

I4

Rules of the
INTERNATIONAL I4 CLASS



**WORLD
SAILING**
CLASS ASSOCIATION

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Effective from 31 March, 2016

RULES

The Name of the Class shall be the International **I4** Class

The International Fourteen is a development class sailing dinghy.

Under the authority of the International Fourteen World Association, the Measurement Rules presented in this booklet constitute the sole reference, except where noted, for the measurement of boats in this class.

The World Sailing Sail Measurement instructions shall not apply. The World Sailing Equipment Rules of Sailing (“ERS”) definitions shall apply to words in bold text. They shall be used in the sail measurement processes. Where a definition is amended or modified by these rules, the modified definition shall be used.

A boat includes its hull, spars, sails and fittings.

The units of measurement shall be metric.

HULL and CENTREBOARD

Note: Unless specifically required otherwise hereunder, all measurements shall be taken parallel to one of the three major axis of the hull - vertical, horizontal or transverse - related to the waterline and fore and aft centre line of the hull.

Rule 1 Length of Hull and Fittings

- (a) The overall length of the hull shall not exceed 4267mm including stem band but excluding all the rudder fittings, transom flaps, drain plugs and stem fittings. Stem fittings shall not project more than 25mm beyond the surface of the hull. No fittings or equipment which have the effect of elongating the skin of the boat beyond a length of 4267mm is permitted.
- (b) A bowsprit and a device to support such bowsprit are allowed. Neither shall extend more than 900mm forward of the hull. The bowsprit shall be able to pass through a ring of internal diameter 140mm. Any device to support the bowsprit shall not exceed cross sectional dimensions of 13mm transverse by 76mm horizontal. Neither shall extend more than 457mm below the sheerline or its extension. A line extended from the jib luff shall not cross a line extended from the sheerline more than 300mm in front of the stem.
- (c) Sails may be sheeted to any point within the hull length measurement of Rule 1.

Rule 2 Beam

- (a) The width of the hull including fittings and gunwale assembly, at its widest points shall not be in excess of 1830mm. Foot loops, which are not capable of supporting the crew outboard the hull or gunwale assembly, are not part of the hull and shall not be included for the purpose of measuring the maximum beam measurement or for the purposes of Rule 5. (See also Rule 19).
- (b) Sails may be sheeted to any point within the hull width measurement of Rule 2

Rule 3 Shape and Depth of section 2134mm aft of bow

At this section:

- (a) The outside of the skin shall not be higher than 200mm above the outside of the keel at a beam of 1040mm.
- (b) The top edge of the hull or gunwale assembly shall not be less than 508mm above the lowest part of the hull (*for the purposes of this Rule, any hollow in the keel or keel band shall be bridged by a straight line from which the measurements shall be taken*).
- (c) The outside of the skin shall not be less than 1040mm in beam at any point above the measurement points in 3(a), up to the sheer line.

Rule 4 Sheer

The sheerline, defined as being the top outside edge of the hull including the deck and gunwale in profile from the side, shall be straight or a fair continuous curve.

Rule 5 Taut Tape

This rule applies to the surface of the boat that is located between the transom and 1600mm aft of the bow but excluding any surface located between the sheer line and 150mm beneath the sheer line. A 600mm long tape, held taut between any two points on the hull in the area as defined above, shall nowhere exceed 2mm from the outside surface of the hull. This restriction shall not apply to boats first registered before 1st July 2005, provided that the hull within the area covered by this rule remains unmodified since that first registration.

Rule 6 Hydrofoils

Only one hydrofoil in contact with the water and configured such that it can develop a vertical dynamic lift component while sailing with no heel may be fitted. This hydrofoil shall comprise only one lifting element, which may be divided by supporting (non-lifting) structure. The sum of the areas of the lifting elements of all underwater appendages not lying in a vertical plane shall not exceed 0.14 m². The hydrofoil shall be symmetrical about the longitudinal centreline of the hull, or foil to which it is attached, at all times while sailing. If such a hydrofoil is used in one race of an event, the same hydrofoil must be used in all races of the event unless accidentally damaged beyond reasonable repair, in which case it may be removed or replaced with the permission of the race committee.

Rule 7 Anchor

An anchor and chain or rope need not be carried.

