. They shall be connected to a 3:1 reduction on the transom, at a minimum distance of 295mm and a maximum distance of 305mm taken from the centerline. It is allowed the use of elastic ropes (bungee) to keep the leeward backstay close to the **mast**, provided that the elastic ropes don't pull the upwind backstay and are mounted outside of the **mast**, fully accessible for inspection.

C.9.6 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without the approval of the MG.

MODIFICATIONS

- (a) Running **rigging** may be replaced. Replacements shall be made according to C.10.5.
- (b) The mast may be slightly sanded and repainted or recoated

MAINTENANCE

(c) Any maintenance of the **running rigging** is permitted as long as it complies with these class rules.

REPAIR

(d) Minor repairs.

C.10 SAILS

C.10.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without prior approval of the MG:

MODIFICATIONS

- (a) Addition of tell tales
- (b) Addition of camber stripes
- (c) Battens located at the top **batten pockets** on the **mainsail** may be replaced by carbon battens

MAINTENANCE AND REPAIR

(d) Routine maintenance such as fixing small rips, replacement of damaged pockets, additional reinforcement and placement of chaffing patches is permitted without re-measurement and **re-certification** but, during an event, authorisation from the Race Committee has to be given before starting this kind of work.

C.10.2 LIMITATIONS

- (a) There is a maximum of **sails** a **boat** can purchase per calendar year (prior payment of the corresponding fee). The amount and type is as follows:
 - (1) 1 Mainsail
 - (2) 2 Genoas
 - (3) 1 Jib
 - (4) 3 Asymmetric Spinnakers
- (b) The **sails** shall have attached the class measurement sticker and the current annual declaration sticker near the tack.
- (c) Sails have to be measured, certified and stamped before the end of the year by the **official measurer** before receiving the current annual declaration sticker.
- (d) An annual declaration sticker shall only be assigned to one **sail** and is only valid on the year of purchase.
- (e) Not more than the following declared **sails** (with annual declaration sticker for that boat) may be used during an Official Class Event except when C.10.2 g applies:
 - (1) 1 Mainsail
 - (2) 2 Genoas
 - (3) 1 Jib
 - (4) 3 Asymmetric Spinnakers
- (f) All sails declared for an event shall be on the boat at all times during the race unless authorised differently by the Race Committee.
- (g) Sails declared for an event shall not be replaced unless authorised by the Race Committee. If a sail needs being replaced it shall only be done with a sail with the annual declaration sticker and the class measurement sticker, and shall not be in better condition than the replaced sail. This is only to the discretion of the event measurer.
- (h) **Sails** with annual declaration stickers shall only be used on the **boat** assigned by the sticker unless otherwise authorized by the MG.

C.10.3 ADDITIONAL SAILS

(a) A **boat** may obtain additional declared **sails** depending on the number of races sailed during the official calendar year of the S40-OD as follows:

After 10 races sailed
 After 30 races sailed
 After 50 races sailed
 After 50 races sailed
 After 70 races sailed
 additional annual declaration sticker
 additional annual declaration sticker
 additional annual declaration sticker

To obtain the additional declaration annual stickers, the owner shall complete and submit the form "Additional Sails" to the MG for approval.

C.10.4 SAILS FOR CHARTERED BOATS

Chartered **boats** may be used with other declared **sails** only with the authorisation of the MG.

SECTION D - HULL

D.1 GENERAL

D.1.1 RULES

The **hull** shall comply with the **class rules** in force at the time of initial **certification**.

D.1.2 IDENTIFICATION

Each **hull** shall have a World Sailing Plaque with the same number as the serial number of the **hull** and it shall be located on the starboard aft cockpit side.

D.1.3 MANUFACTURERS

The **hull** shall be built by a LM and according to the building specifications.

D.2 MODIFICATIONS, MAINTENANCE AND REPAIR

Any modification, maintenance or repair different from the ones described in Section C may be done by anyone after approval from the **Chief Measurer**. This may require the **certificate** to be re-issued stating the work done.

SECTION E - HULL APPENDAGES

E.1 GENERAL

E. 1.1 MANUFACTURERS

The **hull appendages** shall be made by a LM and according to the building specifications.

E. 1.2 RULES

Hull appendages shall comply with the **class rules** in force at the time of the manufacture except those rules in section C where the current rules takes precedence.

E.1.3 MODIFICATIONS, MAINTENANCE AND REPAIRS

Any modification, maintenance or repair different from the ones described in Section C may be done by anyone after approval from the **Chief Measurer**. This may require the **certificate** to be re-issued stating the work done.

