

## Moulds, rigging

Below are the standard rigger specifications for each mould.

Our standard specifications have higher work height for big crews, and smaller spans for faster boats.

**If your crew needs riggers with some special specifications, please order the custom rigger option on the order form.**

### Blue highlight means "Wing rigger only"

Only heavy duty ali wing riggers (ie. without backstays) are supplied with PR1x and PR2x

The span of adaptive & recreational riggers is adjustable by about +/-35mm per side.						
Mould #	P103-	R103-	PR103-	P203-	R203-	PR203-
Boat type	1x	1x	1x	2x/-	2x/-	2x/-
Crew weight - kgs	60-105	60-105	60-105	60-100	60-100	60-100
Crew weight - lbs	132-231	132-231	132-231	132-220	132-220	132-220
Length - cms	636	636	636	916	916	916
Waterline Beam -cms	44.8	44.8	44.8	48.2	48.2	48.2
Production Date	Sep-'12	Sep-'12	Sep-'12	Sep-'12	Sep-'12	Sep-'12
Span - sweep	n/a	n/a	n/a	n/a	840	840
Work height - sweep	n/a	n/a	n/a	n/a	160	160
Lateral pitch - sweep	n/a	n/a	n/a	n/a	0	0
Bow 1/2 span - scull	675	765	765	720	765	765
Stroke 1/2 span - scull	675	765	765	720	765	765
Bow Work height - scull	160	160	160	160	160	160
Str Work height - scull	160	160	160	160	160	160
Bow Lateral pitch - scull	0	0	0	0	0	0
Str Lateral pitch - scull	0	0	0	0	0	0

PR boats (PARA & Recreational) will be supplied with both Para and Recreational seat rails and fittings, and 1 set of riggers. If you need extra riggers, please order on the additional notes page.

From 28 Nov 2012, we use long rigger block for Rec & PARA boats.

We have changed the standard span for R102 and R202 to 765mm, which gives a range of 1460-1600mm, so is good for recreational, and might be useful for some PARA crews.

1s	2s
675mm (1280-1420mm range)	720mm (1370-1510mm range)
720mm (1370-1510mm range)	765mm (1460-1600mm range)
765mm (1460-1600mm range)	

## Grades/construction

All Swift PARA & Recreational 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, cured at high temperature.
- Bonded under vacuum.
- Enclosed seat decks for maximum buoyancy (exceed FISA's requirement).

### Club A

#### Overview

Mainly for training purposes, although with only a small weight disadvantage over Elite Plus boats, can still be highly competitive.

#### Hull

Coremat core with kevlar skins, and carbon reinforcing.

#### Saxboards

Honeycomb core for 2s, closed cell PVC foam for 1s, with carbon and kevlar skins, and carbon reinforcing.

#### Canvas decks

Honeycomb core with inner skin of prepreg carbon and outer skin of kevlar.

#### Seat deck

Closed cell PVC foam core with kevlar skins.

### Elite Plus

#### Overview

For use in top level competition.

#### Hull

Honeycomb core with inner skin of mostly carbon cloth, outer skin of kevlar, and carbon reinforcing

#### Saxboards

Honeycomb core with inner skin of carbon cloth, outer skin of kevlar, and carbon reinforcing

#### Canvas decks

Honeycomb core with inner skin of prepreg carbon and outer skin of kevlar.

#### Seat deck

Closed cell PVC foam core with carbon and kevlar skins.

### Club B

#### Overview

Specifically built for training purposes. Quite heavy, but great "work horses" . This construction is relatively easy to repair.

#### Hull

Coremat core with fibre glass skins.

#### Saxboards

Honeycomb core for 2s, 4s and 8s, closed cell foam for 1s, with fibreglass skins, and carbon reinforcing.

#### Canvas decks

Honeycomb core with fibre glass skins.

#### Seat deck

Closed cell PVC foam core with fibre glass skins.

