

COASTAL BOATS INTRODUCTION

Swift Racing coastal boats are designed and developed to excel in coastal conditions meeting and surpassing all FISA requirements.

The range includes three hull designs for CO1x, one design for CO2x and one for CO4x+.

Swift Racing has been an official supplier at each of the World Rowing Coastal Championships (WRCC) since 2018, the Asian Rowing Coastal Championships (ARCC) since 2017, and other events including French, Spanish, Irish and GB National Championships, the 'Around the Island' 42km Marathon in Hong Kong and The Prince Albert Challenge in Monaco.

Swift Racing boats are also the boats of choices for World Rowing Tours and so many other popular tours in the world.

They are designed to perform for a wide range of abilities, and in addition to being great for beach sprinting and endurance racing, they are popular for touring too. Their great performance has been recognized by other boat builders, who have copied them.

Some of the recent successes include:

- World Rowing Coastal Championships; 13 of 21 medals in 2023, 12 in 2022, and 10 in 2021
- European Rowing Coastal Championships; 12 medals in 2023, 15 in 2022
- Official Supplier of C2x for the 2023 European Rowing Beach Sprint Finals
- Official supplier of the 2023 Asian Beach Sprint Finals
- French Coastal Championships; 72% of medals in 2023 (17 of 25 Gold)
- Irish Coastal Championships; 13 medals in 2023 (80% of all Gold medals)
- Spanish Coastal Championships; 62% of medals in 2021

This is more than 50% of the medals at all major coastal rowing events in the world.

CONSTRUCTION:

All Swift Coastal boats are made using "sandwich" construction, with very thick and strong carbon saxboards and lips, which combined with cross and longitudinal stringers, results in some of the stiffest boats on the market.

RIGGERS

CO1x can be ordered with our stern mounted heavy-duty wing rigger (without backstays), or our bow mounted wing rigger.

CO2x and CO4x+ use our "folding" back riggers.

These are probably the most efficient riggers in the coastal market, turning effort into speed, and each rigger can be folded away in about 20seconds for easy storage.

The CO2x and CO4x+ can be ordered with sweep riggers.

RUDDERS

The fin/rudder system of the CO4x+ requires a little practice for coxes to master, but is the most efficient and fastest turning system of any builder. A smaller version of the rudder is now available for beach sprint or for calmer conditions.

A Smart Track "over stern rudder" can be added on CO1x and CO2x as an option.

FINS

CO1x and 2x come with improved strength, carbon fins.

We recommend the small fin for 1x and 2x, but if the current, wind and waves get bigger, then the medium fins will help. We also offer a beach sprint, shallow fin, designed for quick turns and for use on beaches.

The standard fin box position from the stern is around 60cm for 1x, 120cm for 2x, from the stern, with the option to have it 1m closer to the bow, good for beaches. Or there is the option to have 2 fin boxes.

STRETCHERS and SHOES

There is a choice of our popular “flexfoot” , Swift Racing shoes or Active Tools shoes.

STORAGE

All boats come with life jackets storage nets in the stern area, hatches for under seat deck and bow compartment storage, plus two additional storage positions per rower on 2x and 4x+

HULL SHAPES

While there is no perfect coastal boat for all conditions, we think our hulls are the best on moving waters, while they hold their own on flat water. Crews in our hulls seem to benefit from the better stability and linear power transfer of being closer to the waterline, compared to other brands. All hulls have the right buoyancy at bow to stay on top of waves to keep speed and momentum, and a strong lip for stiffness and to help protect the hull from side impacts.



■ CO102 : The “all-rounder” and probably the most sold Coastal 1x in the World

Designed to excel in waves and more difficult conditions, and to give confidence to rowers with less stability skills.

It gives an advantage when waves gain height, and its extra stability makes it comfortable to apply power, a very enjoyable boat for beginners and champions alike.

It was the boat of choice in 2019 WRCC for Hong Kong’ s infamous “washing machine” waters and was rowed to Gold every single year since 2019.

The standard fin position is optimized for tracking and stability, with the possibility to have a second fin box for beach sprints.

Stern or reverse wing rigger.

■ CO102H : The “big boys’ boat”

The first hull designed specifically for heavyweights. Following requests from heavier and taller athletes for a boat better suited to them, we designed a bigger version of our popular 102, with more buoyancy all along the hull and with a cockpit adapted for taller athletes. It will feel the same as on the CO102 but will cope better in waves for heavier rowers. It was rowed to M1x Bronze in its first outing, at the 2023 ERCC. The standard fin position is optimized for tracking and stability, with the possibility to have a second fin box for beach sprints.

