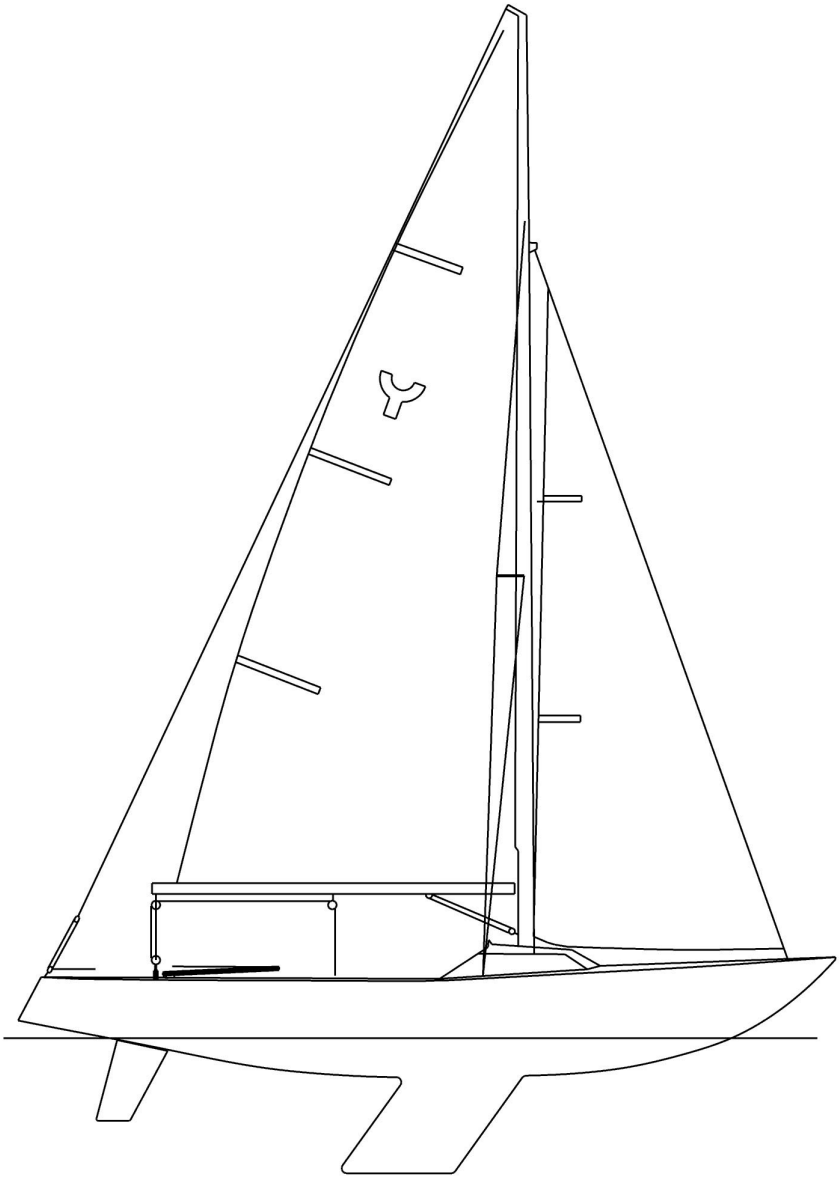
INTERNATIONAL
YNGLING
CLASS RULES
2003



The Yngling was designed in 1967 by Jan Herman Linge and was adopted as an international class in May 1979.

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Introduction to the International Yngling Class Rules

Hulls and Hull Appendages are built by ISAF licensed builders in accordance with the ISAF International Yngling Construction Manual. Hull and deck moulds emanate from a common master plug controlled by ISAF. Moulds must not be altered in any way by the builder without the written authority of ISAF.

Any alteration of the form or construction of the hull, keel and rudder as supplied by the builder is prohibited unless specifically permitted by these class rules.

Rigs and Sails are controlled by measurement and no restrictions are imposed on the source of manufacture or supply. Variations are permitted within the specifications in Section F and G. Sails shall be certified.

An Yngling shall be equipped in accordance with Section C of these class rules.

The use of exotic materials such as Carbon Fibre and Titanium are prohibited except for use in the tiller and tiller extension, spinnaker pole and proprietary fittings.

This introduction is an integral and binding part of the class rules.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.

A.1.2 The word "shall" is mandatory and the word "may" is permissive.

A.2 ABBREVIATIONS

A.2.1

ISAF	International Sailing Federation
MNA	ISAF Member National Authority
IYA	International Yngling Association
NYA	National Yngling Association
ERS	Equipment Rules of Sailing
RRS	Racing Rules of Sailing

A.3 AUTHORITIES AND RESPONSIBILITIES

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

A.3.2 Neither the ISAF, the MNA, the IYA, an NYA, the **certification authority** 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 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate** and shall do so on the request of the ISAF.

A.4 ADMINISTRATION OF THE CLASS

A.4.1 In countries where there is no MNA, or the MNA does not wish to administer the class, its functions as stated in these **class rules** shall be carried out by the IYA which may delegate the administration to an NYA.

A.5 ISAF RULES

A.5.1 These **class rules** shall be read in conjunction with the ERS.

A.5.2 Except where used in headings, when a term printed in "**bold**" the definition in the ERS applies and when a term is printed in "*italics"* the definition in the RRS applies.

A.6 CHAMPIONSHIP RULES

A.6.1 The International Yngling Class Championship Rules shall apply at World and Continental Championships.

A.7 SAILING INSTRUCTIONS

A.7.1 These **class rules** shall not be varied by sailing instructions except as provided by A.7.2.

A.7.2 At World, Continental or Regional Championships the sailing instructions may vary these **class rules** with the agreement of the IYA.

A.8 CLASS RULES CHANGES

A.8.1 Amendments to these **class rules** shall be proposed by the IYA and must be approved by the ISAF in accordance with ISAF Regulation 26.10.

A.9 CLASS RULES INTERPRETATIONS

A.9.1 GENERAL

Interpretations of **class rules**, except as provided by A.9.2, shall be made in accordance with the ISAF Regulation 26.11.1.

A.9.2 AT AN EVENT

Any interpretation of **class rules** required at an event may be made by an international jury constituted in accordance with the RRS. Such interpretation shall only be valid during the event and the organising authority shall, as soon as practical after the event, inform the ISAF, the MNA and the IYA.

A.10 INTERNATIONAL CLASS FEE AND ISAF PLAQUE

A.10.1 The licensed builder shall pay the International Class Fee.

A.10.2 ISAF shall, after having received the International Class Fee for the hull, send the ISAF Building Plaque and a measurement form to the licensed hull builder.

A.11 SAIL NUMBERS

A.11.1 The owner shall apply to the MNA, or the NYA when delegated, for a sail number giving the ISAF plaque number and the builder's name.

A.11.2 Numbering shall be national and shall start from “1”. Sail numbers shall be used once only and shall be consecutive.

A.12 CERTIFICATION

A.12.1 For a **hull** and **keel** not previously **certified**, all items required by the measurement form to be measured shall be measured by an **official measurer** contracted by the builder and the details entered onto the form.

