

INTERNATIONAL MELGES

24 Class Rules 1997.

The Melges 24 Class was designed in 1992 by Reichel/Pugh and was adopted as an International class in 1997.

SECTION A - FUNDAMENTAL RULES.

A.1. Type of Class Rules.

A.1.1. The Melges 24 is a **closed class**.

The intention of these rules is to ensure the yachts are as identical as possible in construction, hull shape, weight, weight distribution, equipment, rigging and sail plan. It is impossible to foresee every conceivable innovation which may be thought of in the future and to mention every suggestion that has been ruled illegal in the past. When considering anything in connection with the boat or its sails or equipment which is not within established practice in the Melges 24 Class or involves the use of a material not previously used or accepted by the class or is not clearly covered by the class rules, plans or specification, you must assume that it is illegal, and must obtain a ruling from the Class Technical Committee before attempting it.

A.2. Abbreviations.

A.2.1.	ISAF.	International Sailing Federation.
	NA.	ISAF National Authority.
	ICA.	International Melges 24 Class Association.
	NCA.	National Class Association.
	ER.	The Equipment Rules.
	RRS.	The Racing Rules.

A.3. Authority.

A.3.1. The international authority of the class is the ISAF which shall co-operate with the ICA in all matters concerning these **class rules**.

A.3.2. Neither the ISAF, an NA, the ICA, an NCA, the copyright holder nor an **official measurer** is under any legal responsibility in respect of these **class rules** or accuracy of measurement and no claim arising from them can be entertained.

A.3.3. The Copyright Holder shall be Melges Boatworks Inc.

A.4. Language.

- A.4.1. The official language of the class is English and in case of dispute over translation the English text shall prevail.
- A.4.2. The word "shall" is mandatory and the words "may" and "can" are permissive.

A.5. ISAF Equipment and Racing Rules.

- A.5.1. These **class rules** shall be read with the ER and measurements shall be taken according to these unless specified. Where a term is used in its defined sense, it is printed in "*italic*" type if defined in the RR and in "**bold**" type if defined in the ER.

A.6. Interpretation.

- A.6.1. Any interpretation of the **class rules**, except as provided in A.7, shall be made by the ISAF which shall consult the ICA and the copyright holder. Request for interpretation shall be made by the ICA or an NA or a licensed builder.
- A.6.2. In the event of a discrepancy between any rules, drawings, specifications or measurement form the matter shall be referred to the ISAF.

A.7. Interpretation of the Class Rules at an Event.

- A.7.1. Interpretations of the **class rules** at an event shall be carried out according to the RR and the race organising authority shall, as soon as practical after the event, inform the NA of such a ruling.

SECTION B - ORGANIZATION.

B.1 Administration of the Class.

- B.1.1. The NA may delegate part or all of its functions as stated in these **class rules** to a NCA.
- B.1.2. In countries where there is no NA, or the NA does not wish to administrate the class, its functions as stated in these **class rules** shall be carried out by the ICA which may delegate the administration to an NCA.

B.2. International Class Fee and ISAF Plaque.

- B.2.1. The International Class Fee shall be paid by the Licensed Hull Builder to the Copyright Holder.
- B.2.2. The Copyright Holder shall, after having received the International Class Fee, send the ISAF Building Plaque, and an official receipt to the Licensed Hull Builder.
- B.2.3. The International Class Fee Building Plaque shall be permanently displayed on the starboard side, aft face of the transom.

B.3. Sail Numbers.

- B.3.1. Sail numbers shall correspond to the number on the International Class Building Fee Plaque.
- B.3.2. In addition, the boat shall carry the sail letters applicable to her nationality as per RR 77 - Appendix H, and class rules C.1.7. and C.1.8.

B.4. Measurement Certificate.

- B.4.1. The owner shall send the completed measurement form to the NA together with the International Class Fee official receipt and any registration fee that may be required.
- B.4.2. Upon receipt of a correctly completed measurement form the NA may issue a **measurement certificate**. The NA shall always retain a copy of the **measurement certificate**.
- B.4.3. A **measurement certificate** is an original or copy of the measurement form which has been stamped and endorsed by a NA, or is a **measurement certificate** issued by that NA.
- B.4.4. Not notwithstanding anything contained herein, the NA may withdraw a **measurement certificate** and shall do so on request of the ISAF. Upon request, an owner is to return the **measurement certificate** to the NA.

B.5. Change of Ownership.

- B.5.1 Change of ownership invalidates the **measurement certificate** but re-measurement is not required. The new owner shall apply to the NA for a new **measurement certificate** returning the old certificate with any re-registration fee that may be required. A new **measurement certificate** shall then be issued to the new owner.

B.6. Amendments to Class Rules.

- B.6.1. Amendments to these **class rules** shall be proposed by the ICA, or an NA, and shall be approved by the ISAF.

B.7. Measurers.

- B.7.1. An **official measurer** shall not measure a boat owned, designed or built by himself, or in which he is an interested party, or has a vested interest except where permitted by the **class rules**.
- B.7.2. If an **official measurer** is in any doubt as to the compliance with the **class rules** of any part of a boat he shall consult the NA before signing a measurement form or attaching a **certification mark**.
- B.7.3. An **official measurer** shall only carry out **fundamental measurement** in another country with the prior agreement of the NA in the country where measurement shall take place.
- B.7.4. A measurer shall seek approval from the ICA, but shall only be an **official measurer** when recognised or appointed by a NA.

B.8. Axes and points of Measurement.

B.8.1. Except where other methods of measurement are specifically indicated all measurement shall be carried out in accordance with the ER and the ISAF Guide to Measurers.