SECTION F - RIG

F.1 PARTS

F.1.1 MANDATORY

- (a) Mast.
- (b) Boom.
- (c) Standing rigging.
- (d) Running rigging.
- (e) Bowsprit.

F.2 GENERAL

F.2.1 MANUFACTURER

Rigs shall only be supplied by a LM and built in accordance with the manufacturing specification

F2.2 RULES

The **rigs** and their fittings shall comply with the **class rules** in force at the time of **certification** of the **rig** except those in Section C where the current rules take precedence.

F2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

Any modification, maintenance or repair different from the ones described in Section C may be done by anyone after approval from the **Chief Measurer**. This may require the **certificate** to be re-issued stating the work done.

SECTION G - SAILS

G.1 **GENERAL**

G.1.1 RULES

Sails shall comply with the class rules in force at the time of certification.

G.1.2 CERTIFICATION

The official measurer or the In-house Official Measurer shall certify mainsails and headsails in the tack and spinnakers in the head and shall sign and date the certification mark.

G.1.3 SAILMAKER

- (a) No licence is required.
- (b) The weight in g/m² of the **body of the sail** shall be indelibly marked near the **head point** by the sail maker together with the date and his signature or stamp.

G.1.4 MODIFICATIONS. MAINTENANCE AND REPAIR

Any modification, maintenance or repair different from the ones described in Section C may be done by anyone after approval from the **Chief Measurer**. This may require the **certificate** to be re-issued stating the work done.

G.2 MAINSAIL

G.2.1 IDENTIFICATION

(a) The class emblem shall conform with the dimensions and requirements as detailed Appendix 2, it shall be in contrasting colours and shall be placed on both sides of the **sail**.

G.2.2 MATERIALS

- (a) Any of the following **ply** fibres may be used:
 - (1) Polyester fibres
 - (2) Aramid fibres.
 - (3) High-modulus polyethylene fibres (HMPE-Spectra) and high-performance polyethylene (HPPE-Dyneema).

- (4) The above mentioned fibres combined with carbon fibres, as long as the amount of carbon fibres is not greater than 60% of the total amount of fibres that make up the **sail**.
- (b) Stiffening may be made of any material, including the top two battens. Exception: The other battens shall not be carbon made.
- (c) **Primary reinforcement** and **Secondary reinforcement** shall be made from one or more of the following materials: Polyester, Aramid, PEN, HMPE and Carbon fibre.

G.2.3 CONSTRUCTION

- (a) The construction shall be: soft sail, single ply sail.
- (b) The **body of the sail** shall consist of the same **woven ply** throughout.
- (c) The **Mainsail** shall have 6 **batten pockets** in the **leech**; the two top batten pockets may be full length extending from luff to leech. Other battens pockets may be of any length.
- (d) The **sail** shall be constructed so that it can be reefed by means of slab reefing at two points adjacent to the **luff**, two points adjacent to the **leech** and four corresponding points in the **body of the sail**.
- (e) The following are permitted: reefing eyelets, mainsail Cunningham eyelets, **leech** and foot adjustment lines, camber stripes, chafing, patches, not more than two **windows** and tell-tales.
- (f) The **leech** shall not extend aft of straight lines between:
 - the aft head point and the intersection of the leech and the upper edge of the nearest batten pocket,
 - (2) the intersection of the leech and the lower edge of a batten pocket and the intersection of the leech and the upper edge of an adjacent batten pocket below,
 - (3) the **clew point** and the intersection of the **leech** and the lower edge of the nearest **batten pocket**.

G.2.4 DIMENSIONS

	minimum	maximum
Quarter width		4970 mm
Half width		3990 mm
Three-quarter width		2790mm
*Upper width		2030 mm
Top width		1550 mm
Each Window area		1 m ²
Angle between luff and leech at the head		90°

G.2.5 WEIGHT

(a) The weight of the **mainsail** without battens shall be a minimum of 21 kg. **Corrector weights** if used shall be attached within 200mm from the line between the **aft head point** and the **head point**.

G.3 GENOA

G.3.1 MATERIALS

- (a) Any of the following **ply** fibres may be used:
 - (1) Polyester fibres.
 - (2) Aramid fibres.
 - (3) High-modulus polyethylene fibres (HMPE-Spectra) and highperformance polyethylene (HPPE-Dyneema).
 - (4) The above mentioned fibres combined with carbon fibres, as long as the amount of carbon fibres is not greater than 60% of the total amount of fibres that make up the sail.
- (b) **Stiffening** may be made of any material, with the exception that the battens shall not carbon made.
- (c) **Primary reinforcement** and **Secondary reinforcement** shall be made from one or more of the following materials: Polyester, Aramid, PEN, HMPE and Carbon fibre.