A.12.2 The measurement form, or a certified copy, and any **certification** fee if required, shall be sent to the **certification authority** in the country where the **hull** is to be registered.

A.12.3 Upon receipt of a satisfactorily completed measurement form and **certification** fee if required, the **certification authority** shall issue a **certificate**. The **certification authority** shall retain the original measurement form. The form shall be transferred to the new **certification authority** when the **hull** is exported.

A.13 VALIDITY OF CERTIFICATES

A.13.1 A **certificate** becomes invalid upon:

(a) change of ownership,

(b) withdrawal by the **certification authority**,

(c) the issue of another **certificate**,

(d) any alteration or repair to **hull** other than permitted routine maintenance,

(e) any alteration to boat **corrector weights**.

A.14 RE-CERTIFICATION

A.14.1 Upon change of ownership the new owner shall apply to the **certification authority** in the country where the hull shall be registered for a new **certificate**. The application shall include the old **certificate** and any re-**certification** fee that may be required. In the case of an imported hull the **certification authority** shall request the measurement form from the previous **certification authority**. A new **certificate** shall then be issued to the new owner.

A.14.2 Upon alteration or repair to an item required by the measurement form to be measured the relevant item shall be re-measured by an **official measurer** and the details entered on a new form. The new form together with the old **certificate** and any re-**certification** fee that may be required shall be sent to the **certification authority** in the country where the hull is registered. A new **certificate**, showing the dates of initial and new **fundamental measurement**, may then be issued to the owner.

A.14.3 Upon alteration to boat **corrector weights**, the boat shall be re-weighed by an **official measurer** and the details entered on the existing **certificate**. The **certificate** and any re-**certification** fee that may be required shall be sent to the **certification authority**. A new **certificate** may then be issued to the owner.

Section B – Boat Eligibility

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

B.1 CERTIFICATE

B.1.1 The hull shall have a valid **certificate** including boat **corrector position** and **weight** details.

B.2 CERTIFICATION MARKS

B.2.1 Sails shall carry **certification marks**. See G.1.2.

B.3 FLOTATION CHECKS

B.3.1 A race committee may require that a **boat** shall pass a flotation test in accordance with Appendix 1.

B.4 CLASS ASSOCIATION STICKER

B.4.1 An IYA class fee sticker for the current year shall be affixed approximately on the centreline of the deck between the **rudder** stock and the aft edge of the cockpit.

B.4.2 Sails shall carry the IYA Sail Label. See G.1.4.

PART II – REQUIREMENTS AND LIMITATIONS

The rules in Part II are **closed class rules**. Measurement shall be carried out in accordance with the ERS except where varied in this Part.

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. Measurement to check conformity with rules of Section C is not part of **fundamental measurement**.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

The ERS Part I – Use of Equipment shall apply.

C.2 CREW

C.2.1 LIMITATIONS

The **crew** shall consist of two or three persons.

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

(a) **Personal buoyancy** for all **crew** members.

C.3.2 OPTIONAL

(a) One hiking harness for each **crew** member. A hiking harness shall not weigh more than 2.5 kg and shall have positive buoyancy in float.

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with the RRS Appendix 1 Category C.

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) **Mandatory**

(1) Not less than one hand bailer per **crew** member and one hand pump. The capacity of each hand bailer shall not be less than 4 litres. The total weight of the hand bailers and the hand pump(s) shall not exceed 4 kg. The hand bailers and the hand pump(s) shall be attached to the **boat** and stored in the cockpit.

(2) One anchor, or anchor with chain securely attached thereto, and not less than 30 m of rope of not less than 10 mm in diameter securely attached thereto. The total weight of the anchor and chain shall not exceed 8 kg or be less than 6 kg of which the weight of the anchor shall be not less than 4 kg.

(3) The anchor with chain and rope may be stored under the cockpit floor, or under the centre section in **hull** with double bottom.

(b) **Optional**

(1) Electronic or mechanical timing devices.

(2) Electronic or magnetic compasses, which may include a timing device and a memory function.

C.5.2 NOT FOR USE

(a) **Mandatory**

(1) Not less than one paddle minimum 1200 mm long.

C.6 BOAT

C.6.1 WEIGHT

	minimum	maximum
Weight of **boat** in dry condition	645 kg	

The weight shall be taken excluding **sails**, sheets, portable equipment and **personal equipment**

C.6.2 CORRECTOR WEIGHTS

Corrector weights of lead shall be permanently fixed to the lower surface of the deck when the **boat** weight, as specified in C.6.1, is less than the minimum requirement. The weights shall be placed with approximately two-thirds of the total weight forward and one-third aft of the cockpit. See also rules A.14.3 and B.1.1.

C.7 HULL

C.7.1 MODIFICATIONS AND MAINTENANCE

(a) The **hull** mouldings shall not be altered in any way except as permitted by these **class rules**.

(b) The double bottom centre section, or floor boards if hull without double bottom, may be exchanged for other items of similar material, weight and dimensions.

(c) One hole on each side not exceeding 240 mm x 35 mm for two handholds mounted side by side and holes for fittings and other hand holds not exceeding 120 mm in any direction may be made in the deck between the bulkheads.

(d) Holes not bigger than necessary for the installation and passage of body or foot straps and other equipment may be made in the knees and floor boards if any.

(e) Any scribe lines in the external surface of the hull shell at the waterline may be filled.

(f) Hull mouldings may be sanded and painted and/or polished and have scratches repaired providing the shape is not altered.

(g) If any hull moulding is repaired in any other way than described in C.7.1(e), an **official measurer** shall verify on the **certificate** that the external shape is the same as before the repair and that no substantial stiffness, or other advantage has been gained as a result of the repair. The **official measurer** shall also describe the details of the repair on the **certificate**.

C.7.2 FITTINGS

(a) **Mandatory**

(1) A mast support under deck, which is not adjustable when racing, not weighing less than 0.8kg.

(2) Mainsheet attachment point(s) or track with traveller fitted to the deck aft of the rudder stock.

(b) **Optional**

(1) One draining hole with a maximum inner diameter of 30 mm in each buoyancy compartment with a plug.

(2) Not more than four self-bailers.

(3) Deck handles that shall not exceed 75 mm in height above deck and, if of rigid material, shall not extend outboard of the **hull**.

(4) Not more than five hand holds through each side deck which shall be reasonably watertight

(5) Foot straps fastened inside the cockpit.

(6) Body straps fastened inside the cockpit or on deck.

(7) One control panel or dashboard arrangement fitted between the cabin sides, or the side decks provided it is nowhere closer than 180 mm to the hull shell.

(8) Sheet winches without a mechanical advantage.

(9) Devices, with the exception of winches, attached to the top of the deck to tension or hold mainsail and jib halyards.

(10) Halyard cleats.

(11) Backstay attachments, blocks, fairleads and cleats

(12) Mainsheet track traveller control blocks, fairleads and cleats.

(13) Mainsheet blocks at the mainsail attachment point or track traveller and in the cockpit, one of which may be a ratchet block, and cleats.

(14) A bridge, console or other attachment point for a mainsheet block in the cockpit which shall be not less than 250 mm vertically below the top of cockpit coaming closest to the attachment point.