B.8.2. Words such as "fore", "aft", "above", "below", "height", "depth", "length", "beam" and "freeboard" acquire a precise meaning in measurement as they are all taken to refer to a boat in measurement trim. All measurement denoted by these or similar words, shall be taken parallel to one of the three major axes of the hull - vertical, horizontal or transverse - related to the waterline and the centerplane of the hull.

B.8.3. Where a measurement is to be taken between two points, the distance between these points shall be taken whether or not parallel to an axis.

B.8.4. Width, thickness, length etc. Of a component shall be measured as appropriate for that component, without reference to the **hull** axes.

B.8.5. The fore and aft position of deck fittings shall be measured from the forward side of a straight measurement beam (MB) minimum 2400mm in length, (not less than 100mm wide), laid across the boat on the deck and against the aft face of the cabin. Measurements shall be taken parallel to the fore and aft centreline of the yacht. The beam may have cut outs to fit around any instruments fitted in the aft face of the cabin.

B.8.6. The Hull Datum Point (HDP) is the intersection, on the centerplane of the **hull** between the underside or the shell and the transom upstand, each extended as necessary.

B.9. Measurement Equipment.

B.9.1. Measurement equipment shall be accurate to at least half the value of the last significant figure specified in the **class rules**.

B.9.2. Templates shall be the official templates made from the ISAF design and registered with the ISAF. Tolerances shall be inscribed on the templates.

B.10. Checking Materials.

An **official measurer** is not required to check materials unless the **class rules** specifically prescribe this.

SECTION C - CONDITIONS FOR RACING.

The crew and the **boat** shall comply with the rules in this section before the preparatory signal and, when applicable, whilst *racing*. These rules may not be checked as part of **fundamental measurement**. It is the Owners responsibility to see that his **boat** complies with the **class rules** and relevant RR at all times and that alteration, replacement or repairs to the **boat** do not invalidate the **measurement certificate**.

Items referred to in these **class rules** shall only be used for the purpose stated.

C.1. Certificate and Identification Marks.

C.1.1. No boat shall take part in class races unless it has a valid **measurement certificate**.

C.1.2. New or substantially altered sails shall be measured by an **official measurer** who shall stamp, and/or sign and date the sails in the vicinity of the tack for fore and aft sails and at the head for spinnakers. Failure to have sails measured and endorsed shall invalidate the **measurement certificate**.

C.1.3. The class insignia and the sail number and letters, as per rule B.3 shall be according to RR 77 - Appendix H except where varied herein.

C.1.4. Numbers and letters shall be of the following dimensions:

	minimum.	maximum.
Height.	300mm	
Spacing between adjoining numbers or letters or edge of sail.	60mm.	

C.1.5. The class insignia shall conform with the dimensions and requirements as detailed in the diagram contained in these rules.

C.1.6. The class insignia shall be positioned on both sides of the mainsail, between the top two battens, with the starboard side being higher.

C.1.7. The national letters and sail numbers shall be positioned on both sides of the mainsail, between the second and third battens, with the starboard side being higher.

C.1.8. In accordance with RRS Appendix 115, the National letters and sail numbers are optional on the spinnaker.

C.2. Equipment.

C.2.1. Mandatory:

1. Engine: minimum power of 2 kilowatts (3hp).
Minimum weight 12.5kgs. (empty of fuel).
When not in use engine and outboard bracket shall be stowed in the engine berth below the main cockpit.
2. The boat shall depart the dockside with the engine tank full and a separate container with a minimum of 3 liters of fuel.
Container to be of a type as required by NA and/or local regulations.
3. One anchor and chain: minimum anchor weight 3.1kgs.
minimum combined weight 5 kgs.
One warp: minimum length 40 meters.
minimum diameter 8 mm.
4. One manual bilge pump.
5. One bucket of not less than 9liters capacity, with lanyard minimum 1 meter.

6. Personal flotation vests shall be carried for each crew member on board. The vests shall comply with any NA regulations.
7. Boats shall comply with any special requirements of the NA under which racing is being held or those set by the club or local marine authority.
8. The 6 hatches from the cabin "V" berth/settees.
9. The two main companionway hatches to enable the cabin to be closed off should the weather become extreme.
10. The engine tray shall be carried under the engine.

C.2.2 Optional.

1. Electronic timing devices.
2. Navigation lights, tactical and navigation instruments and their associated power sources.
3. A cool/ice box may be carried, but if carried, shall be stowed in the designated position under the engine hatch, aft of the engine.
4. Bunk cushions and a portable toilet may be carried. The cushions shall be on the bunks and the toilet shall be stowed under the companionway step.
5. The mast may be fitted with a gaiter below the gooseneck to prevent damage from the jib clew and blocks.
6. The companionway hatches may be stowed in a protective bag.
7. The spinnaker may be stowed in a bag in the companionway hatch. The design of this bag is optional.
8. The moulded gel coat below the waterline and for not more than 30mm above the waterline may be lightly abraded back to allow for the application and adhesion of anti-fouling products, for those boats to be left afloat. The abrasion of the gel coat shall be the minimum needed to ensure adhesion of the coating and shall not involve fairing of any sort. The application of paint and epoxy treatments, whilst allowed, shall be subject to class rule D.7.2. and be completed under the supervision of a measurer.

C.2.3 Limitations

- C.2.3.1. Not more than 1 mainsail, 1 headsail and 2 spinnakers shall be carried on board. The headsail and mainsail shall not be changed or substituted whilst underway or away from the dockside.
- C.2.3.2. Not more than 1 mainsail 2 headsails and 2 spinnakers shall be presented for measurement and/or registration at a class event.
- C.2.3.3. The keel shall be retractable using the Melges designed lifting crane. The keel shall be secured in the down position whilst racing using the supplied locking system.

C.3

Fittings

C.3.1. There shall be only one jib sheet track to port and one to starboard. They shall be positioned as per rule D.6.1.4. The position shall not be modified.