G.3.2 CONSTRUCTION

- (a) The construction shall be: soft sail, single ply sail.
- (b) The body of the sail shall consist of the same woven ply throughout.
- (c) The **Genoa** shall have no more than 4 batten pockets in the **leech**. The top batten pocket may be full length extending from luff to leech.
- (d) The **leech** shall not extend beyond a straight line from the aft **head point** to the **clew point**.
- (e) The following are permitted: Stitching, glues, tapes, corner eyes, hanks, batten pocket elastic, batten pocket patches, batten pocket end caps, leech line with cleat, one window, tell tales and sail shape indicator stripes.
- (f) The headsail **luff** groove tape shall run least the 90% of the **luff length**.
- (g) The luff groove device for the "headsails" should be the TuffLuff1706. The transverse direction shall be between 32mm and 34mm in any direction.

G.3.3 DIMENSIONS

	Minimum	Maximum
Luff length		16350 mm
Foot length		5350 mm
Quarter width		3860 mm
Half width		2640 mm
Three-quarter width		1390 mm
Top width		80 mm
Window area		1 m2
Genoa weight (without battens)	14 kg	

G.4 JIB

G.4.1 MATERIALS

- (a) Any of the following **ply** fibres may be used:
 - (1) Polyester fibres.
 - (2) Aramid fibres
 - (3) High-modulus polyethylene fibres (HMPE-Spectra) and high-performance polyethylene (HPPE-Dyneema).
 - (4) The above mentioned fibres combined with carbon fibres, as long as the amount of carbon fibres is not greater than 60% of the total amount of fibres that make up the **sail**.
- (b) **Stiffening** may be made of any material, with the exception that the battens shall not be made of carbon fibre
- (c) **Primary reinforcement** and **Secondary reinforcement** shall be made from one or more of the following materials: Polyester, Aramid, PEN, HMPE and Carbon fibre.

G.4.2 CONSTRUCTION

- (a) The construction shall be: soft sail, single ply sail.
- (b) The **body of the sail** shall consist of the same **woven ply** throughout.
- (c) The **Jib** shall have no more than 4 batten pockets in the **leech**. The top batten pocket may be full length extending from luff to leech.
- (d) The **leech** shall not extend beyond a straight line from the aft **head point** to the **clew point**.
- (e) The following are permitted: Stitching, glues, tapes, corner eyes, hanks, batten pocket elastic, **batten pocket patches**, batten pocket end caps, **leech** line with cleat, one **window**, tell tales and sail shape indicator stripes.

G.4.3 DIMENSIONS

	Minimum	Maximum
Luff length		15330 mm
Foot length		5330 mm
Quarter width		3680 mm
Half width		2400 mm
Three-quarter width		1190 mm
Top width	-	80 mm
Window area		1 m2
Jib weight (without battens)	14 kg	

G.5 SPINNAKER

G.5.1 MATERIALS

(a) The **body of the sail** shall be manufactured from Nylon sailcloth.

G.5.2 CONSTRUCTION

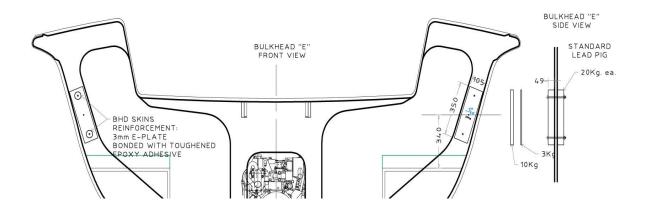
- (a) The construction shall be: soft sail, single ply sail.
- (b) The **body of the sail** shall consist of the same **woven ply** throughout.
- (c) The following are permitted: Stitching, glues, tapes, corner eyes, recovery line eyes and tell tales.
- (d) **Primary reinforcement** and **Secondary reinforcement** are unrestricted.