(15) Mainsail Cunningham blocks, fairleads and cleats.

(16) Mainsail reefing fairleads, blocks and cleats.

(17) Jib sheet tracks, blocks of which one at each side may be a ratchet block, fairleads and cleats.

(18) Jib Cunningham blocks, fairleads and cleats.

(19) Jib Barber hauler fairleads, blocks and cleats.

(20) Spinnaker boom lift and downhaul blocks, fairleads and cleats.

(21) Spinnaker sheet and guy blocks one of which at each side may be a ratchet block, fairleads, hooks and cleats.

(22) Spinnaker Barber hauler blocks, fairleads and cleats.

(23) A stemhead cover.

(24) Tiller lock.

(25) Stowage clips for paddle(s), spinnaker pole, sail bags and other equipment.

(26) Deck clips for cockpit cover and/or tent

(27) Compass mounting.

(c) **Use**

(1) Bulkhead inspection covers shall be securely locked in their positions.

(2) Double bottom centre section if hull with double bottom, or floor boards if hull without double bottom, shall be in place.

(3) Body straps shall only be used at the same time as foot straps and shall not enable a different position to be adopted than would be possible in their absence.

(4) No body straps or foot straps shall prevent its user from instantly releasing himself/herself from the **hull**.

C.8 HULL APPENDAGES

C.8.1 LIMITATIONS

Only one **keel** and one **rudder** shall be used during an event, except when a **hull appendage** has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee. The race committee shall then remove or cross out any **event limitation mark** attached to the replaced **hull appendage**.

C.8.2 MODIFICATIONS AND MAINTENANCE

(a) **Hull appendages** may be filled, sanded, painted and polished provided they comply with Appendix 4 and 5.

(b) A glassed over **keel**–hull shell joint may be opened up to remove the **keel** and may be repaired after the **keel** is refitted.

(c) The type of tiller and tiller extension is optional.

C.9 RIG

C.9.1 LIMITATIONS

Only one set of **spars** and standing **rigging** shall be used during an event, except when an item has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee. The race committee shall then remove or cross out any **event limitation mark** attached to a replaced **spar**.

C.9.2 MAST

(a) **Construction**

The gooseneck construction shall prevent the boom **spar** from being set in a position that does not comply with ERS B.7.1

(b) **Fittings**

The following is optional:

(1) not more than two spinnaker pole fittings, which maybe on a track, provided that the maximum **spinnaker pole fitting height** can not be exceeded. Any spinnaker pole track may not extend more than 50mm above the maximum **spinnaker pole fitting height**,

(2) spinnaker pole downhaul block with attachment,

(3) kicking strap blocks,

(5) Devices, with the exception of winches, to tension and/or hold mainsail and jib halyards,

(6) one mechanical wind indicator,

(7) one compass bracket.

(c) **Dimensions**

Mast datum point: see F.2.1.

	minimum	maximum
Distance from the **mast datum point** to the intersection of the top of the deck and the aft face of the **spar**	495 mm	505 mm
Longitudinal distance from forward face of **spar** at deck to breakwater measurement point as defined in D.1.3 (b)	240 mm	360 mm
Mast spar curvature anywhere between the **mast datum** and 5300 above the **datum**		40 mm

(d) **Use**

(1) The **spar** shall be stepped on the cabin top.

(2) The mast heel position shall not be adjusted.

(3) Spreader position, length and angle shall not be adjusted.

C.9.3 BOOM

(a) **Fittings**

The following is optional:

(1) two mainsheet blocks and not more than two wire strops for mainsheet blocks,

(2) kicking strap blocks,

(3) mainsail clew outhaul blocks, fairleads and attachments,

(4) spinnaker pole stowage fittings,

(5) reefing hooks, blocks, fairleads and attachments.

(b) **Dimensions**

	minimum	maximum
Limit mark width	10 mm	
Boom point distance		2600 mm
Boom spar curvature forward of **outer limit mark**		25 mm

C.9.4 SPINNAKER BOOM

(a) **Fittings**

Fittings are optional.

C.9.5 STANDING RIGGING

(a) **Fittings**

The following is mandatory:

(1) one rigging link or screw for each shroud.

The following is optional:

(2) one forestay rigging screw,

(3) fittings for adjustment of the backstay with the exception of hydraulic systems.

(b) **Construction**

(1) The backstay shall be attached to the masthead.

C.9.6 RUNNING RIGGING

(a) **Materials**

Materials are optional.

(b) **Construction**

Mandatory:

(1) mainsail halyard,

(2) mainsail sheet,

(3) kicking strap,

(4) jib halyard,

(5) jib sheets,

(6) spinnaker halyard,

(7) spinnaker sheet and guy,

(8) spinnaker pole lift and downhaul.

Optional**:**

(9) mainsail Cunningham line,

(10) mainsail clew outhaul,

(11) mainsail track control lines,

(12) jib Cunningham line,

(13) two jib Barber haulers consisting of a single line with block or eye to run on the jib sheet and capable of modifying the sheeting angle in one direction only,

(14) two spinnaker Barber haulers of a single line with block or eye to run on the spinnaker sheet or guy and capable of modifying the sheeting angle in one direction only,

(15) reefing lines,

(16) jib furling gear which shall be attached to the forestay fitting.

(c) **Use**

(1) The jib shall not be furled.

(2) All halyard arrangements shall allow sails to be taken down by **crewmembers** standing in the cockpit and/or on the deck. Mainsail and jib halyard release points shall be either above deck or aft of the forward breakwater measurement point and above the sheer-line.

C.10 SAILS

C.10.1 LIMITATIONS

(a) Not more than one mainsail, two jibs and one spinnaker shall be carried aboard.

(b) Not more than one mainsail, two jibs and one spinnaker shall be used during an event, except when a **sail** has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee. The race committee shall then remove or cross out any **event limitation mark** attached to a replaced **sail**.

C.10.2 MODIFICATION AND MAINTENANCE

Routine maintenance such as repairing minor tears is permitted without re-measurement and re-**certification**.

C.10.3 MAINSAIL

(a) **Identification**

The sail numbers shall comply with the RRS.

(b) **Use**

Luff and **foot** bolt ropes shall be in the **spar** sail grooves.

C.10.4 JIB

(a) **Use**

(1) The **sail** shall be capable of being removed without disconnecting the forestay.

(2) The **tack** shall be fixed to the forestay fitting on deck or the jib furling gear by a shackle or similar device and shall not be adjustable up and down.

C.10.5 SPINNAKER

(a) **Identification**

The sail numbers shall comply with the RRS.

Section D – Hull

D.1 GENERAL

D.1.1 RULES

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

D.1.2 CERTIFICATION

See A.12.

D.1.3 DEFINITIONS

(1) **Hull Datum Point**

The intersection on the **hull** between the underside of the hull shell and the transom extended as necessary.

(2) Fwd Breakwater Measurement Point

The point on the **hull** centreplane at the forward edge of the breakwater one half of the breakwater height above the cabin top.

(3) Aft Breakwater Measurement Point

The point on the hull centreplane at the aft edge of the cockpit coaming one half of the coaming height above the deck.

(4) Stem Datum Point

The foremost point on the deck, extended to meet an extension of the deck flange, excluding and stemhead cover.