Rule 8 Weight

- (a) The hull in dry condition shall weigh not less than 74.25kgs. From the 1st June 2011, the minimum weight shall be 72kg. From the 1st June 2013, the minimum weight shall be 70kg. The hull shall include essential fittings (as defined below), buoyancy apparatus (whether moveable or fixed), spinnaker boom and controls directly connected for the purposes of launching or retraction of the spinnaker boom, and correctors, but exclude the mast, boom, rudder, centreboard, lines, sails and all other gear.

Essential fittings are defined as:

- (i) Any fittings that are permanently bolted, glued or screwed to the hull.
- (ii) Any fittings attached to the hull, that are included in another hull measurement rule. Such fittings include, but are not limited to, footloops, non-skid materials and materials covering the foredeck area attached to, and between the gunwales.
- (iii) All components of an assembly that is used to support the mast at a point no higher than the top of the lower band defined in Rule 14(c)(i).
- (b) If the hull is found to be underweight, lead correctors shall be added. No other inside ballast shall be carried. Neither any essential fixed fittings nor any correctors shall be removed or altered without the boat being reweighed by an Official Measurer, and the revised weight being recorded on the Measurement Certificate. The weight of any correctors shall be stated on the Measurement Certificate. Correctors may not be moved during an event.

Rule 9 Centreboard/daggerboard

Only one centreboard or one daggerboard shall be carried.

BUOYANCY

Rule 10 Buoyancy Apparatus

The buoyancy apparatus of the boat shall be constructed so that it meets:

- (a) The requirements of Rule 11
and
- (b) The following requirements:
 - (i) Boats constructed of buoyant materials shall have at least one independent watertight unit securely attached to or integral with the hull of minimum volume 0.085m^3 .
 - (ii) Boats constructed of non-buoyant materials shall have three independent watertight units containing not less than 0.085m^3 minimum of closed cell rigid foam plastic or air bags of robust construction. Either shall be capable of being removed for inspection.
 - (iii) Covers, valves etc., shall be enclosed in a manner that prevents accidental dislodgement whether the boat is afloat, capsized or swamped.

Rule 11 Buoyancy Test

With sails, boom, rudder, tiller and all loose gear removed from the boat, but with the centreboard or daggerboard and mast in position, the boat shall pass the following buoyancy test:

- (a) With the boat on its side and the mast horizontal, it shall support not less than 136kgs placed entirely out of the water and not within either 1524mm of the bow or 610mm of the stern. The boat shall float for 10 minutes on each side, followed by 10 minutes upright. At the end of this test and with the specified weight aboard, the boat must float with the top edge of the hull (sheerline or gunwales) not less than 127mm above the water for its entire length.
- (b) With the boat out of the water, the Measurer shall check that all the buoyancy units contain not more than 13.6kgs of water. No air bags shall be visibly deflated.
- (c) Each buoyancy test is valid for twelve months. For the Measurement Certificate to remain in force, the boat must be re-tested in accordance with the procedure of Rule 11(a) and (b) and re-certified by an authorised person (i.e. Class or Club Official) within each twelve months.
- (d) Any alteration of the buoyancy apparatus immediately invalidates the Measurement Certificate until the boat is re-tested and certified according to this Rule by an Official Measurer.
- (e) The initial test and the first test after any alteration to the buoyancy apparatus must comply with Rule 11, paragraphs (a) to (d) inclusive. Subsequent re-tests may be carried out by a dry testing method approved by the National Authority. Boats sailing outside their National Authority's jurisdiction or taking part in International Team Racing Events, must be re-tested in accordance with Rule 11, paragraphs (a) to (d) inclusive.
- (f) Boats constructed of buoyant materials are exempt from the requirements of this rule.

SAILS, SAIL AREA, SPARS and RIGGING

Rule 12 Sail Plan

- (a) (i) The **Throat Point** of the mainsail and the **Head Point** of the headsail and spinnaker must be lower than a line 7626mm above and parallel to the top edge of the hull and gunwale assembly measured in way of the mast at all times.
- (ii) Where the mast is stepped on or above the gunwale line the 7626mm measurement shall be taken from the gunwale line in way of the mast. If a mast jack is used in such cases, the measurement shall be taken with this fully extended.
- (b) The extension of the top of the spinnaker halyard when held taut at right angles to the mast shall intersect the mast not more than 7626mm above the top edge of the gunwale band. If the spinnaker halyard is led through an eye or block, no part of such eye or block shall project more than 76mm from the mast.
- (c) Spare.
- (d) All sails shall be capable of being fully lowered while afloat, without detaching the forestay or requiring that the boat be capsized.
- (e) (i) The foremost end of the spinnaker boom, including end fitting(s), shall not extend more than 2743mm beyond the foremost vertical extension or transverse extension of the bow. The measurement of 2743mm shall be taken at right angles to the extension of the centreline of the hull. The spinnaker boom shall not be used as a bowsprit for headsails or when sailing close hauled.

