

# **MEASUREMENT RULES**

# **CONTENTS**

Section	Item	Pag
1.	General	2
2.	Builder	2
3.	Registration and Measurement Certificate	2
4.	Measurement	3
5.	Identification Marks	3
6.	Construction	3
7.	Hull Measurement	3
8.	Keel	4
9.	Rudder	4
10.	Skeg	4
11.	Fittings	5
12.	Weight	6
13.	Mast	6
14.	Standing and Running Rigging	6
15.	Main Boom	7
16.	Spinnaker Pole and Whisker Pole	7
17.	Sails	7
18.	Crew	9
19.	Advertising	9
20	Annendices	10

# **MEASUREMENT RULES**

#### 1. General

- 1.1. The Measurement Rules and specifications are intended to ensure these restricted design classes conform to the prescribed measurement as stated in the Rules.
- 1.2. No alteration to the structure of the hull, decks, keel, rudder, skeg, sails and standing rigging other than allowed under the rules shall take place without prior agreement of the Class Association. Such changes to be assessed on the water for a minimum of one year.
- 1.3. The following measurement rules shall apply to both the Yeoman and the Kinsman except where individually provided for.
- 1.4. The Class Association does not accept any legal responsibility in respect of these rules and/or the drawings or any claims arising therefrom.
- 1.5. There shall not be any retrospective effects upon boats, their equipment, fixtures and sails consequent upon the approved alteration of a measurement rule.
- 1.6. Any interpretation of the rules shall be made by the Class Association in conjunction with the Designer and the Appointed Builder.

#### 2. Builder

 G.R.P mouldings shall be produced only by the official licensed builder using the sanctioned moulds.

# 3. Registration and Measurement Certificate

- 3.1. No boat shall be permitted to race in races recognised by the Class Association unless it has a valid registration certificate and its sails have been endorsed.
- 3.2. The Builder, in conjunction with the Association, will issue boat numbers.
- 3.3. No two boats shall have the same name, except when designated 1, 2 etc. and then only with the permission from the Yeoman/ Kinsman Association.
- 3.4. The registration certificate is obtained as follows:-
  - 3.4.1. The Builder shall apply for a boat number and the owner shall at the same time submit the proposed name of the boat to the Class Association Secretary, who will issue the Registration Certificate.
  - 3.4.2. The Builder shall endorse the certificate that the boat has been built from the approved moulds and to the Yeoman/Kinsman Class Rules at the time in force.
  - 3.4.3. The secretary of the Class Association shall finally countersign the Registration Certificate.
- 3.5. It is the owner's responsibility to ensure that his boat, its spars, sails and equipment comply with the Class Rules at all time, and that alterations, replacement or repairs do not invalidate the certificate.
- 3.6. A certificate shall be valid only during the current period of ownership for which it is issued and shall be invalidated on a sale of the boat. The certificate shall be revalidated or replaced only upon re-registration with the Class Association by the new owner and payment of the appropriate membership fee.

#### 4. Measurement

- 4.1. The Class Association or any Race Committee may require that a boat or its spars, sails and equipment be liable to measurement or re-measurement at any time.
- 4.2. Only Measurers approved by the RYA or the Class Association shall measure a boat, its spars and equipment and sign a declaration on the registration certificate that they comply with the Class Rules.
- 4.3. Measurement tolerances are intended to allow for genuine building errors and shall not be deliberately used to alter the design. The Measurer shall report to the Committee anything which he considers to be a departure from the intended nature and design of the boat, or to be against the general interest of the class, and a certificate may be refused, even if the specific requirements of the rules are satisfied.
- 4.4. A Measurer shall not measure a boat, spars, sails or equipment owned by himself, or in which he is an interested party or has a vested interest.
- 4.5. All boats, spars, sails and equipment shall comply with the current rules.
- 4.6. Owners shall have all new or subsequently altered sails measured by a Measurer approved by the RYA or the Class Association in accordance with part 17 of these rules. The Measurer, if satisfied, will endorse the sail by signing or stamping the sail near its tack.

#### 5. Identification Marks

- 5.1. The hull shall carry the boat number cut into the hog. Where this is not practicable a plate bearing the number shall be attached under the cuddy.
- 5.2. The mainsail shall carry identification marks as indicated in the rule 17.5.

# 6. Construction

- 6.1. The hull and deck shall be of G.R.P construction in accordance with the specification and moulds approved by the Class Association in conjunction with the licensed builder.
- 6.2. The Hull and deck mouldings shall not be modified except that holes not exceeding 120mm in any direction are permitted for the attachment or installation of appropriate equipment.
- 6.3. A spinnaker chute may be fitted through the foredeck provided that it is manufactured but not necessarily fitted by the Class Builder.
- 6.4. No internal ballast is permitted.