C.3.2. The sheet cars and their associated blocks for the sheeting of the jib, shall be on the jib sheet tracks and no other method of sheeting the jib shall be permitted.

C.3.3. The manufacturer or brand of the blocks and winches is optional, except that if another make is used from the original specification, there shall be no improvement in efficiency or mechanical advantage. The sheave height from fixing point and sheave diameter shall not exceed the following dimensions. The spinnaker tack line cleat may be changed to a sheet stopper.

		Minimum	Maximum.
Jib Clew Blocks.	Sheave dia.	26mm.	30mm.
Jib car blocks.	Sheave dia.	54mm.	58mm.
Jib car blocks, to bearing surface of Sheave	Sheave dia.	50mm.	54mm.
Jib ratchet blocks.	Sheave dia.	74mm.	78mm.
Mainsheet track block.	Sheave dia.	54mm.	58mm.
Mainsheet boom blocks.	Sheave dia.	54mm.	58mm.
Mainsheet ratchet block.	Sheave dia.	74mm.	78mm.
Spinnaker turning blocks.	Sheave dia.	54mm.	58mm
Spinnaker ratchet blocks.	Sheave dia.	74mm.	78mm.
Bowsprit end block.	Sheave dia.	36mm.	40mm.
All control line blocks.	Sheave dia.	26mm.	30mm.
Hiking line block	Sheave dia.	15mm.	26mm.

C.3.4. The position of the winches or ratchet blocks for the spinnaker and jib and their associated cleats is optional. There shall be not more than two cleats per side for the jib.

C.3.5. The spinnaker turning blocks may be either free running or ratchet blocks of size as per class rule C.3.3.

C.3.6. The traveller and backstay cleats may be placed within a box measuring 1900mm and 2150mm aft of the MB and between the lower edge of the deck non skid and a line 180mm below this edge on the cockpit moulding.

C.3.7. A block with a sheave size minimum 26mm, maximum 30mm, may be added above the traveller cleat to assist in tacking the traveller in light winds.

C.3.8. The mainsheet track shall be fitted at minimum 2260mm, maximum 2370mm aft of the MB. The mainsheet swivel jammer may be fitted either forward or aft the mainsheet track.

C.3.9. The rear gate line across the transom shall be closed whilst racing.

C.3.10. The rope used to attach the hiking line to the stern pulpit shall be pre-stretched and minimum 3mm diameter. It shall form a minimum of three full loops before making off.

C.3.11. A length of shockcord minimum 5mm diameter shall be looped to the rear of the hiking lines from the stern pulpits to eliminate slack in the hiking lines

C.3.12. Padding may be fitted to the hiking lines to enhance crew comfort.

C.3.13. When pushing down hard on the hiking lines at the mid point between the two centre stanchions, the upper edge of the hiking line shall be not closer to the deck than 127mm. This measurement shall be taken with any shockcord restraints loose. See drawing.

C.3.14. From the aft stanchion, the hiking line may be led down and through either a block - size as per class rule C.3.3. - or a shackle attached to the spinnaker turning block deck eye, or through the deck eye itself, and up to the stern pulpit.

C.3.15. Bags for the storage of rope tails and miscellaneous equipment may be attached to the cockpit moulding.

C.4. Rigging.

C.4.1. Additions to or subtractions of purchase, to the mainsheet system, spinnaker sheet system, main Cunningham, boom vang, main outhaul, jib sheet system, traveller controls, bowsprit launch and recovery systems, backstay or reefing systems shall not be permitted. The Cunningham may be led through the mainsail eye/block and tied off on the gooseneck fitting.

C.4.2. The complete boom vang unit as supplied may be fitted with the cleat at either mast or boom end.

C.4.3. No lines shall lead below deck other than the main halyard, jib halyard, jib furling line and the bow sprit launch and recovery line with tackle.

C.4.4. Control lines may be tapered and size is optional. Diameter of mainsheet, Jib sheets and spinnaker sheets are optional. All sheets and control lines shall be of High Modulus Polyethylene (HMPE), eg Spectra®, Dyneema®.

C.4.5. A single gybe line, maximum 500mm in length, may be spliced into the spinnaker sheets at the clew to ease gybes. The sheets shall not be spliced onto the clew.

C.4.6. The shrouds may be attached and adjusted by turnbuckles/bottlescrews of optional design except that only one thread is permitted per turnbuckle. Lock plates may be fitted to maintain the rig setting. They may be adjusted whilst racing, but at the chainplate only. Remote adjustment of any type is prohibited.

C.5. Hull Weight.

C.5.1. The weight of the complete boat, dry and in racing condition at building specification shall be not less than 809kgs. Excluded from this weight shall be only: Sails, Engine, engine bracket, fuel can, anchor, chain and warp, manual bilge pump, bucket and lanyard, flotation vests. All equipment listed in class rule C.2.2. except that the fittings in C.2.2.1. and C.2.2.2. that are permanently fixed to the boat (e.g. display heads and sensors) may be included in the weight. N.B. Batteries or power sources of any sort shall be removed before weighing.

C.5.2. If the boat is found to be underweight, lead corrector weights shall be added to bring the boat up to the minimum required weight. These corrector weights shall be divided equally fore and aft and shall be glued, bonded or fixed in the locations shown on the drawing. These corrector weights shall be recorded on the certificate and shall remain in place until the boat is re-weighed by an official measurer. Re-weighing shall not take place closer together than one full calendar year, starting from the time of first measurement.

C.6. Spars.

C.6.1. Mast.

		Minimum.	Maximum.
C.6.1.1.	Mast weight: complete with all standing and running rigging.	28kgs.	
	Tip weight:	10kgs.	

C.6.1.2. The masthead crane shall be fitted with a sail batten, connected to the backstay. The sail batten shall be used to assist keeping the backstay clear of the mainsail leech. The length and specification of this sail batten is optional.