Stern or reverse wing rigger.

■ CO103: In the right hands, probably the fastest C1x out there!

The 103 CO1x is designed for highly skilled coastal rowers and/or less wavy conditions. Crews in the 103- have medaled at the WRCC in 2021, 2022 and 2023 and won both Gold medals in 2018.

The standard fin position is optimized for tracking and stability, with the possibility to have a second fin box for beach sprints.

Stern or reverse wing rigger.

■ CO2x 202A

Our CO2x shape is like no other. Based on our very successful CO4x+, it excels in surfing, especially when there is a bit more weight in bow seat. We improved the hull and cockpit in late 2020 to optimize comfort and speed, then was rowed to Gold, Silver and Bronze at the 2021 WRCC, and won more than 50% of 2x medals at 2022 WRCC.

The standard fin position is optimized for tracking and stability, with the possibility to have a second fin box for beach sprints.

Reverse design riggers with four fixing points and a short outboard make them very efficient, but also allow for quick derigging for compact storage.

It was also the boat of choice for the 2023 European Rowing Beach Sprint Championships in France.

■ CO4x+

With even small waves coming from stern, it will start to surf. The boat runs beautifully and does not stop when going through waves. The hull is designed to excel in surfing and to perform in flat water too.

It won 5 out of 6 medals at the 2023 WRCC for a total of 22 World Championship medals in 5 World championships in flat and wavy conditions. Don't look further, the Swift CO4x+ leads them all. The boat has set records at long-distance races such as in the San Remo to Monaco 32km race and Hong Kong's 'Around the Island Race'.

Incredible at turning thanks to its clever rudder system and back half hull shape.

Reverse design riggers with four fixing points and a short outboard make them very efficient, but also allow for quick derigging for compact storage at boat houses.



Moulds & Standard Rigging

Custom riggers are available.

Blue highlight means "Wing rigger only"

Coastal boats

Mould #	C102-	C103-	C102H-	C202B-	C402B+
Boat type	1x	1x	1x	2x/-	4x/+
Crew weight - kg	65-95	65-95	80-110	65-95	65-95
Crew weight - lb	143-209	143-209	176-243	143-209	143-209
Length	600	600	600	750	1070
Waterline Beam -cm	46.5	45	51	62	74.5
Span - sweep	/	/	/	860	850
Work height - sweep	/	/	/	165	165
Lateral pitch - sweep	/	/	/	0	0
Bow (starb'd) 1/2 span - scull	795	795	795	795	795
Stroke (port) 1/2 span - scull	795	795	795	795	795
Bow Work height - scull	170	170	185	170	170
Str Work height - scull	160	160	175	160	160
Bow Lateral pitch - scull	0	0	0	0	0
Str Lateral pitch - scull	0	0	0	0	0

C102- more stable but less fast, good for beginners, C103- faster but less stable, good for high performance rowers.

C102H- is the heavy version based on C102-.

Keep the same standard work height as we currently have, but we will modify the production of riggers so that this work height is achieved without using spacers. Continue to provide spacers, and the bolts will be the same as now, so customers can go higher, if they want.

Grades/construction

All Swift Coastal boats share these features;

- "Sandwich" construction (ie. A core material such as honeycomb, coremat, or PVC foam is sandwiched between 2 "skins").
- Use epoxy resin, and vacuum moulding.
- Enclosed seat decks for maximum buoyancy (exceed FISA's requirement).

Elite Carbon

Overview

Our lightest construction, around 10% below World Rowing minimum weight.

Hull

Honeycomb with an outer skin of kevlar, and inner skin of carbon cloth.

Canvas decks

Coremat core with inner and outer skins of carbon.

Seat deck

Closed cell PVC foam core with inner and outer skins of carbon.

Elite Plus

Overview

Our standard construction, around World Rowing minimum weight.

Hull

Coremat core with an outer skin of fibreglass, inner skin of carbon cloth, and carbon reinforcing

Canvas decks

Coremat core with inner and outer skins of fibreglass.

Seat deck

Closed cell PVC foam core with fibreglass skins, and fibreglass reinforcing.