(5) Aft Deck Datum Point

The point on each aft corner of the aft deck at the intersection of the planes extending the deck flange over the topsides and the transom and the upper surface of the deck.

(6) Section Template Reference Points

On all boats built or re-measured after 1 April 2002, Reference Points for positioning the 4 section templates shall be marked on the external hull centerline and the deck flange in accordance with the Measurement Diagram Appendix 3A. The point shall consist of a 2.5mm diameter hole approximately 2mm deep drilled at the center of the measurement mark and filled with a material of contrasting colour. The point may not be removed or obliterated.

D.1.4 IDENTIFICATION

The hull shall carry permanently fixed:

(a) the ISAF Plaque on the forward face of the aft bulkhead,

(b) the Designer's Plaque on the aft end of the cockpit coaming, or on the forward face of the aft bulkhead,

(c) a Builder's Plaque adjacent to the ISAF Plaque. The plaque shall show the builder's name, the ISAF plaque number, the hull shell mould number and the hull serial number and the year built.

D.1.5 BUILDERS

(a) The hull shall be built by a builder licensed by ISAF.

(b) The builder shall use production moulds obtained from official suppliers approved by the ISAF. The builder shall not alter the shape of these moulds unless specifically authorised in writing by ISAF.

D.2 HULL COMPONENTS

D.2.1 The hull components are: the hull shell, the bulkheads, the deck, the knees, the floor and deck beams and the double bottom, or the side tanks with floor boards and the mast support.

D.2.2 MATERIALS

Shall comply with the Yngling Construction Manual issued by ISAF.

D.2.3 CONSTRUCTION

Shall comply with the Yngling Construction Manual issued by ISAF.

D.3 ASSEMBLED HULL

D.3.1 BUOYANCY

(a) Blocks of buoyant rigid foam or expanded polystyrene shall be placed in the forward and aft buoyancy compartments.

(b) Buoyancy materials shall not be structurally fixed to hull or deck

(c) Sufficient buoyancy material shall be distributed such that the boat passes the Buoyancy test (Appendix 1).

D.3.2 FITTINGS

The following fittings shall be fitted:

(a) one bollard on the deck in front of the forestay attachment point and one bollard on the deck aft of the rudder stock. The bollards shall be made of

solid stainless steel minimum 9.3 mm diameter and each bollard shall be attached with not less than two threaded nuts of minimum M10 or 3/8",

The following fittings shall be fitted in accordance with the Construction Manual:

(b) One side deck stanchion each side between the deck and the double bottom.

(c) one watertight cover in each bulkhead,

(d) one watertight sealed centre section hatch that provides access to the keel bolts if the hull is fitted with a double bottom,

(e) one lifting eye strap weighing not more than 2 kg attached to the keel bolts,

(f) two chain plates on each side,

(g) one forestay attachment which shall be of stainless steel.

D.3.3 DIMENSIONS

	minimum	maximum
Hull length	6340 mm	6370 mm
Radius between outside of transom and outside of hull shell	4 mm	
Thickness of a plywood double bottom centre section	14 mm	
Longitudinal distance from centre of forestay attachment hole in forestay fitting to **stem datum point**	385 mm	395 mm
Longitudinal distance from centre of shroud attachment hole in chain plate fittings in front of **aft breakwater datum point**	1830 mm	1860 mm
Shortest horizontal distance from centre of shroud attachment hole in chain plate fittings to outside edge of deck		60 mm
Height of double bottom above inner surface of the hull above the keel flange	325 mm	375 mm
Rudder stock centreline to **hull datum point**	1045mm	1075 mm
Total volume of fore and aft buoyancy compartment buoyancy blocks	0.56 m^3	

Section E – Hull Appendages

E.1 GENERAL

E.1.1 RULES

Hull appendages shall comply with the **class rules** in force at the time of initial **fundamental measurement** of the hull.

E.1.2 BUILDERS

(a) The **hull appendages** shall be built by builders licensed by ISAF.

(b) The builder shall use the casting pattern for the **keel** core obtained from an official supplier approved by ISAF. The builder shall not alter the shape of the casting pattern unless specifically authorised in writing by ISAF.

E.2 KEEL

E.2.1 CERTIFICATION

See A.12.

E.2.2 MATERIALS

(a) Shall comply with the Yngling Construction Manual issued by ISAF.

E.2.3 DIMENSIONS

	minimum	maximum
Radius of leading and trailing edges	2 mm	
Distance on **hull** centreplane from **hull datum point** to a point on aft edge of **keel** 50 mm above lower edge of the **keel**	2725 mm	2765 mm
Depth of the **keel** measured at section 2		800 mm

The **keel** shall be checked with templates in accordance with Appendix 4.

E.2.4 WEIGHTS

	minimum	maximum
The weight of the iron core	305 kg	315 kg

E.3 RUDDER

E.3.1 MATERIALS

Shall comply with the Yngling Construction Manual issued by ISAF.

E.3.2 CONSTRUCTION

Shall comply with the Yngling Construction Manual issued by ISAF.

E.3.3 DIMENSIONS

	minimum	maximum
Sectional radius of **rudder** blade edges	2 mm	
Diameter of **rudder** stock	22 mm	

The rudder shall comply with Appendix 5.

E.3.4 WEIGHTS

	minimum	maximum
Weight of **rudder** blade and stock	6 kg	

Section F – Rig

F.1 GENERAL

F.1.1 RULES

Rig components shall comply with these **class rules**.

F.1.2 MANUFACTURERS

Manufacturers are optional.

F.1.3 CERTIFICATION

No **certification** is required.

F.2 MAST

F.2.1 DEFINITIONS

Mast Datum Point

The **mast datum point** shall be the **lower mast point**.

F.2.2 MATERIALS

The spar shall be of aluminum alloy to the International 6000 Series Specifications. The spar maybe be anodized, painted or powder coated.

F.2.3 Construction

(a) The **spar** extrusion shall include an integral sail groove.

(b) The **spar** extrusion shall be one single length and of constant section with the exception that the upper part of the **spar** shall be uniformly tapered.

(c) The sail groove may be opened up and/or the sides of the sail groove may be cutback providing the fore and aft dimensions is reduced by not more than 15mm below a point 350 mm above the **mast datum point**.

(d) The spreaders shall be attached above the lower shroud **rigging point**.

F.2.4 FITTINGS

The following fittings shall be fitted:

(a) one pair of **spreaders** with fittings which maybe adjusted at the spreader,

(b) one mast head fitting which may include the mainsail halyard sheave,

(c) shroud fittings,

(d) forestay fitting,

(e) mainsail halyard sheave box,

(f) jib halyard sheave box,

(g) spinnaker halyard block with attachment or sheave box with optional tripod fairlead,

(h) spinnaker pole fittings which may include a track,

(i) spinnaker pole lift sheave box or block with attachment,

(j) gooseneck,

(k) kicking strap attachment,

(l) heel fitting which may include sheaves for halyards.