#### 7. Hull Measurement

- 7.1. The length overall shall be 6075mm +/- 30mm excluding any fittings.
- 7.2. At its widest point the beam shall be 1980mm +/-30mm excluding any gunwale rubbing strip

#### 8. Keel

- 8.1. The keel shall be of fine grain cast iron manufactured to the pattern approved by the Class Association in conjunction with the approved Builders and the Designer. The keel may be treated with any paint or resin providing that the profile or section remain unaltered.
- 8.2. The shape of the keel shall be controlled by the Designer's drawings and templates.
- 8.3. The point where a line projected up the leading edge of the keel meets the hull shall be 3500mm +/-20mm from the aft base of the transom measured under the hull.

#### Kinsman

- 8.4. The keel shall be of the lifting type and conform to 8.1 and 8.2 above.
- 8.5. The front edge of the keel casting shall exit the hull at 3430mm +/- 20mm from the aft base of the transom measured under the hull.
- 8.6. The keel shall be fully lowered at all times while racing.

#### 9. Rudder

- 9.1. The profile of the rudder blade shall conform to the approved mould and shall fit the female template with no greater clearance than 6mm at any point.
- 9.2. The sectional shape of the rudder blade shall fit the templates taken from the approved mould with no greater clearance than 3mm at any point.
- 9.3. The rudder and spindle shall weigh not less than 6.5 kg.
- 9.4. The position of the centre of the rudder spindle shall be 605mm +/ -10mm from the centre aft base of the transom to the centre line of the spindle measured under the hull.
- 9.5. No faring is permitted between the rudder and the skeg.
- 9.6. For the profile of an alternative rudder, which dispenses with the inclusion of a skeg, the rudder blade shall conform to the approved mould and shall fit the female with no greater clearance than 6mm.

# Kinsman

- 9.7. The rudder blade shall conform to rules 9.1, 9.2, 9.3, 9.4 and 9.6 above and form a lifting unit with the skeg as per rule 10.4.
- 9.8. If a "kick-up" lifting type rudder blade is used then it may be made of any material and to any design, providing the profile is no greater than the otherwise specified rudder.
- 9.9. When the alternative rudder referred to in 9.6 is used the centre of the spindle may be moved up to 70mm further forward.

# 10. Skeg

- 10.1. The profile of the skeg shall conform to the approved mould and shall fit the female template with no greater clearance than 6mm at any point.
- 10.2. The sectional shape of the skeg shall fit the templates taken from the Designer's drawings and with no greater clearance than 3mm at any point.
- 10.3. The weight of the skeg shall not be less than 1.5kg.

#### Kinsman

- 10.4. The skeg as above shall be of the lifting type manufactured in accordance with the original drawings.
- 10.5. The profile of the skeg shall conform to the Designers drawings and shall fit the female template with no greater clearance than 6mm at any point.
- 10.6. The sectional shape of the skeg shall fit the template taken from the Designer's drawings with no greater clearance than 3mm at any point.
- 10.7. The weight of the skeg together with its frame but without the rudder shall not be less than 2.7kg.
- 10.8. The rudder skeg unit shall be fully lowered while racing.
- 10.9. No faring is permitted between the rudder and the skeg.

# 11. Fittings

- 11.1. Genoa fairlead's which may be adjustable fore and aft but shall be mounted within the confines of the flat top or inside of the coming section.
- 11.2. Fore and aft mooring cleats or rings shall be securely fitted on the centre line of the fore and aft decks respectively.
- 11.3. Toe rails shall be fitted or formed in the deck moulding.
- 11.4. Floorboards, where originally fitted, shall be collectively laid over at least seven bearers.
- 11.5. Aft main sheet tracks if fitted shall be a maximum length of 1200mm and fitted no further than 900mm forward of the aft top face of the transom.
- 11.6. Jib fairlead's, if fitted, may be adjustable and shall be mounted on the deck adjacent to the cuddy.
- 11.7. Self-bailers, if fitted, shall be on each side of the hull in a position above the waterline.
- 11.8. A stem head fitting, if fitted shall not project forward of the hull by more than 25mm.
- 11.9. A rubbing strake, if fitted, shall not project more than 20mm outboard of the hull.
- 11.10. There shall be no aids to support the helm or crew outboard except toe straps, which when fitted, shall be unable to be extended outboard of the sheerline.
- 11.11. Outboard motors or brackets extending beyond the transom are not permitted whilst racing.
- 11.12. Foresail furling gear, when fitted may be positioned either above or below the deck. A cut out section in the foredeck is permitted provided that the furling gear is located in a compartment which does not extend further than 290mm from the foremost part of the bow (excluding stem head fittings).
- 11.13. A centre mainsheet system which bisects the cockpit is prohibited.