C.6.2. Main Boom.

		Minimum.	Maximum.
C.6.2.1	Boom spar curvature:		25mm.
	Spar band width:	15mm.	
	Boom band distance:		3800mm.
C.6.2.2.	The boom shall be fitted with a clew outhaul system.		
C.6.2.3.	The cleat and line for the mainsail reef is optional.		
C.6.2.4.	An additional guide block or snap shackle may be fitted to the underside of the boom to help to stow the spinnaker halyard.		

C.6.3. Bow Sprit.

C.6.3.1.	The bow sprit shall be retractable. When retracted, the forward end shall be level with or aft of the forward side of the stem. It shall be retracted to this position when the asymmetrical spinnaker is not flying. To help insure a watertight seal, tape may be added around the bowsprit to butt against the rubber seal over a maximum width of 60mm.
C.6.3.2.	The bowsprit shall extend not more than 1400mm forward of the forside of the stem. This shall be measured in a straight line from the forward side of the stem to the center of the bowsprit 'U' bolt in the same plane as the bowsprit.
C.6.3.3.	The bow sprit retraction line is optional. If not fitted, the bowsprit may be retracted by a knot placed at the correct position in the spinnaker tack line. However, the requirements of class rule C.6.3.1. still apply.
C.6.3.4.	The bow sprit shall not be retracted by shockcord or similar.

C.6.3.5. To assist in catching the spinnaker sheets, the bow sprit may be fitted with a batten or similar at the outer end. The batten shall not extend more than 150mm from the outer end of the bowsprit.

C.7. Crew.

C.7.1. The minimum number of crew is 3.

C.7.2. The total crew weight on board while racing shall not exceed 360kgs. This weight shall be taken with the crew dressed in normal underclothes only.

C.7.3. "Competitors shall not wear or carry clothing or equipment for the purpose of increasing their weight."

C.7.4. RRS 43.2 shall apply. See also class rule D.6.1.10.

C.8. Advertising.

C.8.1. Advertising for the Melges 24 Class shall at all times comply with RR 79 and Appendix G4, Category B. All Melges 24 Class racing shall take place under this category.

C.9. Membership.

C.9.1. The owner shall be a current member of the NCA or, where there is no NCA in his country, a member of the ICA or an NCA nominated by the ICA, and the yearly ICA sticker shall be attached to the hull on the upper port corner of the aft face of the transom.

C.10 Boat Handling Rules.

C.10.1. The bow sprit shall not be extended until the bow of the boat breaks the imaginary line drawn from the leeward mark or start line through the windward mark, on the windward side of the buoy.

C.10.2. The bow sprit shall be retracted immediately after rounding the leeward mark.

C.10.3. The skipper or crew shall not hike out by sitting over the spinnaker turning block. The entire body of the skipper/helmsman shall be inside the hiking lines at all times.

C.10.4. When roll tacking the upper body of any crew shall not go outside the hiking lines. Standing up and hanging on the shrouds shall be prohibited.

SECTION D - HULL.

D.1. Measurement and Certification.

D.1.1. The hull shall conform with the class rules and ER in force at the time of fundamental measurement.

D.1.2. If a **hull** has been substantially altered or repaired its **measurement certificate** shall cease to be valid until the relevant parts of the **hull** have been re-measured and the **measurement certificate** re-validated by the NA.

D.2. Builders.

D.2.1. **Hull builders** shall be licensed by the **Copyright Holder**.

D.2.2. The licensed builder shall, at his own expense, correct or replace any **hull** that does not comply with the **class rules** as a result of an omission or error by the builder, if the **hull** is submitted for **fundamental measurement** within twelve months of purchase.

D.2.3. The ISAF building plaque shall be fixed by the builder on the starboard side, aft face of the transom.

D.2.4. All **boats** shall carry an official serial number moulded into or securely fixed to the starboard side, aft face of the transom. This number shall be issued as part of a National requirement such as European Standard EN ISO 10087 : 1996 for those relevant countries. Where the builder does not have to conform to a National requirement, the number shall be from a series formulated by Melges Boatworks Inc. No yacht shall be deemed legal without this number.

D.2.5. Builders shall only build boats and components from moulds taken from master tooling and approved by the **Copyright Holder** and ISAF, or an organisation approved by the ISAF.

D.3. Hull Shell.

D.3.1. Materials.

D.3.1.1. The **hull** shall be constructed of glass reinforced materials specified within the builders license.

D.3.1.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment, fairing exterior parts or **hull** to improve moments of inertia, or to change the standard shapes shall be prohibited. Except that through hull knotmeters and depth sounders shall be allowed.

D.3.1.3. The sanding of the **hull** to reshape hull profiles or contours shall be prohibited.

D.3.1.4. The fairing of the keel box area, or the keel box "delrins" shall be prohibited, excepted that they may be adjusted to fit flush with the **hull** underside.

D.3.1.5. Through **hull** devices for bailing or self bailing shall be prohibited. One drain plug not exceeding 25mm internal diameter may be fitted in the transom for draining internal water when ashore.

D.3.2. Dimensions.

D.3.2.1. The **hull** shall be constructed from official moulds and conform to the official templates.

D.4. Deck.

D.4.1. Materials.

- D.4.1.1. The **deck** shall be constructed of glass reinforced materials specified within the builders license.
- D.4.1.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia, or to change the standard shapes shall be prohibited.
- D.4.1.3. The sanding of the **deck** to reshape profiles or contours shall be prohibited.

D.4.2. Dimensions.

- D.4.2.1. The **deck** shall be constructed from official moulds.

D.5. Internal Structure.

D.5.1. Materials.