F.2.5 DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Mast spar cross section of non tapered extrusion:		
fore-and-aft	89 mm	95 mm
transverse	61 mm	67 mm
Mast spar cross section at the **upper point**:		
fore-and-aft	66 mm	74 mm
transverse	52 mm	58 mm
Mast datum point to beginning of **spar** taper	4500 mm	
Upper point height		6800 mm
Spinnaker hoist height	5240 mm	5360 mm
Forestay height	5200 mm	5300 mm
Upper **shroud height**	5250 mm	5350 mm
Lower **shroud height**	2450 mm	2550 mm
Distance from fwd face of spinnaker sheave to fwd face of mast		60 mm
Spreader;		
length	590 mm	
Spinnaker pole fitting:		
height		1000 mm
projection		45mm
Mast spar deflection when loaded with 50 kg at 2650mm from the **mast datum point** measured at 2650 from **datum** (supported between the **datum** and 5300 above the **datum**):		
fore-and-aft	35 mm	45 mm
Distance from **mast datum point** to the centre of Gravity of the **mast**	3045 mm	

NOTE: Highlighted mast spar values are still under investigation so values are provisional

F.2.6 WEIGHTS

	minimum	maximum
Weight	17 kg	

F.3 BOOM

F.3.1 MATERIALS

The spar shall be of aluminum alloy to the International 6000 Series Specifications. The spar maybe be anodized, painted or powder coated.

F.3.2 Construction

(a) The **spar** extrusion shall be of constant section and shall include an integral sail groove.

(b) The sail groove may be cutaway at each end to permit entry of the mainsail.

F.3.3 FITTINGS

The following fittings shall be fitted:

(a) two mainsheet block attachments one being at the aft end of the **spar**,

(b) a clew attachment arrangement,

(c) a kicking strap fitting,

(d) a gooseneck attachment.

F.3.4 DIMENSIONS

	minimum	maximum
Boom spar cross section of extrusion		
vertical	69 mm	75 mm
transverse	51 mm	57 mm
Limit of sail groove cutaway		200 mm

F.4 SPINNAKER POLE

F.4.1 MATERIALS

Spar material is optional.

F.4.2 CONSTRUCTION

Construction is optional.

F.4.3 FITTINGS

Fittings are optional.

F.4.4 DIMENSIONS

	minimum	maximum
Spinnaker pole length		2015 mm

F.5 STANDING RIGGING

F.5.1 MATERIALS

The standing **rigging** shall be of 1 x 19 strand stainless steel wire minimum 3 mm in diameter.

F.5.2 CONSTRUCTION

The following is mandatory:

(a) one forestay,

(b) one pair of upper shrouds,

(c) one pair of lower shrouds,

(d) one backstay.

Section G – Sails

G.1 GENERAL

G.1.1 RULES

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

G.1.2 CERTIFICATION

(a) The **official measurer** shall **certify** mainsails and jibs in the **tack** and spinnakers in the **head** and date the **certification mark** with the date of **fundamental measurement**.

(b) An MNA may appoint one or more persons at a sailmaker to measure and **certify sails** produced by that manufacturer. A special license shall be awarded for that purpose.

(c) The weight in g/m^2 of the **body of the sail** shall be indelibly marked near the **head point** by the sailmaker together with the date and his signature or stamp.

G.1.3 SAILMAKERS

Sailmaker is optional.

G.1.4 IYA SAIL LABEL

The official IYA sail label shall be permanently attached in the **tack** in mainsails and jibs and in the **head** in spinnakers. Sail labels shall be obtained from the NYA, or in the case of difficulty from the IYA.

G.2 MAINSAIL

G.2.1 IDENTIFICATION

The class insignia shall comply with Appendix 2 and the RRS.

G.2.2 CONSTRUCTION

(a) The construction shall be: **Soft sail**, **single ply sail**.

(b) Except within 250mm of the foot, the **body of the sail**, shall consist of the same **woven ply** throughout. The **ply** fibres shall be of polyester.

(c) There shall be three **batten pockets** in the **leech**.

(d) The **leech** shall not extend aft of straight lines between:

(1) the **aft head point** and the intersection of the **leech** and the upper edge of the nearest **batten pocket,**

(2) the intersection of the **leech** and the lower edge of a **batten pocket** and the intersection of the **leech** and the upper edge of an adjacent **batten pocket** below,

(3) the **clew point** and the intersection of the **leech** and the lower edge of the nearest **batten pocket**.

(e) The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye or pulley, reefing eyes,

batten pocket elastic, leech line with cleat, two **windows**, telltales, sail shape indicator stripes.

G.2.3 DIMENSIONS

	minimum	maximum
Leech length		7200 mm
Quarter width		2220 mm
Half width		1660 mm
Three-quarter width		960 mm
Top width		155 mm
Weight of **ply** of the **body of the sail**		180 gr/m^2
Primary reinforcement		355 mm
Secondary reinforcement:		
from **sail corner measurement points**		1065 mm
for **chafing patches**		1065 mm
at a reefing point adjacent to **luff** or **leech**		1065 mm
for **flutter patches**		120 mm
Total **window area**		0.3 m^2
Window to **sail edge**		150 mm
Extension of headboard from **head point**		145 mm
Batten pocket length:		
top pocket:		
inside		530 mm
other pockets:		
inside		730 mm
Batten pocket width:		
inside		60 mm
Head point to intersection of **leech** and centreline of uppermost **batten pocket**		1780 mm
Clew point to intersection of **leech** and centreline of lowermost **batten pocket**		1780 mm

G.3 JIB

G.3.1 CONSTRUCTION

(a) The construction shall be: **Soft sail**, **single ply sail**.

(b) The **body of the sail** shall consist of the same **woven ply** throughout. The **ply** fibres shall be of polyester.

(c) There shall be two **batten pockets** in the **leech**.

(d) The **leech** shall not extend outside a straight line from the aft **head point** to the **clew point**.

(e) The following are permitted: Stitching, glues, tapes, corner eyes, Cunningham eye or pulley, hanks, batten pocket elastic, leech line with cleat, two **windows**, telltales, sail shape indicator stripes.

G.3.2 DIMENSIONS

	minimum	maximum
Luff length		5700 mm
Leech length		5300 mm
Foot length		1950 mm
Foot median		5620 mm
Top width		35 mm
Foot irregularity		20 mm
Weight of the **ply** of the **body of the sail**		180 gr/m^2
Primary reinforcement		320 mm
Secondary reinforcement:		
from **sail corner measurement points**		960 mm
for **chafing patches**		960 mm
for **flutter patches**		90 mm
Total **window area**		0.3 m^2
Window to **sail edge**	150 mm	
Batten pocket length:		
inside		280 mm
Batten pocket width:		
inside		60 mm
Head point to intersection of **leech** and centreline of top **batten pocket**	1730 mm	
Clew point to intersection of **leech** and centreline of lower **batten pocket**	1730 mm	

G.4 SPINNAKER

G.4.1 CONSTRUCTION

(a) The construction shall be: **Soft sail**, **single ply sail**.

(b) The **body of the sail** shall consist of the same **woven ply** throughout. The **ply** fibres shall be of polyester or polyamide.

(c) The following are permitted: Stitching, glues, tapes, corner eyes, telltales.