# 12. Weight

12.1. The minimum all-up sailing weight in dry conditions including fittings in rules 11 and 14, spars and correctors if any, excluding sails, shall not be less than 670kg.

#### 13. Mast

# [The figures in brackets only apply to the 300 series]

- 13.1. The mast shall be fitted on a pivot (tabernacle) on the centre rear edge of the cuddy with the centre of the mast pin 2760mm +/- 20mm to the foremost point of the bow (excluding stem head fitting). Alternatively the mast may be pivoted, about a pin 210mm +/- 20mm vertically below that point. With the mast protruding through a slot in the rear of the cuddy where the original tabernacle was positioned.
- 13.2. The mast shall be of aluminium alloy extrusion with a continuous groove which shall be integral with the spar section.
- 13.3. Distinctly coloured bands not less than 10mm wide shall be marked as follows with those for any boat with the tabernacle set in the lower position noted in brackets.
  - 13.3.1.Band A (upper point), the lower edge of which shall be no more than 7485mm (7695mm) above the lower edge of the mast heel.
  - 13.3.2.Band B, the lower edge of which shall be no more than 6740mm (6950mm) above the lower edge of the mast heel and the centre of the sheave to be no less than 6720mm (6930mm) from the lower edge of the mast heel.
  - 13.3.3.Band C, upper edge of which shall not be less than 370mm (580mm) above the lower edge of the mast heel.
- 13.4. Rotating and permanently bent masts are prohibited but a set, due to distortion of up to 50mm between band A and band C is permitted.
- 13.5. The mast shall have one set of spreaders for the main shrouds which shall fit above the lower shrouds
- 13.6. No part of the spinnaker pole fitting(s) attached to the mast shall project for more than 65mm from the mast.

#### 14. Standing and Running Rigging

- 14.1. The standing rigging shall be of stainless steel or galvanised wire, diameter not less than 4mm and shall consist of one forestay, one pair of main shrouds, one pair of lower shrouds and one backstay. The backstay may be of an alternative material with equal strength to the specified wire and may include an adjusting system.
- 14.2. The forestay shall be attached to the boat no further forward than the forward extremity of the deck.
- 14.3. The foresail shall be attached behind the forestay or on the furling assembly.
- 14.4. The main shroud fittings shall not be attached further outboard than the outer skin of the hull and the centre positioned at 3250mm +/- 150mm from the foremost point of the bow (excluding stem head fitting).
- 14.5. The lower shrouds may be attached to separate shroud plates no further forward than the front face of the mast.

- 14.6. The extension of the line of the top of the spinnaker halyard, when held taut at right angles to the mast shall be attached below band B and the shrouds forestay and foresail halyard shall be attached below this point.
- 14.7. The shrouds shall not be adjusted while racing.
- 14.8. No sheeting is permitted through or outboard of the hull.
- 14.9. No controls shall be hydraulically actuated.

#### 15. Main Boom

- 15.1. The boom shall be of aluminium alloy extrusion with a fixed bolt rope track which shall be integral with the spar section. The section must not exceed 100mm deep x 85mm wide.
- 15.2. A distinctive coloured band, (outer point) not less than 10mm wide shall be marked on the boom with its inner edge not more than 2565mm from the aft side of the mast, including the groove but excluding any local curvature, when the boom is fitted and horizontal.
- 15.3. Permanently bent booms are prohibited but a set, due to distortion of up to 25mm between the measurement band and the fore end of the boom is permitted.
- 15.4. Cutaway booms are allowed provided the cutaway does not exceed 625mm at either end.

# 16. Spinnaker Pole and Whisker Pole

- 16.1. May be of wood or aluminium alloy.
- 16.2. The overall length, including fittings shall not exceed 2550mm.
- 16.3. Shall be able to pass through 75mm diameter circle.

### 17. Sails

- 17.1. The following sails are permitted; standard mainsail, foresail and spinnaker (only one of each type of sail shall be carried in a race).
- 17.2. Sails shall be made and measured in accordance with the World Sailing Measurement Instructions except where varied herein. The mainsail, foresail and spinnaker shall be of woven polyester material having the same fibre throughout. Unwoven windows are permitted in both the mainsail and foresail. The transparent material of such windows shall not exceed 0.6m sq. per sail. Windows shall not be placed closer to the luff, leach or foot than 150mm.
- 17.3. Reinforcement Maximums

	Foresai	Mainsail
Primary reinforcement	400mm	400mm
Secondary reinforcement	1120mm	1150mm
Flutter patch	200mm	200mm
Chafing Patch	500mm	800mm