- D.5.1.1. The interior, bulkheads hatches and other mouldings shall be constructed of glass reinforced materials specified within the builders license.
- D.5.1.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment on any of the above mouldings to improve moments of inertia, or to change the standard shapes shall be prohibited.
- D.5.1.3. The sanding of any of the above mouldings to reshape profiles or contours shall be prohibited.

D.6. Complete Hull.

D.6.1. Fittings.

- D.6.1.1. Fittings shall be fixed in accordance with the specifications of the builders license and shall not be modified unless stated herein.
- D.6.1.2. The fore and aft position of deck fittings shall be measured from the measurement beam (MB), as per rule B.8.5.
- D.6.1.3. The chainplates shall be placed in accordance with the builders specification and shall not be modified or moved. The upper and lower shrouds shall intersect the deck at minimum 360mm, maximum 390mm forward of the MB. The athwartships centre of the chainplate fitting shall be minimum 1725mm, maximum 1750mm apart, equally spanning the boat fore and aft centreline. Both measurements shall be taken on the leading face of the chainplate at hole centreline.
- D.6.1.4. The jib tracks shall be minimum 478mm, maximum 486mm in length. They shall be positioned such that the leading edge of the track is minimum 510mm, maximum 530mm forward of the MB. The centreline of the tracks shall lie parallel to the cabin sides on the level deck at the inboard edge of the non slip moulding.

D.6.1.5. The position of the aft spinnaker turning block deck plates shall have their centres at minimum 2650mm, maximum 2670mm aft of the MB. They shall be minimum 15mm, maximum 25mm from outboard edge of the deck moulding.

D.6.1.6. The forward edge of the mast step shall be minimum 2405mm, maximum 2415mm from the aft face of the jib furler drum recess at deck level measured in a straight line.

D.6.1.7. Two stanchions, a stern pulpit and one hiking line shall be fitted to each side of the boat. The stanchions and pulpits shall be of stainless steel construction as specified in the building specification.

D.6.1.8. The forward end of the hiking line shall be fixed to the deck at minimum 2470mm, maximum 2500mm forward of the **MB**. They shall be attached to builders specified deck fittings.

D.6.1.9. A bow pulpit is optional. If fitted, it shall be as per the building specification.

D.6.1.10. There shall be one hiking line only per side. The underside of the hole in the stanchion shall be: minimum 450mm, maximum 460mm above the deck when the line is taut. The line shall be constructed of either 7 x 19 coated stainless steel wire minimum 3.1mm or HMPE line of minimum 4.5mm, eg. Spectra®.

D.6.1.11. For the purpose of RRS 43.2 the hiking lines shall be regarded as per RRS 49.2, except that the tension may be modified as in class rule C.3.13.

D.7. Additional Rules.

D.7.1. Sanding is prohibited on all hull, deck and internal structures unless repair of "superficial damage" is required. If there is any doubt to the interpretation of "superficial damage", a ruling shall be sought from a measurer or the technical committee before repair work commences and the boat offered for re-measurement on completion.

D.7.2. If the **hull** requires to be painted to repair a damaged gelcoat, the process shall be reported to a measurer and the boat offered for re-measurement on completion.

D.7.3. Normal proprietary polishes may be used on the hull if in compliance with RRS 53.

D.7.4. The moulded gel coat below the waterline and for not more than 30mm above the waterline may be lightly abraded back to allow for the application and adhesion of anti-fouling products, for those boats to be left afloat. The abrasion of the gel coat shall be the minimum needed to ensure adhesion of the coating and shall not involve fairing of any sort. The application of paint and epoxy treatments, whilst allowed, shall be subject to class rule D.7.2. and be completed under the supervision of a measurer.

SECTION E - HULL APPENDAGES.

E.1. Measurement and Certification.

- E.1.1. Hull appendages shall conform with the **class rules** and ER in force at the time of **fundamental measurement**.
- E.1.2. A NA may appoint one or more persons at a manufacturer to measure and certify hull appendages produced by that manufacturer. A special license shall be awarded for that purpose.
- E.1.3. The **official measurer** shall attach the **official certification sticker**, showing the date of **fundamental measurement**, to approved rudder blades, tillers and keel fins.
- E.1.4. Substantially altered or repaired hull appendages shall be re-measured and the **official measurer** shall attach a new **official certification sticker** showing the new date of **fundamental measurement**.

E.2. Manufacturers.

- E.2.1. Manufacturers shall be licensed by the Copyright Holder.
- E.2.2. The manufacturer shall, at his own expense, correct or replace any **hull appendage** that does not comply with the **class rules** as a result of an omission or error by the manufacturer, if the **hull appendage** is submitted for **fundamental measurement** within twelve months of purchase.
- E.2.3. Each hull appendage shall have a unique serial number which shall be recorded on the measurement form.
- E.2.4. Manufacturers shall only build hull appendages from moulds approved by the Copyright Holder and ISAF, or an organisation approved by the ISAF.
- E.2.5. Hull appendages shall conform to the official templates.

E.3. Keel Fin and Keel Bulb.

E.3.1. Materials

- E.3.1.1. The hull appendages shall be constructed of carbon fibre reinforced materials and lead specified within the manufacturers license.
- E.3.1.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia, or to change the standard shapes shall be prohibited.
- E.3.1.3. The sanding of the keel fin or keel bulb to reshape profiles or contours shall be prohibited.

E.3.2. Fittings.

E.3.2.1. The forward edge of the keel shall be fitted with a kelp cutter to the Melges design. The slot in which the cutter operates shall not be filled or covered.

E.3.2.2. The keel fin shall be fitted with a removable stainless steel ring used to lift the keel with the Melges crane.

E.3.3. Dimensions.

E.3.3.1. The measurement around the hull on the yachts centerline from the **HDP** to the intersection of the hull and fin trailing edge shall be: minimum 3482mm, maximum 3494mm.