G.4.2 DIMENSIONS

	minimum	maximum
Leech lengths	5600 mm	5800 mm
Foot length		4000 mm
Foot median		6600 mm
Quarter width		4700 mm
Half width		4200 mm
Three-quarter width		2300 mm
Difference between **diagonals**		20 mm
Weight of the **ply** of the **body of the sail**		38 gr/m^2
Primary reinforcement		320 mm
Secondary reinforcement:		

from **sail corner measurement points** .... 960 mm

PART III – APPENDICES

Appendix 1 – Flotation Check

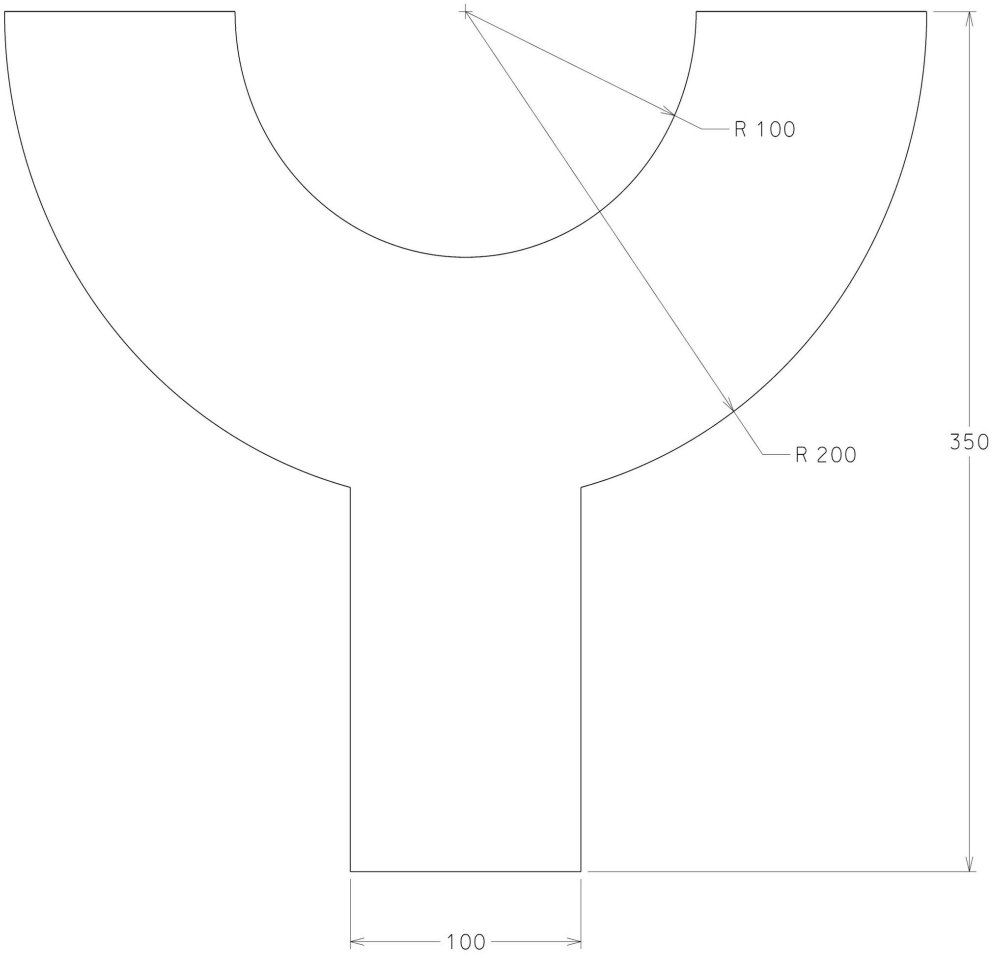
All hatches and draining plugs shall be open and the **hull** shall be totally filled with water. To ensure this, the **boat** shall, when filled with water, be tipped 30° to each side where after the **crew** shall go first to the stern then to the stem. The **boat** shall then float level with the **crew** in the cockpit area.

Effective: 7th April 2003

Previous issues: 2001, 2002 and 1st March 2003

International YNGLING Class
Measurement Diagram - Appendix 2

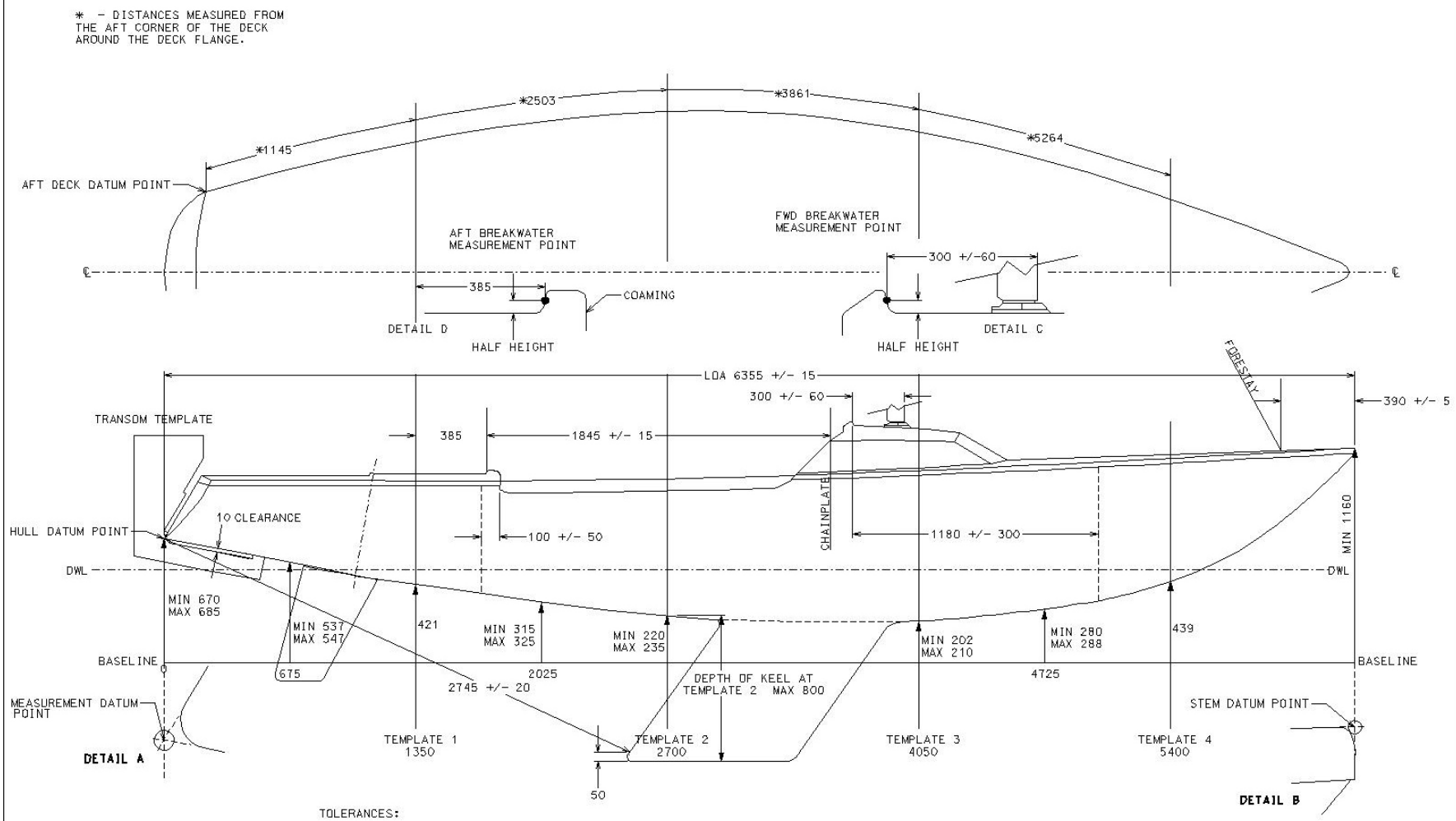
CLASS INSIGNIA



Designer: Jan H.Linge

NOMINAL DIMENSIONS - NOT TO SCALE

International YNGLING Class
Measurement Diagram - Appendix 3A



TOLERANCES:

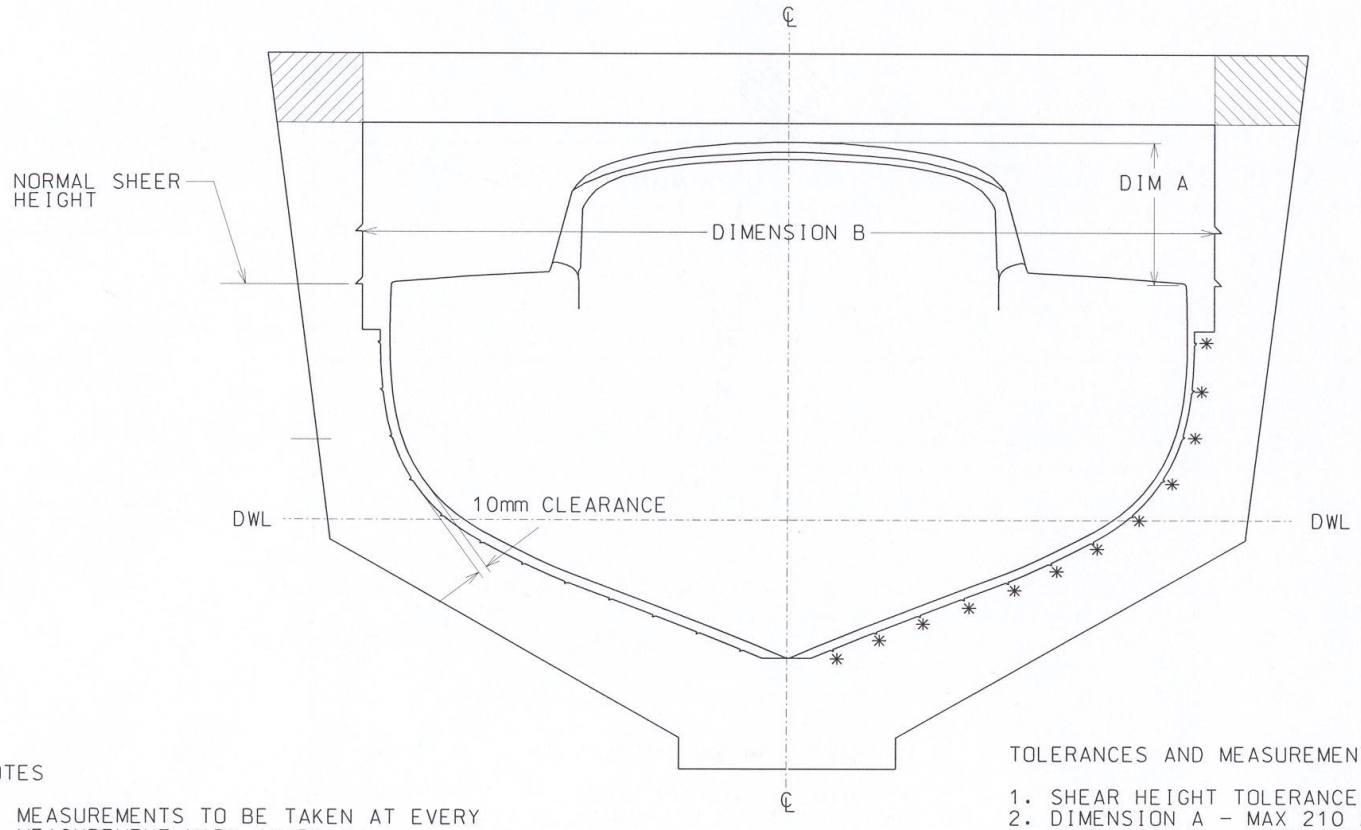
1. TRANSOM TEMPLATE +/- 6mm (MIN 4mm MAXIMUM 16mm CLEARANCE)

Designer: Jan H. Linge

NOT TO SCALE

International YNGLING Class
Measurement Diagram - Appendix 3

TYPICAL HULL TEMPLATE ARRANGEMENT



NOTES

1. MEASUREMENTS TO BE TAKEN AT EVERY MEASUREMENT MARK (MARK *)

TOLERANCES AND MEASUREMENTS

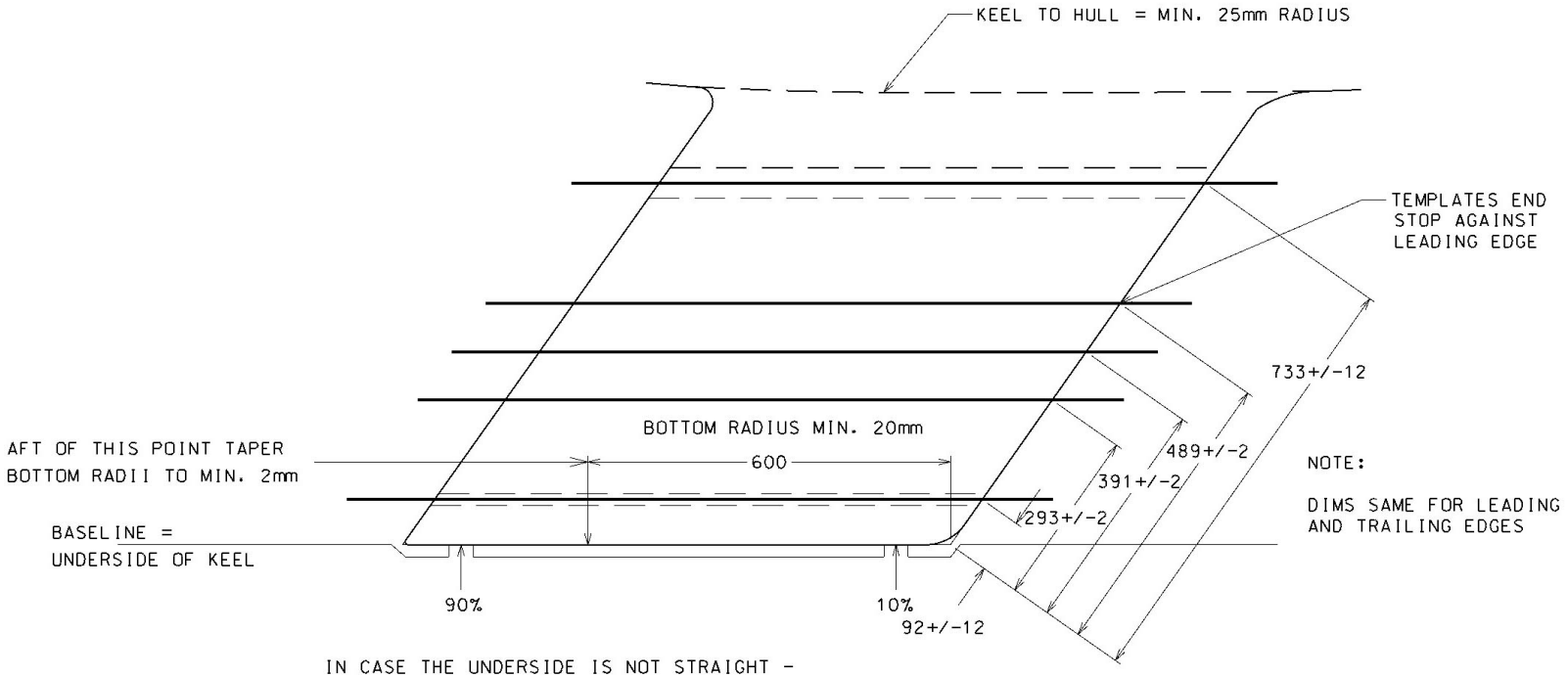
1. SHEAR HEIGHT TOLERANCE +/- 10mm
2. DIMENSION A - MAX 210 AND MIN 190.
3. DIMENSION B - TEMPLATE 1 - 1427
   TEMPLATE 2 - 1753
   TEMPLATE 3 - 1528
   TEMPLATE 4 - 793