- 17.4. Sails may be made by any Sailmaker, the mainsail and foresail shall be white, except that coloured draft stripes are permitted. Spinnaker to own choice.
- 17.5. The sail numbers, letters and class emblem shall be placed as laid down in the Racing Rules of Sailing. The emblem shall not be less than 565mm high or 310mm wide. Numbers and letters shall be of the following minimum dimensions:- Height 300mm; width 95mm (except No.1) thickness 50mm. Minimum space between adjoining figures 60mm. All Yeoman sail numbers will be black with exception of numbers on the spinnaker when white will be accepted should black be insufficiently visible on the coloured background. The Yeoman and Kinsman insignia shall comply to the pattern of the Designer. The Yeoman insignia will be black and the Kinsman insignia and sail number will be red

#### 17.6. Mainsail

#### 17.6.1.

- 17.6.1.a. The sail shall be hoisted by a halyard.
- 17.6.1.b. The luff (and if fitted) foot bolt ropes shall be in the spar grooves or tracks.
- 17.6.1.c. Battens shall be fitted, except in case of accidental loss.
- 17.6.1.d. The sail shall be set so that the highest point of it, projected at 90 degrees to the mast spar, shall not be higher that the lower edge of the upper point. The tack point shall not be lower that the upper edge of the lower point. The after most visible point on the leech, projected at 90 degrees shall be forward of the inner edge of the outer point of the boom.
- 17.6.2. The length of the leech shall not exceed 7350mm (straight line measurement). The foot median shall not exceed 7500mm.
- 17.6.3. The mainsail shall have three battens of any material which shall divide the leech, the aft edge of the sail into four (equal) parts (+/- 50mm). The outside length of the batten pockets shall not exceed; Top 765mm, middle 915mm, bottom 915mm. The inside width of the batten pockets shall not exceed 50mm.
- 17.6.4. The top width shall not exceed 125mm.
- 17.6.5. The distance from the 1/4, 1/2 and 3/4 leech points to the nearest point of the luff, including the bolt rope, shall not exceed 2155mm, 1600mm and 920mm respectively. Any hollows in the leech shall be bridged by straight lines. The 1/2 leech point shall be determined by folding the sail with the head point even with the clew point. The 1/4 and 3/4 leech points shall be determined by folding the clew and head points to the half leech point.

17.6.6. One set of reef points or cringles for slab reefing may be fitted. on a line from a point on the luff 1060mm-1070mm up from the tack point and a point on the leach 1085mm-1095mm up from the clew point.

#### 17.7. Foresail

- 17.7.1. The 'triangulation' method of measurement shall be used if the top width of the sail at the head exceeds 30mm.
- 17.7.2. No part of the sail shall extend beyond a line between the aft headpoint and the clew point.
- 17.7.3. Foresail shall have a maximum luff length of 6967mm, a maximum leach length of 6425mm, a maximum foot median of 6665 mm and a maximum foot length of 2950mm.
- 17.7.4. Battens are prohibited.

# 17.8. Spinnaker

- 17.8.1. The spinnaker shall be a symmetrical, three cornered sail. No headboard, battens or other stiffening device other than normal woven reinforcing is permitted.
- 17.8.2. The length of the leeches shall be a maximum 6400mm with maximum differential of 50mm, measured along the edge of the sail from the head point to the clew point.
- 17.8.3. The foot shall not exceed 4500mm.
- 17.8.4. The width at half height shall be a maximum of 4576mm and a minimum of 85% of the sails foot measurement.
- 17.8.5. The foot median shall be a maximum of 7300mm.

#### 18. Crew

- 18.1. There shall not be less than two and no more than four persons on board when racing in open class races. This rule may be varied at local fleet level.
- 18.2. No ballast shall be carried by the crew.

#### 19. Advertising

19.1. Advertising on boats is not permitted (as per category 'A' of the I.S.A.F advertising code).

# 20. Appendices

# Appendix A – Acknowledgements

Design concept – Mr E Yeomans
Original Designer – E C Landamore & Co Ltd.
300 Series Designer - Phil Betts
Class Builder – Chris Tuckett, Belaugh Boatyard

# Appendix B - Buoyancy

The Class Association does not specify nor is it responsible for buoyancy specifications. However these boats can sink and it is the responsibility of the owner to ensure their boat has adequate buoyancy to suit varied sailing conditions. The Class Association Manual gives details on how adequate buoyancy could be achieved.

# Appendix C – Sail Area

Any mainsail, foresail or spinnaker of significantly less than the maximum dimensions specified on previous pages of this booklet may be used in competitive racing.

# Appendix D – Sail Measurement

All sails measured & signed by an Association Measurer prior to the issue date of these rules can continue to be used in competitive racing.