E.3.3.2. With the keel fully lowered, the straight line measurement from the **HDP** to the intersection of the fin trailing edge and the top of the keel bulb shall be: minimum 3784mm, maximum 3823mm.

E.3.3.3. With the keel fully lowered, the measurement from the underside of the hull to the top of the keel bulb, measured along the trailing edge of the keel shall be: minimum 1195mm, maximum 1215mm.

E.3.3.4. The keel fin and keel bulb shall not be reshaped, faired, or sanded except to facilitate the repair of superficial damage. If there is any doubt to the interpretation of "superficial damage" a ruling shall be sought from an official measurer or the technical committee before work commences and the item offered for re-measurement on completion.

E.3.4. Weight.

	Minimum.	Maximum.
E.3.4.1. Combined keel fin and keel bulb:	300kgs	313kgs.

E.4. Rudder and Tiller.

E.4.1. Materials

E.4.1.1. The rudder and tiller shall be constructed of carbon fibre reinforced materials specified within the manufacturers license.

E.4.1.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia or to change the standard shapes shall be prohibited.

E.4.1.3. The sanding of the rudder or tiller to reshape profiles or contours shall be prohibited.

E.4.2. Fittings.

E.4.2.1. A tiller extension shall be optional. If fitted its overall length measured perpendicular to the tiller surface shall be not more than 1016mm.

E.4.2.2. The rudder shall be attached to the transom by means of 2 custom made Melges pintles on the rudder and 2 custom made Melges fittings, with loose pin or pins, on the transom. These fittings shall comply with official drawings.

E.4.3. Dimensions.

E.4.3.1. The rudder head between gudgeons shall be parallel to the transom, +/- 2mm.

E.4.3.2. The measurement from the **HDP** to the trailing edge rudder tip shall be not more than 1220mm.

E.4.3.3. The rudder shall not be reshaped, faired, or sanded except to facilitate the repair of superficial damage. If there is any doubt to the interpretation of "superficial damage" a ruling shall be sought from an official measurer or the technical committee before work commences and the item offered for re-measurement on completion.

E.4.4. Weights.

		Minimum.	Maximum.
E.4.4.1.	Rudder: Including gudgeons and mounting bolts	7.5kgs	
	Tiller: Including tiller extension and bolt to fix tiller to rudder	1.8kgs	

E.5. Additional Rules.

E.5.1. Normal proprietary polishes may be used on the hull appendages in compliance with RRS 53.

SECTION F - RIG.

F.1. Measurement and Certification.

F.1.1. The **rig** shall conform with the **class rules** and ER in force at the time of **fundamental measurement**.

F.1.2. A NA may appoint one or more persons at a manufacturer to measure and **certify masts, booms and bowsprits** produced by that manufacturer. A special license shall be awarded for that purpose.

F.1.3. The measurer shall attach an official **certification mark** showing the date of **fundamental measurement** to approved spars.

F.1.4. Substantially altered or repaired spars shall be re-measured and the **official measurer** shall attach a new official **certification mark** showing the new date of **fundamental measurement**.

F.2. Mast.

F.2.1. Manufacturer.

F.2.1.1. Manufacturers shall be licensed by the Copyright Holder.

F.2.1.2. The manufacturer shall, at his own expense, correct or replace any **spar** that does not comply with the **class rules** as a result of an omission or error by the builder, if the **spar** is submitted for **fundamental measurement** within twelve months of purchase.

F.2.1.3. Each **spar** shall have a unique serial number which shall be recorded on the measurement form.

F.2.1.4. Manufacturers shall only build **spars** from moulds approved by the Copyright holder and ISAF, or an organisation approved by the ISAF.

F.2.2. Materials

F.2.2.1. The **mast** shall be constructed of carbon fibre reinforced materials specified within the manufacturers license.

F.2.2.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia, or to change the standard shapes shall be prohibited.

F.2.2.3. The sanding of the **mast** to reshape profiles or contours shall be prohibited.

F.2.3. Fittings.

F.2.3.1. The following are permitted: mast head (crane) fitting, backstay batten, wind vane, sheaves and sheave boxes, tangs, spreaders, spreader attachments, gooseneck, boom vang fitting, compass and brackets, protective cloth sleeves, vinyl tapes for mast bands, manufacturer label, **certification mark**.

F.2.4. Dimensions.

Measured from the **mast heel point (MHP)**, as the lowest point of the mast section on top of the spar foot or from upper edge of **lower mast band (LMB)** The shroud intersection shall be taken as the point on the outside mast wall and the centerline of the shroud extended if necessary. **THIS WILL BE CHANGED TO MATCH ER.**

	Minimum.	Maximum.
Mast spar section at top of spar foot:		
Fore and aft:	115mm.	118mm.
Transverse:	76mm.	78mm.
Mast spar section at mast top point:		
Fore and aft:	77mm.	85mm.
Transverse:	62mm.	70mm.
Start of taper above MHP:		
Constant section to this point	8150mm.	
Spar band widths:	15mm.	
Mast band heights:		
Lower: (above MHP):	707mm.	717mm.
Upper: (above Lower):		8812mm.
Main Shroud height: (above LMB):	8283mm.	8291mm.
Lower Shroud height: (above LMB):	4177mm.	4185mm.
Jib halyard sheave:		
(bearing point centerline above LMB):	7433mm.	7441mm.
Jib Halyard sheave:diameter:	80mm.	84mm.
Spinnaker halyard sheave:		
(bearing point centerline above LMB):	8732mm.	8740mm.
Spinnaker Halyard sheave:diameter:	36mm.	40mm.