Any spinnaker boom when in use and below a horizontal projection from the lower mainsail black band, shall have a minimum end diameter of 50mm and shall be shaped or capped to avoid a sharp edge.

- (ii) In its retracted position, the spinnaker pole shall not extend more than 900mm in front of the foremost vertical or transverse extension of the bow. The spinnaker pole shall be in its retracted position whenever the spinnaker is not in use.

The spinnaker boom need not be attached to or fixed to the mast when in use.

- (f) A spinnaker once hoisted in a race shall be the only spinnaker to be used for the remainder of that race.

Rule 13 Sail Area

- (a) The area of the headsail shall be taken as $(0.5 \times L \times LP) + (0.66 \times LE \times R)$ where L, LP, LE, & R are as defined in Rule 14. The area shall be rounded off to the nearest 0.01m^2 and shall be inscribed near the clew on the port side of the sail in numbers not less than 76mm high and line width 6mm in a contrasting colour indelible ink.
- (b) The mainsail area shall be taken as $0.25A (G1 + G2 + G3 + 0.5B)$ where A and B are as defined in Rule 14(c)(i) and Rule 14(c)(ii) and G1, G2 and G3 are the mainsail girths defined in Rule 14(c)(v). This area shall be rounded off to the nearest 0.01m^2 and shall be stated on the Measurement Certificate and inscribed near the clew on the port side of the sail. Above this figure shall also be inscribed the maximum area of the headsail permitted with this mainsail (i.e. 18.58 less the measured mainsail area). Both these numbers to be not less than 76mm high and line width 6mm in a contrasting colour indelible ink.
- (c) Different combinations of mainsail and headsail areas are permitted provided the total measured area in use at any one time does not exceed 18.58 m^2 .

Rule 14 Sail Measurement

(a) Method

- (i) Measurements are taken with the sail smoothed out on a flat surface and with just sufficient tension to remove wrinkles across the line of the dimension being taken. All measurements are to be taken over the full width including tabling and roping with the battens in position.
- (ii) Each sail is to be measured, and if satisfied, the Measurer shall date and sign the **Clew** on the port side of the sail and mark the area of the sail in accordance with Rule 13(a) for the headsail and Rule 13(b) for the mainsail.
- (v) All reinforcement shall be capable of being folded in any direction, measuring no more than 13mm across the fold inward from the folded edge. Any finishing material or coating applied to the sail material shall not prevent the reinforcement being folded. This rule shall not apply to headboards, clewboards, or any other fittings attached to the sail with a maximum dimension of less than 102mm.

(b) Headsail

- (i) The Luff length L shall be measured from the bottom edge of the sail at the tack to the top edge of the sail at the head. The measurement L shall not be exceeded whilst racing.

Either the headsail shall have a check wire of minimum diameter 1.25mm attached to the head and tack of the sail whilst racing, to ensure that measurement L is not exceeded at any time, and the distance between the tack and head attachment points shall not exceed measurement L; or if the headsail is presented for measurement without a check wire fixed at the head and tack, then L shall be measured with a tension of 5kg applied to the Luff, and the measurement L shall be marked within 150mm of the tack on the port side in letters of minimum dimension 25mm high.

- (ii) The length LP shall be measured from the outside edge of the clew to the nearest point of the Luff. The clew is defined as the intersection of the foot and the leech, extended as necessary.
- (iii) R shall be the maximum distance of the leech from a straight line joining the head and clew, as defined in rule 14(b), measured at right angles to that line. LE shall be the length of the line from head to clew. Where the leech is concave or straight R shall be taken as equal to zero.