Designer: Jan H. Linge

NOT TO SCALE

International YNGLING Class
Measurement Diagram - Appendix 4

KEEL TEMPLATE ARRANGEMENT



IN CASE THE UNDERSIDE IS NOT STRAIGHT -
USE STUDS OR SPACERS AT APPROX. 10% AND 90%

TOLERANCES:

1. LEADING AND TRAILING EDGE MUST NOT DEVIATE MORE THAN 2mm FROM A STRAIGHT EDGE PLACED ALONG ITS LENGTH (EXCLUDING THE FIRST AND LAST 75mm).
2. SECTION SHAPE TO HAVE A TOLERANCE OF +/- 2mm FROM DESIGN SHAPE (8-12mm CLEARANCE FROM TEMPL. EGDE).

Designer: Jan H. Linge

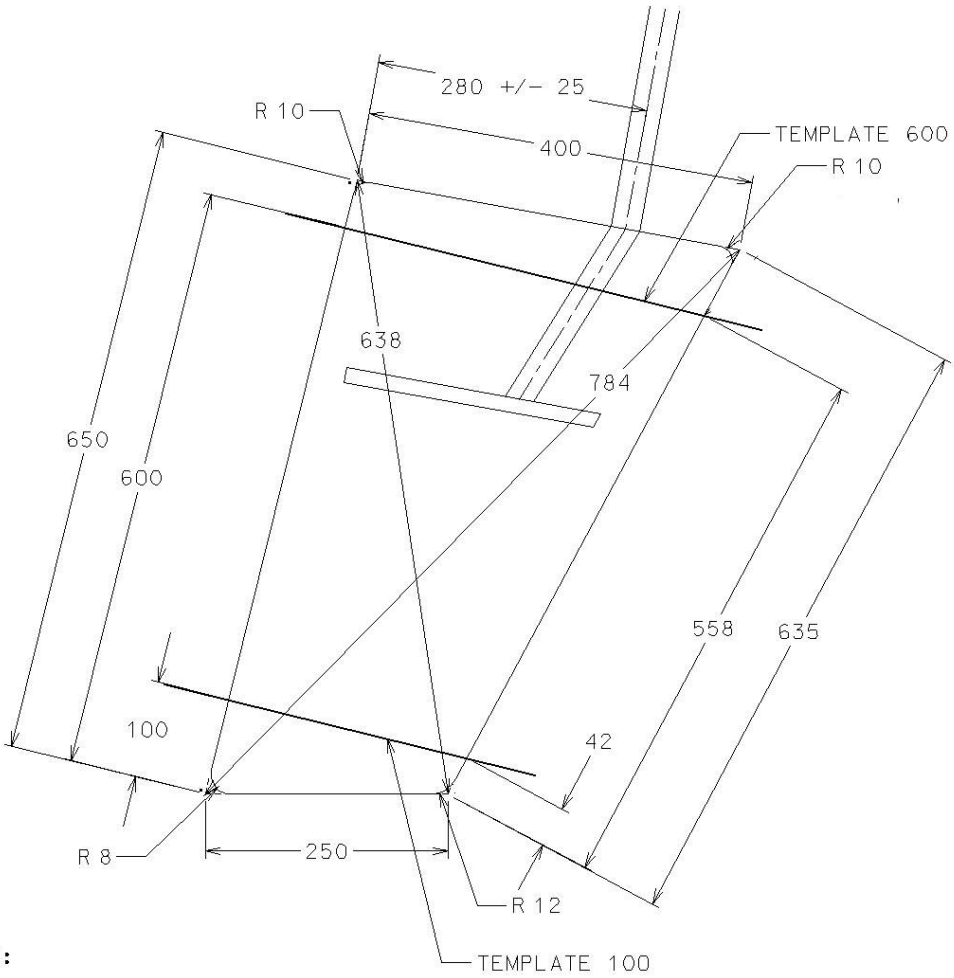
NOT TO SCALE

International YNGLING Class
Measurement Diagram - Appendix 5

TOLERANCES:

1. RUDDER PROFILE SHOULD NOT DEVIATE MORE THAN +/- 5mm FROM DIMENSIONS SHOWN.
2. SECTION SHAPE TO HAVE ATOLERANCE OF +/- 1mm FROM TEMPLATE SHAPE (4-6mm CLEARANCE FROM TEMPL. EDGE).

RUDDER TEMPLATE ARRANGEMENT



NOTES:

1. BLADE TO HAVE A STRAIGHT TAPER.

THE TEMPLATES SHALL BE POSITIONED:
- AGAINST THE LEADING EDGE WHEN MEASURING THE FORWARD END BACK TO THE THICKEST SECTION,
- AGAINST THE TRAILING EDGE WHEN MEASURING AFT OF THE THICKEST SECTION.

THE TEMPLATES CONTROL THE SHAPE OF THE SECTION BETWEEN POINTS 5MM AFT OF THE LEADING EDGE AND 25MM FORWARD OF THE TRAILING EDGE. OUTSIDE THESE POINTS THE SHAPE IS NOT CONTROLLED, EXCEPT THAT IT MUST BE A CONTINUOUS FAIR EXENSION OF THE RUDDER SECTION WITH NO CONCAVITY. THE MINIMUM THICKNESS OF THE TRAILING EDGE SHALL BE 4MM, MEASURED 2MM FORWARD OF THE TRAILING EDGE.

Designer: Jan H.Linge

NOT TO SCALE