Backstay crane: from aft face of mast:	305mm.
Backstay crane: top aft corner vertically above UpperMB	230mm.
Spreader: number per side:	one.
Spreader: Length:	320mm. 330mm.
Height: (centerline):	4299mm. 4309mm.
Deflection: aft side of mast to taut line on aft side of shrouds:	230mm. 260mm.

F.3. Boom.

F.3.1. Manufacturer.

F.3.1.1. Manufacturers shall be approved by the Copyright Holder.

F.3.2. Materials.

F.3.2.1. The boom shall be made of aluminium and shall only be constructed from an ISAF approved section.

F.3.2.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia, or to change the standard shape shall be prohibited.

F.3.3. Fittings.

F.3.3.1. The following are permitted: Clew outhaul and fittings, sheaves and sheave boxes, blocks, cleats, hooks, spinnaker stowage fittings, reefing fittings, manufacturer label, **certification mark**.

F.3.4. Dimensions.

F.3.4.1. Tapered or permanently bent booms shall be prohibited.

	Minimum.	Maximum.
Boom spar curvature		25mm
Spar band width:	15mm.	
Boom band distance:		3800mm.

F.4. BOW SPRIT.

F.4.1. Manufacturer.

F4.1.1. Manufacturers shall be licensed by the Copyright Holder.

F.4.1.2. The manufacturer shall, at his own expense, correct or replace any **bow sprit** that does not comply with the **class rules** as a result of an omission or error by the builder, if the **bow sprit** is submitted for **fundamental measurement** within twelve months of purchase.

F.4.1.3. Manufacturers shall only build **bow sprits** from moulds approved by the Copyright Holder and ISAF, or an organisation approved by the ISAF.

F.4.2. Materials

F.4.2.1. The **bow sprit** shall be constructed of carbon fibre reinforced materials specified within the manufacturers license.

F.4.2.2. Coring, drilling out, rebuilding, replacement of material, grinding or relocating standard equipment to improve moments of inertia, or to change the standard shapes shall be prohibited.

F.4.2.3. The sanding of the **bow sprit** to reshape profiles or contours shall be prohibited.

F.4.3. Fittings.

F.4.3.1. The following are permitted: Sheaves and sheave boxes, blocks, 'U' bolts, sheet catching batten, blanking off caps, manufacturer label, **certification mark**, tape for sealing against rubber seal when pole is retracted. See class rule C.6.3.1.

F.5. Standing Rigging.

F.5.1. Manufacturer.

F.5.1.1. The manufacturer is optional.

F.5.2. Materials.

F.5.2.1. The standing rigging shall be of stainless steel cable only. Rod, diamond, Aramid (eg. Kevlar®) or similar shall be prohibited.

F.5.2.2. The backstay may be either stainless steel cable or HMPE.

F.5.3. Fittings.

F.5.3.1. The following are permitted: turnbuckles/bottlescrews, tangs, swages, swage eyes, shackles, shroud lock plates.

F.5.4. Dimensions

		Minimum.	Maximum.
Main shroud diameter:		4.7mm.	5.1mm.
Lower shroud diameter:		4.7mm.	5.1mm.
Backstay diameter:	stainless steel:	3.0mm	
Backstay diameter:	HMPE core diameter:	4.0mm	
Backstay nominal breaking strain HMPE:		950kgs.	

F.6. Running Rigging.

F.6.1 Manufacturer.

F.6.1.1. The manufacturer is optional.

F.6.2. Materials.

F.6.2.1. The jib halyard shall be stainless steel wire of 7 x 19 cable construction. It shall have a rope tail of optional size.

F.6.2.2. The main halyard and spinnaker halyard shall be of 'HMPE' eg. Spectra® or Dyneema®, or 'Aramid' eg. Kevlar®.

F.6.3. Dimensions.

		Minimum.	Maximum.
F.6.3.1.	Main halyard:	7.9mm.	
	Spinnaker halyard:	5.9mm.	

F.7 Additional Rules.

F.7.1. The main halyard shall be secured below deck only, using a sheet stopper or Cam cleat mounted on the starboard side of the mast compression tube. Only one cleat or stopper shall be permitted.

F.7.2. The jib halyard shall be secured to the tail of the highfield lever system.

F.7.3. The shrouds may be attached and adjusted by turnbuckles/bottlescrews of optional design except that only one thread is permitted per turnbuckle. Lock plates may be fitted to maintain the rig setting. They may be adjusted whilst racing, but at the chainplate only. Remote adjustment of any type is prohibited.

SECTION G - SAILS.

G.1. Measurement and Certification.

G.1.1. Sails shall conform with the **class rules** and ER in force at the time of **fundamental measurement**.

G.1.2. A NA may appoint one or more persons at a sailmakers to measure and **certify** sails produced by that manufacturer. A special license shall be awarded for that purpose.

G.1.3. Sails shall carry the official **certification mark** near the **tack point**. The mark shall be signed and dated by the measurer.

G.1.4. The weight in g/m² of the **body of the sail** shall be indelibly marked near the **head point** of the headsail and the spinnaker by the sailmaker together with the date and his signature or stamp.

G.1.5. Substantially altered or repaired sails shall be re-measured and the measurer shall attach a new official **certification mark** showing the date of **fundamental measurement**.

G.1.6. Each sail constructed after 1st January 1997 shall have permanently fixed, (with stitching), near to its **tack point**, an official ICA label. No sail shall be accepted for its **fundamental measurement** without a sail label. The measurer shall sign across the label and sail to ensure that it cannot be transferred to another sail. Labels shall only be available from the ICA secretary (or treasurer) and the cost shall be fixed by the ICA in general meeting.

G.2. Sailmakers.

G.2.1. The sailmaker is optional.

G.3. Mainsail.

G.3.1. Construction.

G.3.1.1. The construction shall be: **Soft sail, single ply sail.**

G.3.1.2. The **body of the sail** shall consist only of **woven or laminated ply**, made from Polyester or Non-Aromatic Polymides. Reinforcement shall be made from materials permitted in the **body of the sail**.