Stretchers

Coastal boats are supplied with lightweight carbon and PVC foam sandwich stretchers.
There is a choice of shoes as below:

	Active shoes	Swift shoes	Flexfoot
Elite carbon	Standard	Standard	Standard
Elite plus	Upgrade	Standard	Standard



Active Tools adjustable shoes
2 sizes available:
40-45 and 43-48



Swift Racing shoes
Sizes 37-54 available



Heel restraints and solid heels for safety, rounded heels for a good fit. Approved by USRowing and British Rowing.

Shoes

For shoes, the order form needs to be completed with European shoe sizes.
Please use this chart to help you.

Euro	GB	US	JPN
37	4 1/4	4 3/4	22.75
38	5	5 1/2	23.5
39	5 3/4	6 1/4	24.25
40	6 1/2	7	25
41	7 1/4	7 3/4	25.75
42	8	8 1/2	26.5
43	8 3/4	9 1/4	27.25
44	9 1/2	10	28
45	10 1/4	10 3/4	28.75

Euro	GB	US	JPN
46	11	11 1/2	29.5
47	11 3/4	12 1/4	30.25
48	12 1/2	13	31
49	13 1/4	13 3/4	31.75
50	14	14 1/2	32.5
51	14 3/4	15 1/4	33.25
52	15 1/2	16	34
53	16 1/4	16 3/4	34.75
54	17	17 1/2	35.5

Colour options

All hulls are light grey, and there are 4 possibilities for the upper part of the boat (decks and cockpit), so:

Light grey hull with red upper

Light grey hull with aqua blue upper

Light grey hull with light grey upper

Light grey hull with yellow upper

Light grey hull with green upper



PLEASE NOTE that the colours shown here are only very approximate representations.
If the choice of colour is very important, then you should check the colour using the RAL numbers listed below.

Colour & RAL	Name	Hull	Upper
		Colour	Colour
RAL 7035	Light grey	Yes	Yes
RAL 3001	Red	No	Yes
RAL 5012	Aqua blue	No	Yes
RAL 1018	Yellow	No	Yes
RAL 6024	Green	No	Yes

Name on boat

50mm tall, ariel font, in UPPER CASE & lower case. MUST be ordered at the same time as boat.
Ask Distributor about cost.

Seat type

Elite carbon and Elite Plus boats are supplied with lightweight carbon seat tops.



Single action type with bearings, height adjustable.



Double action type (add extra 220g per seat)

Rigger type

See following page for a full explanation of different rigger types:

<https://swiftracing.com/co-rigger-options/>

Notes about riggers

Our riggers are made from high grade aluminium, welded to the optimum design and hard anodised for a long lasting finish.

All are adjustable for span, work height and pitch.

We guarantee the accuracy of our span, work height and pitch, see website for details.

Aluminium stern wing riggers – heavy duty

Scull riggers using a heavy duty aerofoil profile, for use without backstays, ideal for lower ability crews and recreational rowing, mounted over the foot stretcher.

Aluminium reverse wing riggers

Scull and sweep riggers using aerofoil profiles, with C bracket to hold the pin, mounted behind the rower.

Folding ali back riggers

A lightweight design with C bracket to hold the pin, mounted to the strong lip and rigger mounts.

All measurements are in millimeters or degrees. $\pm 3\text{mm}$, ± 0.3 degrees is the margin of error we work to.

Span and work height are calculated:

- From the boat's center line, when the pin is in the MIDDLE position of the rigger block.
- When the oarlock is vertically in the MIDDLE position of the pin.
- From the curve around the hole in the seat top to the sill of the oarlock.

All rigger types are adjustable for work height and span.

	Work height adjustment				Work height adjustment Total	Span adjustment per rigger
	by pin washers	by 10mm spacers	by rigger height	by height wedge		
Ali wing scull (for 1x)	$\pm 18\text{mm}$	$\pm 10\text{mm}$			$\pm 28\text{mm}$	$\pm 21\text{mm}$
Reverse Ali Wing scull (for 1x)	$\pm 18\text{mm}$	$\pm 10\text{mm}$			$\pm 28\text{mm}$	$\pm 19.5\text{mm}$
Folding ali back scull	$\pm 18\text{mm}$			$\pm 10\text{mm}$	$\pm 28\text{mm}$	$\pm 19.5\text{mm}$

Ali Wing and Reverse Ali Wing riggers have $\pm 10\text{mm}$ extra work height adjustment with Swift's "10mm spacers", Prod# Rig33 (1 set supplied as standard).