## Stretcher type

PARA and Rec boats are supplied with lightweight carbon and PVC foam sandwich stretchers. There is a choice between shoes and flexfoot.

Both of these stretcher types can be replaced with plywood, which is heavier, but can be easily customised by the rower/coach.

	PBR shoes	Active shoes	Swift shoes	Flexfoot
Elite plus	Standard	Standard	Standard	Standard
Club A	Upgrade	Upgrade	Standard	Standard
Club B	Upgrade	Upgrade	Standard	Standard



By Bont Rowing



Adjustable size shoes by Active Tools



Swift' s own rowing shoes



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

## 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

Please note, PBR shoes are small, so we suggest to choose shoes that are 1 or 2 sizes larger than normal.

## Rudder type

Rudders are stainless steel, and are available in standard (50x80mm plate) for straight course rowing, or large (80 x 100mm plate) for river rowing.

A rudder will only be supplied if sweep riggers for 2- are ordered.



## Colour options

Standard: main colour is white, trim colour is black

**Custom A:** main is white, trim is other than black - ask distributor about extra cost

**Custom B:** Main is NOT white, trim is EITHER black or other colour - ask distributor about extra cost

**Custom C:** all other, such as white hull, red bow and stern canvas, yellow trim - ask distributor about extra cost



Please note; we use the word "trim" to explain the black parts on the boat (bow and stern). All other parts (hull, bow canvas & stern canvas) we call "main".

Color & RAL #	Name	Main color	Trim color	Color & RAL #	Name	Main color	Trim color
RAL 9005	Black	No	Yes	RAL 6012	Hunter green	No	Yes
RAL 7036	Midium grey	Yes	Yes	RAL 6001	Kelly green	Yes	Yes
RAL 8011	Dark brown	No	Yes	RAL 6017	Light green	Yes	Yes
RAL 8002	Medium brown	No	Yes	RAL 3001	Red	Yes	Yes
RAL 4008	Purple	Yes	Yes	RAL 2008	Orange	Yes	Yes
RAL 4006	Magenta	Yes	Yes	RAL 3015	Light pink	Yes	Yes
RAL 5010	Dark blue	No	Yes	RAL 1016	Light yellow	Yes	Yes
RAL 5015	Light blue	Yes	Yes	RAL 1018	Yellow	Yes	Yes
RAL 5012	Aqua blue	Yes	Yes	RAL 9003	White	Yes	Yes

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 above.

### Chevrons - ask distributor about extra cost

Chevrons need to be ordered on "add notes" page, not the "order form". All "trim" colours are possible. All chevrons are 80mm wide, and the angle is 45 degrees. Maximum number is 6 chevrons (3 for bow and 3 for stern). Bow chevrons point to bow, stern chevrons point to stern. "Chevron1" is closest to the center of the boat.

The photo shows 3 chevrons, not 2. Chevron 1 is green, chevron 2 is yellow, chevron 3 is green.

#### Example of how to request chevrons:

*I want 3 chevrons on bow and stern.*

*Bow: 1st: RAL4006, 2nd: RAL5015, 3rd: RAL1016.*

*Stern: 1st: RAL4006, 2nd: RAL5015, 3rd: RAL1016.*



## 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.

## Rigger type

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

<http://swiftracing.com/p-riggers/>

## 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

Scull and sweep riggers using aerofoil profiles, for use with backstays, mounted over the foot stretcher.

### 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.

All measurements are in millimeters or degrees.  $\pm 3\text{mm}$ ,  $\pm 0.3$  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.
- When Ali Wing riggers are fixed to boats with 1 piece of 10mm spacer.
- 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 heavy duty	$\pm 18\text{mm}$	$\pm 10\text{mm}$			$\pm 28\text{mm}$	$\pm 35\text{mm}$
Ali wing sweep	$\pm 18\text{mm}$	$\pm 10\text{mm}$			$\pm 28\text{mm}$	$\pm 21\text{mm}$
Reverse ali wing scull	$\pm 25\text{mm}$	$\pm 10\text{mm}$			$\pm 25\text{mm}$	$\pm 19.5\text{mm}$

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

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

All PARA and Rec scull riggers use our extra long rigger block, allowing 70mm span adjustment each side.