(c) Mainsail

- (i) The mast shall be painted with three distinctively coloured bands:
 - the first shall have its upper edge level with the top edge of the hull and gunwale assembly in way of the mast and no part of this band may protrude above this level (Gunwale band)
 - the second coloured band shall be painted with its upper edge in line with the top edge of the boom, when the boom is at right angles to the mast. (Boom band)
 - the third coloured band shall be painted so that the lower edge is no more than 7626 mm from the top edge of the Gunwale band (Head band)
- (ii) The dimension A is the distance between the upper edge of the Boom band and the lower edge of the Head band. The dimension B is the shortest distance from the **Clew** of the mainsail to the **Tack** or **Luff**.
- (iii) The measurements A and B are to be stated on the Measurement Certificate.
- (iv) The girth measurements G1, G2 and G3, indexed from the **Throat**, shall be taken from their respective points on the **Leech** to the nearest point on the **Luff** of the sail. The half height on the **Leech** shall be determined by folding the **Throat Point** to the **Clew** and the quarter and three quarter height **Leech Points** by folding the **Clew** and the **Throat Point** respectively to the half height point on the **Leech**. If there are any hollows in the **Leech** of the sail, these shall be bridged by straight lines and the girth measurements taken from these straight lines.

The **Throat Point** of the mainsail is defined in accordance with the ERS 2009 – 2012, Part2 Definitions, Sub Section B – Additions for Other sails p39 of 46.

- (v) For sails first measured after 14 July 2011, no part of the mainsail may project above a reference line passing through the **Throat Point** and drawn at 112° from the **Luff**. Figure 1 shows a suggested mainsail plan profile measurement template.

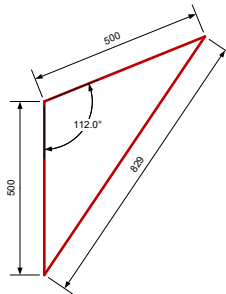


Figure 1- Suggested mainsail **Throat Point** measurement template

Rule 15 Boom

The boom, excluding fittings, shall be capable of being passed through a circle of 150mm diameter. The total accumulated length along the boom of any part of all attachment surfaces which fall outside the 150mm diameter circle, shall not exceed 152mm.

Rule 16 Distinguishing Marks

- (a) On each side of the mainsail shall be the insignia **14** and beneath this the national letter and the class number of the boat as stated on the Measurement Certificate, thus:

14

GBR 1355

The National letters and sail number shall be in accordance with RRS Appendix G, except that G.1.3(d) shall not apply.

- (b) Each boat shall bear a permanent distinguishing mark, which shall be either
 - (i) The complete class number, e.g. GBR 1355, *or*
 - (ii) The manufacturer's code, in which case this code shall appear on the boat's Measurement Certificate, *or*
 - (iii) The World Sailing or ISAF plaque specified in Rule 21, the number of which shall be recorded on the Measurement Certificate.

Rule 17 Prohibitions and equipment usage

17 (a)-(d) Prohibitions

The following are prohibited:

- (a) Mast or boom designed or built with a permanent bend. A bend is defined as present if, with the mast evenly supported and under zero loading, a straight line along the aft side of the mast, including sail track if present, from the lower end of the upper painted band to the upper end of the lower painted band is more than 50mm from the mast including sail track if fitted.

- (b) Rotating masts.
- (c) Double luffed sails, except that headsails attached to the forestay using unshaped sleeves passing around the forestay are permitted.

17 (e) Equipment usage

- (i) *Sails*. Each boat, irrespective of owner, shall have for use not more than one (1) mainsail, two (2) headsails and one (1) spinnaker for use during any one regatta.
- (ii) *Mast and spars*. Each hull is only allowed one mast, one boom, one bowsprit and one spinnaker boom for use during any one regatta.
- (iii) *Centreboard/daggerboard*. Each hull is only allowed one centerboard or one daggerboard for use during any one regatta.
- (iv) *Rudder*. Each hull is only allowed one rudder for use during any one regatta.
- (v) *Hydrofoil*. Each hull is only allowed one hydrofoil (as defined in Rule 6) for use during any one regatta.
- (vi) *General*
 - (i) This Rule 17(e) applies only to World Championships, other International events, and to National Championships
 - (ii) The mast, spars, sails, rudder, centreboard/daggerboard, and hydrofoil of each boat, irrespective of owner, must be declared at the start of each regatta.
 - (iii) Any application to change a mast, spar, sail, rudder, centerboard/daggerboard, or hydrofoil must be in writing to the PRO and permission will be granted provided (a) the discarded mast, spar, sail, rudder, centerboard/daggerboard or hydrofoil is damaged beyond repair and is not used again by that boat during the regatta and (b) any official stamp on the discarded mast, spar, sail, rudder, centerboard/daggerboard, and hydrofoil has been appropriately crossed;

Rule 18 Crew

Crew shall be two, including the helmsman.