Folding Ali back scull have $\pm 10\text{mm}$ extra work height adjustment with Swift's "10mm spacers", Prod# Rig94 (Not supplied as standard).

The Folding Ali Back and Reverse Ali Wing riggers are adjustable for lateral pitch.

For Ali Wing riggers, lateral pitch can be easily adjusted with our pin wedges, Rig10A (1 degree wedges supplied as standard).



Reverse ali wing on 1x
(Black Swift for Elite Carbon grade)



Folding ali back on 2x and 4x+



Heavy duty ali wing on 1x

Quick release (for wing riggers)

Our wing rigger quick release system is precision made, easy to use and reliable.



Quick Release (QR) parts are the same height as our standard 10mm spacer.
Therefore when QR parts are used adjustability of work height is reduced by 10mm.

Rudders

The 4x+ has a rudder system, just in front of the cox.

There are 2 options for rudders:

Our standard rudder for CO402x+ is sensitive and very effective, part of what makes Swift quads turn so well, and important for manoeuvring in very big waves.

The short rudder is less responsive, and requires less skill and attention, and may be useful in shallow water and calmer conditions.



Rudder system



Standard (250 mm)



Short (150mm)

The 1x and 2x can be supplied with an optional shoe controlled, stern-mounted rudder, which can be pulled up out of the water.



Fins

For 1x and 2x there are 3 options for fins: small for calm conditions, medium for rougher conditions, and a low profile fin which can be useful for beach sprint races and rowing in shallow water. Fins can be easily changed from 1 type to another with 2.5mm Allen key.



medium (205mm)

small (160mm)

beach sprint (80mm)sprint

There is also a choice of fin box position: standard and "beach sprint". The beach sprint position is 1m closer to the bow, than the standard position, so it is easier to turn, which can be good for a short slalom type race such as beach sprints. It is also less likely to scrape against the beach at start. Or there is the option to have 2 fin boxes.

	Standard	Beach sprint
CO102-	60cm	160cm
CO103-	60cm	160cm
CO202A-	120cm	220cm



Wave break & Bow deck hatch

The 402+ mould was updated in Feb 2022 to including a sliding wave break.

There is a choice of hatch near the wave break, our standard 180mm hatch or our oval hatch, better for storing more stuff "on tour".



CO4x+ sliding type wave break & choice of hatch

Stern cover

Our optional stern cover is to reduce the amount of water coming into the stern of the boat. This can happen when you are stationary, waiting for the start of a race in mid sizes waves or when the wave length is shorter than the length of the boat, as the stern will dip under water. It can also be useful for long distance touring - ask distributor about extra cost.



Waterproof storage bag - Touring Option

Waterproof storage bags for 2x and 4x+, attached between rigger mounts with velcro and clips, suitable for touring etc - ask distributor about extra cost.



Cox feet blocks for CO4x+

Cox feet blocks are used to offer a second position for the cox's feet. Attach to boat with 3M Dual Lock - ask distributor about extra cost.



Bow protective wrap

Protective wrap for bow (hull) to protect boats from damage on the beach, especially useful for beach sprint - ask distributor about extra cost.

We use 2 large side pieces from deck joint, down to the keel and back up the other side by 3cm. Finally have a 10cm wide piece around 100cm long along keel, from top of bow to cover the 2 side pieces. It means that there will be 3 layers in the most important area.

The material is TPU 6.5mil type.



Bow decorative wraps

Decorative wrap for bow deck - ask distributor about extra cost.

Customers can customise their boats using our template or use one of our designs.

The material is PVC.



Wrapping

Clear plastic wrapping is available, but help us to reduce the negative impact of our sport by choosing not to have this on your boats.

Boat weights



Steel trestles
(large for 1s, 2s & 4s)



Steel trestles
(simple for 1s)



Aluminium trestles
(large for 1s, 2s & 4s)

Boat weights

	Weight			
	Elite Carbon		Elite Plus	
CO102-	32±1kg	70±2lbs	35±1kg	77±2lbs
CO103-	32±1kg	70±2lbs	35±1kg	77±2lbs
CO202B-	53±1kg	116±2lbs	60±1kg	132±2lbs
CO402B+	112±3kg	246±7lbs	130±3kg	286±7lbs