G.3.1.3. The **sail** shall have **4 batten pockets in the leech**. The upper two shall be full length and extend from **leech** to **luff**. The **4 batten pockets** shall divide the **leech** into five equal parts, +/- 100mm.

G.3.1.4. **Windows** are permitted below **half height**.

G.3.1.5. One reef position may be fitted.

G.3.1.6. The following are permitted: Stitching, glues, webbing, woven and PTFE tapes, bolt ropes, corner eyes, corner rings, Velcro or other fastening, Cunningham eye or block, reefing points, battens, batten pocket elastic, batten pockets, batten retaining devices, mast and boom slides, leech line with cleat, camber bands, ICA label, sailmakers labels as permitted by the ISAF, sailnumbers, national letters and class insignia, tell tales, headboards and fixings, **certification mark**

G.3.2. Dimensions.

	minimum.	maximum.
Leech length.		9590mm.
Three-quarter width.		1680mm.
Half width.		2700mm.
Leech hollows.	13mm.	
Foot median.		9200mm

Top width.	175mm.
Primary reinforcement.	unlimited.
Secondary reinforcement:	
from corner measurement points.	unlimited.
for flutter, chafing and batten pocket patches	unlimited.
for reefing points or eyes adjacent to the luff or leech.	unlimited.
Tabling or seam width.	unlimited.
Inside batten pocket length:	
Lower two pockets.	1780mm.
Upper two pockets, (full length).	1.0m2.
Inside batten pocket width.	60mm.
Window.	1.0m2.
Reef points above Tack and clew points.	1000mm
Luff bolt rope.	8mm
	9.5mm.

G.4. Headsail

G.4.1. Construction.

G.4.1.1. The construction shall be: **Soft sail, single ply sail.**

G.4.1.2. The **body of the sail** shall consist only of **woven or laminated ply**, made from Polyester or Non-Aromatic Polyimides. Reinforcement shall be made from materials permitted in the **body of the sail**.

G.4.1.3. The shape of the **leech** shall not be convex.

G.4.1.4. The **jib luff wire** shall be 7x19 or 7x7 or 1x19 and may be coated or non-coated wire.

G.4.1.5. **Windows** are permitted below **half height**.

G.4.1.6. The following are permitted: Stitching, glues, webbing, woven tapes, luff wire, corner eyes, corner rings, Velcro or press studs, Cunningham eye with cleat, leech line with cleat, foot line with cleat, camber bands, ICA label, sailmakers labels as permitted by the ISAF, tell tales, two blocks for sheets, **certification mark**.

G.4.1.7. For headsails manufactured after the 1st of July 1997, the weight of the cloth in the body of the sail shall comply with the minimum listed in class rule G.4.2. and shall be subject to class rule G.1.4.

G.4.2. Dimensions. (To be measured as a headsail).

	minimum.	maximum.
Cloth Weight of headsail	200gms/m ²	
Luff length.	8460mm	8560mm.
Leech length.	7775mm	7903mm.
Foot length.	2926mm	3026mm.
Top width.		50mm.
Primary reinforcement.		unlimited.
Secondary reinforcement:		
from corner measurement points.	unlimited.	
for flutter and chafing patches.		unlimited.

Tabling and seam width.	unlimited.
Windows.	0.75m ² .
Luff wire. Diameter.	4.7mm
Luff wire length between bearing surfaces.	8520mm. 8700mm.

G.5. Spinnaker

G.5.1. Construction

- G.5.1.1. The construction shall be: **Soft sail, single ply sail.**
- G.5.1.2. The **body of the sail** shall consist only of **woven ply**. All **ply** fibres shall be of non polyester material. Primary reinforcement may include other materials.
- G.5.1.3. **Windows** are permitted below **half height**.
- G.5.1.4. The following are permitted: Stitching, glues, webbing, woven tapes, corner eyes, corner rings, camber bands, sailmakers labels as permitted by the ISAF, sail numbers and national letters, ICA labels, tell tales, leech lines, luff lines, foot lines, **certification mark**

G.5.2. Dimensions,(to be measured as a spinnaker).

	minimum.	Maximum.
Luff length.	11285mm.	11585mm.
Leech length.	10000mm.	11078mm.
Foot length.	6000mm.	6300mm.
Foot median.		12000mm.
Three-quarter width.		3700mm.
Half width.		5860mm.
Primary reinforcement.		unlimited.
Secondary reinforcement.		
From corner measurement points.		unlimited.
Tabling and seam width.		unlimited.
Windows.		0.75m ² .
Cloth weight.	40gms/m ² .	

G.6. Additional Rules.

- G.6.1. The **headsail** shall be capable of being fully furled around the forestay, from the cockpit, using the furling system supplied with the boat.
- G.6.2. The mainsail shall be set so that: the **head point** is not above the lower edge of the **upper mast band**, the **tack point** is not below the upper edge of the **lower mast** and the **clew point** is forward of the inner edge of the **boom band**.
- G.6.3. Double luff sails are prohibited.
- G.6.4. The mainsail shall be attached to the boom only at the clew.
- G.6.5. Sails made of laminated materials shall have a woven material patch fixed at the tack on which the sail can be endorsed by the measurer.

~~horizontal~~

G.6.6. The jib wire shall be enclosed in a full length pocket on the sail. Zippers shall be prohibited for any purpose.

DRAWINGS: To Follow

Deck layout to show fittings.

Sail Logo.

Measurement beam and Position.

Hull Datum Point.

Bowsprit measurement.

Chainplate positions.

Hiking lines and template for checking droop.

Rudder Fittings.

Keel Positions.

Mast foot and mast measurements.

Advertising and sizes.