RYA YTC - formerly the South West **Yacht Time Correction** System

Application: https://www.swytc.org.uk/applications.asp

Expect to be asked to upload the following in order to finish the application so have the files ready to upload: a scan/PDF of your existing IRC certificate (if applicable); a photo/sketch/PDF showing any bulb, flare or wing on your boat's keel and a photo/scan/PDF of documentary evidence of sail areas.

Data – have the following ready before logging on. (* is required data)

*Boat Type e.g. "Westerly Konsort"		IRC rating (if not current then give previous)	(If applicable)
*LH Length of Hull	m	*Draft	m
*LWL Length waterline	m	*Displacement No fuel/water See YTC definition online	kg
*Beam	m	*Year built	

Note about sail areas.

Do not take sail areas from boat sales brochures, magazines etc. The sail areas you declare should be as quoted by the sailmaker who made your sails**. Any sail made in the last 20 years is quite likely to have the measurement data in your sailmaker's software.**

Before entering the sail areas below, please see the next page and use the data values and calculations on the next page to arrive at the measured sail areas.

Upwind sail area		Downwind sail	
*Genoa/Jib	m²	*Type Symmetric/Asymmetric/Cruising chute etc.	
*Main	m²	*Area	m²
*Other	m²		
*Sail area source	Sailmaker/boatbuilder/IRC certificate/measurer etc.		
*Ketch/Yawl	Yes/No	*In-mast reefing	Yes/No
*Keel	Fin/wing/long etc.		
*Engine	Inboard/Outboard		
*Propeller	Fixed/Folding etc.		
*Are the rigging, sail plan and ballast of standard design?			Yes/No
Comments			

A PDF "2023 POLICY AND PROCEDURES" valid from 1 January 2023 is available from YTC. Over the page is an extract of the important Appendix A relating to sail area calculations.

If your sails are made by Sanders Sails, then Sanders may have the required dimensions in their software which is never exactly correct but definitely easier than re-measuring. Sanders will only supply the measurements – you need to calculate the sail areas. To help with this there is an Excel tool which can help you check your calculations. Other sailmakers are likely to be able to provide the measurements for sails they have made for your boat.

Before using this guide, please make sure it is the latest version available.

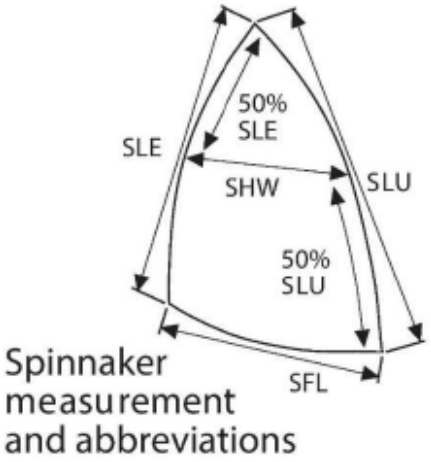
APPENDIX A – SAIL AREA CALCULATIONS

Mainsail Area = (P/8) * (2.04*E + 3*MHW + 1.5*MTW + MUW)

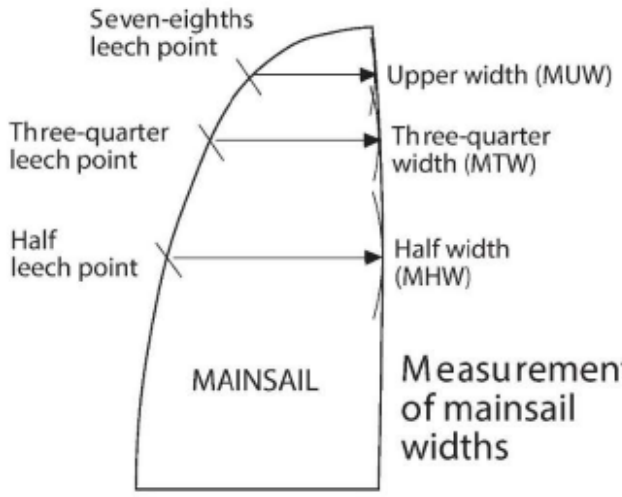
Where P is the **Mainsail Luff Mast Distance** – See Equipment Rules of Sailing F.2.3(d)
E is the **Boom Outer Point Distance** – See Equipment Rules of Sailing F.3.3(a)

Headsail Area = 0.0625*HLU*(4*HLP + 6*HHW + 3*HTW + 2*HUW + 0.09)
Where HLU is the Headsail Luff Length

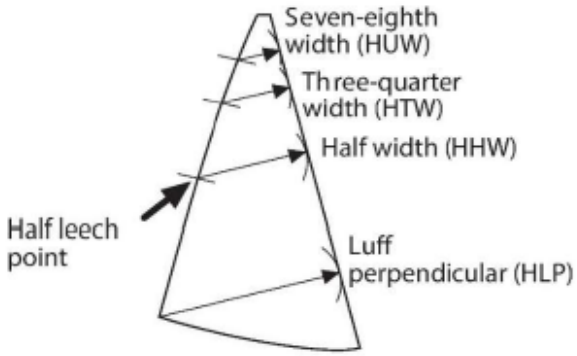
Spinnaker Area = ((SLU + SLE)/2) * ((SFL + (4 * SHW))/5) * 0.83



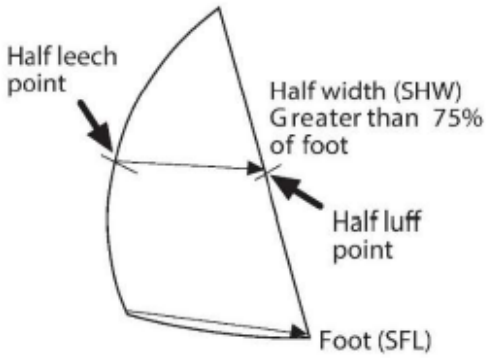
Spinnaker measurement and abbreviations



Measurement of mainsail widths



HEADSAIL



SPINNAKER

Here you can insert the sail measurement data for your boat.

Mainsail	**MHW**	m	**MTW**	m	**MUW**	m	**P**	m
	E	m						
Headsail	**HLP**	m	**HLU**	m	**HTW**	m	**HUW**	m
	HHW	m						
Spinnaker	**SFL**	m	**SHW**	m	**SLU**	m	**SLE**	m

You need to calculate the sail areas. To help with this there is an Excel tool which can help you check your calculations.

Mainsail m² **Headsail** m² **Spinnaker** m²