Because of the small span adjustment for Reverse wing riggers, we recommend using the Ali Wing riggers on the PR1x and PR2x boats.

## 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.

## PARA seats

We currently offer 3 different seats:



Flat carbon. This is a low profile, flat seat that rowers usually customise with their own padding.



Bucket seat - small. This seat offers some sideways support, and is popular with some TA rowers.



Bucket seat - large. This seat offers some sideways support, and is popular with some TA rowers.

## PARA back supports

Back supports are supplied as standard for PARA1x. If you don't want a back support with PARA 1x or if you want back supports with PARA 2x, please fill in details in the order form, and discuss prices with distributor.

There is a choice between 4th generation and 3rd generation.



### Back support 4th generation

It is adjustable for back angle and height, with the flat carbon seat. There are 4 widths available (230mm, 280mm, 330mm, 380mm). Except for the carbon back plate, all other parts are interchangeable between the 4 sizes.



### Back support 3rd generation

It is adjustable for back angle and height. There are 4 widths available (220mm, 260mm, 340mm, 380mm). Except for the upper piece and cushion, all other parts are interchangeable between the 4 sizes.

## 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

The final weight of each boat depends upon the following:

### Grade:

**Elite Plus** is the lightest, followed by Club A, then Club B.

**Club A** is APPROX heavier than Elite Plus by 1.5kgs (3.3lbs) for 1s, 2kgs (4.4lbs) for 2s.

**Club B** is APPROX heavier than Club A by 1.5kgs (3.3lbs) for 1s, 3kgs (6.6lbs) for 2s.

### Configuration:

The PARA version of 1s is APPROX heavier than the Recreational version by 6kg (13lbs).

The PARA version of 2s is APPROX heavier than the Recreational version by 2kg (4.4lbs).

**Choice of parts:**

The above weights are based on a typical PARA set up with:

- Floats, flat carbon seat and backsupport for 1x.
- Flat carbon seats (no floats, no backsupports) for 2x.

Approximate boat weights:

	Elite	Club A	Club B
PARA 1x	23 (51lbs)	25 (55lbs)	26.5 (58.5lbs)
PARA 2x	35 (77lbs)	36.5 (80.5lbs)	39.5(87lbs)
Recreational 1x	17.5 (38.5lbs)	19 (42lbs)	20.5 (45lbs)
Recreational 2x/-	32.5 (71.5lbs)	34.5 (76lbs)	37.5 (82.5lbs)

**If weight is an important point for you, please tell us the mould number, grade and rigger type and we can guarantee the final boat weight to you.**

**Additional Informations**

Please note what is included as standard and what is not following the boat type chosen:

If you wish extra parts such as floats, but is not included in a boat type, you can order by mentioning in the Add. Notes Page of the Order Form

	Para Rails	Para Seat	Para Back Support	Sliding Seat and Rails	Floats+arms	Chest Strap	Leg Strap
P:1x (AS=PR1)	Standard	Standard	Standard	NO	Standard	Standard	Standard
P:1x (TA=PR2)	Standard	Standard	NO	NO	NO	NO	Standard
R:1x (Rec)	NO	NO	NO	Standard	NO	NO	NO
PR:1x (AS=PR1 & Rec)	Standard	Standard	Standard	Standard	Standard	Standard	Standard
PR:1x (TA=PR2 & Rec)	Standard	Standard	NO	Standard	NO	NO	Standard
P:2x (TA=PR2)	Standard	Standard	NO	NO	NO	NO	Standard
R:2x (Rec)	NO	NO	NO	Standard	NO	NO	NO
PR:2x (TA=PR2 & Rec)	Standard	Standard	NO	Standard	NO	NO	Standard