G.5.3 DIMENSIONS

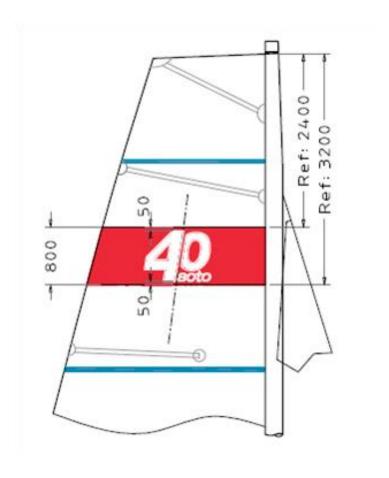
	Minimum	Maximum
Luff length	19550mm	19860mm
Leech length	16850mm	17680mm
Foot length	11100mm	11340mm
Quarter width	11700mm	12200mm
Half width	10580mm	11120mm
Three Quarter width	6050mm	6460mm
Window area		1m²
Sailcloth weight	37 g/m²	

PART III - APPENDIXES

APPENDIX 1 - POSITIONING OF CORRECTOR WEIGHTS POSITIONING OF CORRECTOR WEIGHTS



APPENDIX 2 - POSITIONING OF THE SOTO 40 OD CLASS EMBLEM



APPENDIX 3 - RUNNING RIGGING SPECIFICATIONS

ITEM	Minimum Working Ioad	Qty.	Min Diam.	Min Length	Recommended Material	Comments
	kg		mm	m		
Main halyard 2:1	850	1	8	28.0	Vectran	14 m without cover
		1	6	32.0	Polyester	
Top asymmetric halyard	930	2	9	43.0	Spectra SK 75	14 m without cover
Frac asymmetric halyard	760	1	9	39.0	Vectran	10 m without cover
Genoa halyard	1290	1	9	38.0	Vectran	10 m without cover
Reef 1	2290	1	10	16.0	Spectra K900	
Main sheet	940	1	10	42.0	Spectra K900	May be continuous
Genoa sheets	1080	2	10	10.0	Spectra SK 75	
Asymmetric sheet	620	2	8	35.0	Spectra SK75	3.5 m without cover
Traveller (1:1)	560	2	5	2.4	Ocean 12 HC	without cover
Traveller (6:1)	130	1	6	25.0	Spectra K900	with cover
Genoa barber (1:1)	500	2	6	0.9	Spectra SK 75	without cover
Genoa barber (4:1)		2	6	4.5	Spectra SK 60	with cover
Genoa up and down (1:1)	1300	2	6	4.5	Spectra SK 75	without cover
Genoa up and down (2:1)		2	5	2.7	Spectra SK 75	without cover
Genoa up and down (3:1)		2	5	6.1	Spectra SK 75	without cover
Genoa up and down (6:1)		2	6	9.0	Spectra SK 60	with cover
Vang strop (1:1)	1050	1	8	2.8	Spectra SK 75	without cover
Vang strop (2:1)		1	8	8.0	Spectra SK 75	without cover
Vang strop (2:1)		1	6	4.5	Spectra SK 75	without cover
Vang strop (6:1)		1	6	19.0	Spectra SK 60	with cover
Cunningham (1:1)		1	4	7.0	Spectra SK 75	without cover
Cunningham (2:1)		1	3	2.5	Spectra SK 75	without cover
Cunningham (4:1)		1	6	15.0	Spectra SK 60	with cover
Foot (1:1)	700	1	8	0.8	Spectra SK 75	without cover
Foot (2:1)		1	3	5.8	Spectra SK 75	without cover
Foot (2:1)		1	5	19.0	Spectra SK 75	without cover
Foot (2:1)		1	5	2.4	Spectra SK 75	without cover
Foot (4:1)		1	6	15.0	Spectra SK 60	with cover
Asymmetric tack	1870	1	8	17.5	Vectran	
Bowsprit guy rope strope	3550	1	5	1.4	Dynex 75	without cover
Backstays Stropes	1400	4	10	0.5	Spectra SK75	with cover
Backstays (3:1)	700	2	10	11.0	Vectran	with cover
		2	8	13.0	Polyester	
Mast-hole guy rope		2	6	1.2	Vectran	without cover
Top lifelines		2	5	11.2	Stainless steel	
Low lifelines		2	5	11.0	Stainless steel	
Back lifelines		3	5	3.6/3.3/3.2	Stainless steel	

Notes:

- 1. Every rope shall comply with the breaking strength and the minimum diameters established in the chart.
- 2. Covers for protection may be added in the areas where maximum effort is made.
- 3. Eyes are permitted on the rope ends to facilitate their use.
- 4. The ropes' minimum diameter shall be applied to the external diameter of their cover.
- 5. The use of carbon ropes is not permitted.