Rule 19 Equipment for Crew

- (a) Both members of the crew shall be in contact with the hull, fittings or gunwale assembly. Either, or both, may use a trapeze, individually or simultaneously. Trapezing is not allowed from any point outside the 4267mm length of the hull as defined in Rule 1.
- (b) The trapeze belts when wet, must float and shall not weigh more than 4kg each.
- (c) A competitor shall not wear or carry clothing or equipment for the purpose of increasing his/her weight. The total weight of clothing or equipment worn or carried by a competitor shall not exceed 10kg when weighed as provided in Appendix H of the Racing Rules of Sailing.

Rule 20 Certificate

- (a) The Measurement Certificate and Form shall be approved by the World Association.
- (b) No boat shall be allowed to race in the Class unless it has a valid Measurement Certificate. Application for measurement and registration shall be the responsibility of the Owner who shall apply to his National Authority for a Sail Number and Measurement Form.
- (c) The Owner shall arrange for the attendance of an Official Measurer who shall complete the Measurement Form and Measurement Certificate, and, if satisfied, shall certify thereon that the boat complies with the Class Rules.

- (d) The Measurement Form and Measurement Certificate, when complete shall be returned by the Owner to his National Authority together with any registration fee required by the National Authority. The National Authority shall then endorse the Measurement Certificate.
- (e) Change of ownership invalidates the Measurement Certificate, but re-registration may be effected by the new owner in accordance with procedures laid down by the National Authority.
- (f) A Measurement Certificate issued or endorsed by the National Authority shall remain valid so long as the boat continues to comply with these Rules, and the details shown on the Measurement Certificate and providing that there is a current buoyancy endorsement. (See Rule 11(c)).
- (g) The Owner of the boat is responsible for ensuring that the Measurement Certificate is not rendered invalid from any cause.
- (h) If any details on the Measurement Form or Measurement Certificate are altered the Owner shall arrange for an Official Measurer to re-measure the altered items. The Measurer shall, if satisfied, complete the relevant section of a Measurement Form or Measurement Certificate and the Owner shall process this as laid down by the National Authority.
- (i) These Rules are effective from the 1st January 1997 and shall apply to all boats first measured as an International 14 on or after that date. Boats whose rigs and sails were measured in accordance with the Rules effective from 1st March 1976 to 28th February 1982 may continue to use those rigs and sails, but must conform with the 1st January 1989 Rules if any alteration to their rig is made or any additional sails used.

A boat first measured as an International 14 before 1st March 1976 shall comply with the Rules in force at the time she was first measured. Any alterations, replacements or repairs shall at the Owner's option, comply with either the Rules in force at the time she was first measured or with these Rules. However, if any alteration is made in accordance with these Rules to the sail plan or to the spars, all the sails and spars shall be measured in accordance with these Rules and a new Measurement Certificate shall be issued.
- (j) Any hull first measured and then registered with the Australian Fourteen Foot Council or the New Zealand 14 Association before 1st January 1997 need not conform to Rules 1 and 3 herein, provided it continues to conform to the Rule under which it was originally measured.
- (k) Australian and New Zealand International 14 Associations are permitted to conduct races for entries limited to registered owners from those associations at a reduced weight of 65.5kg, measured in accordance with local rules, up until 1st January, 1999.
- (l) Where a conflict arises between the rules of the International 14 Class and the rules of the Australian and New Zealand International 14 Associations, the conflict shall be resolved by reference to the Australian Rotary letter dated 25th June, 1996.

Rule 21 World Sailing Plaque

Boats first measured after 1 April 2010 shall display a World Sailing or ISAF plaque evidencing payment of the fee payable to World Sailing on each new boat.

NOTES and AMENDMENTS

Approved by ISAF (now World Sailing), November 1995. Effective 1st January, 1996

Includes amendments approved by ISAF (now World Sailing) November 1996 (effective 1st January 1997), May 1998 (effective 1st June 1998), November 2000 (effective 1st December 2000 and 1st January 2001), August 2001 (effective August 2001), November 2002 (effective 1st December 2002), February 2005 (effective 4th February 2005), December 2005 (effective 19th December 2005), June 2007 (effective 1st July 2007), March 2010 (effective 17 March 2010), July 2011 (effective July 14 2011), and by World Sailing February 2016 (effective 31 March 2016).

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