

OARS

Catalogue

Swift Racing Canada

REGULAR OARS

With our durable construction, competitive pricing, choice of grades, lengths and blades, Swift's scull oars are an ideal choice for all club, school, university and master rowers.



Handles & Grips:

We offer 3 grip sizes, on 2 sizes of handle. The external diameter of the handle is cut by CNC machine to fit perfectly inside the shaft, where it is securely held.

Handle Size	Small	Medium	Medium
Color Code	Red	Orange	Purple
Grip Diameter	32mm	35mm	37mm



Length Adjustment:

Simply loosening 2 screws allows for quick and easy length adjustment, of up to 6cm. All handles have overall length engraved, so avoiding the need to measure length each time they are adjusted.



Grades of Shaft Construction:

The 3 grades cover the range from minimum weight and high stiffness to slightly heavier with increased flexibility. When considering which grade is most suitable, the key factors should be boat speed and muscle development.

Lengths:

There are 2 lengths of regular scull oar, standard and short:

	A2 Blade	A3 Blade
Standard - Length	286-292	291-297
Standard - Outboard	190-205	195-210
Short - Length	283-289	288-293
Short - Outboard	188.5-203.5	193.5-208.5
Length Adjustment	6	6

*Outboard = Oar Length - Inboard

HP – High Performance:

The HP oar shafts are 95% carbon and the same weight and stiffness as racing scull oars from the leading manufacturers.

- Blades: Carbon, PVC foam core, clear carbon gel coat finish.
- Weight: 1.41+/-0.03kg (maximum variation within 1 pair is 20g).
- Stiffness: 42+/-2mm (maximum variation within 1 pair is 2mm).

CP – Club Performance:

The CP oar shafts are 70% carbon, have about 10% more flex than HP, and are just 70g heavier per oar. The difference in weight is negligible, but the increased flexibility will benefit everyone that rows in “slower boats”, so should be seriously considered as an alternative to HP. “Slower boats” includes all 1x, 2-, all beginner crews, most junior crews, most women crews, most masters crews, and many LWT crews. There is no loss of boat speed due to a 10% increase in flexibility, but less stress is put on the back at the catch.

- Blades: Carbon, PVC foam core, white gel coat finish.
- Weight: 1.48+/-0.03kg (maximum variation within 1 pair is 20g).
- Stiffness: 48+/-2mm (maximum variation within 1 pair is 2mm).

Rec – Recreational:

The Rec oar shafts are 40% carbon, have about 20% more flex than CP, and are, just 70g heavier per oar. They are therefore ideal for young beginners and casual as well as recreational rowers.

- Blades: Carbon & fiberglass, PVC foam core, and light grey polyurethane paint finish.
- Weight: 1.55+/-0.03kg (maximum variation within 1 pair is 30g).
- Stiffness: 58+/-3mm (maximum variation within 1 pair is 2mm).

Blades & Edges:

All grades are available with either the A2 or A3 (Macon) blade.

	A2 Blade	A3 Blade
Edge	Vortex or Plain	Plain
Size (LxW)	46x21.5	51x17
Area cm2	785	695

Blade length is along the axis of the shaft; width is maximum width. Oar covers are available and can be ordered from our website or by contacting us directly.



ADAPTIVE OARS

Swift is producing oars for use with our Cadet and Cadet Mini boats or by Adaptive/PARA rowers. These are manufactured with purpose-built tooling, so are correctly sized, not just “cut down” versions of normal scull oars.

Handles & Grips:

We offer 3 grip sizes, on 2 sizes of handle. The external diameter of the handle is cut by CNC machine to fit perfectly inside the shaft, where it is securely held.

Handle Size	Small	Medium	Medium
Color Code	Red	Orange	Purple
Grip Diameter	32mm	35mm	37mm



Length Adjustment:

Simply loosening 2 screws allows for quick and easy length adjustment, of up to 12cm. All handles have overall length engraved, so avoiding the need to measure length each time they are adjusted.



Grades of Shaft Construction:

Please note that even with 12cm handle adjustment range, because of reduced overall length, oars become light and very stiff. We therefore do not offer HP grade.

CP – Club Performance:

As with the regular length oars, the CP oar shafts are 70% carbon, and blades are made from carbon, with PVC foam core, and white gel coat finish. Weight and stiffness vary with length, so please see chart below for details.

Rec – Recreational:

As with the regular length oars, the Rec oar shafts are 40% carbon, and blades are made from carbon & fiberglass, with PVC foam core, and light grey polyurethane paint finish. Weight and stiffness vary with length, so please see the chart below for details.

	Club Performance (CP)	Recreational (Rec)
Total weight – (per piece) - Long	1.42+/-0.2kg	1.47+/-0.2kg
Total weight – kg (per piece) - Medium	1.36+/-0.2kg	1.41+/-0.2kg
Total weight – kg (per piece) - Short	1.34+/-0.2kg	1.39+/-0.2kg
Maximum variation per pair - kg	20g	30g
Shaft stiffness – cm – Long (weight)	35mm	40mm
Shaft stiffness – cm – Medium (weight)	28mm	34mm
Shaft stiffness – cm – Short (weight)	24mm	28mm
Maximum Variation per pair - cm	2mm	2mm

*Stiffness is measured the same way as for regular oars, with the weight suspended from at the connection point of shaft and blade.

Adaptive Oars:

The sleeve is positioned so that they are only useful for PARA rowing, where very heaving gearing/loading is wanted, such as with internationally competitive Adaptive/PARA rowers.

	A2
Long - Length	268-280
Long Adaptive - Outboard	193-208
Medium - Length	256-268
Medium Adaptive - Outboard	190-205
Short - Length	244-256
Short Adaptive - Outboard	181-196
Length Adjustment	12

*These oars are not available with the A3 blade.

* Oar covers are available and can be ordered from our website or by contacting us directly.

CADET OARS

Swift is producing oars for use with our Cadet and Cadet Mini boats, with shorter shafts, which we make in 3 lengths; short, medium and long. These are manufactured with purpose-built tooling, so are correctly sized, not just “cut down” versions of normal scull oars. The external diameter of the handle is cut by CNC machine to fit perfectly inside the shaft, where it is securely held.

With our durable construction, competitive pricing, choice of grades, lengths and blades, Swift’s scull oars are an ideal choice for all clubs and schools.

Handles & Grips:

We offer 3 grip sizes, on 2 sizes of handle.

Handle Size	Small	Medium	Medium
Color Code	Red	Orange	Purple
Grip Diameter	32mm	35mm	37mm



Length Adjustment:

Simply loosening 2 screws allows for quick and easy length adjustment, of up to 12cm. All handles have overall length engraved, so avoiding the need to measure length each time they are adjusted.



Grades of Shaft Construction:

Please note that even with 12cm handle adjustment range, because of reduced overall length, oars become light and also very stiff. We therefore do not offer HP grade.

CP – Club Performance:

As with the regular length oars, the CP oar shafts are 70% carbon, and blades are made from carbon, with PVC foam core, and white gel coat finish. Weight and stiffness vary with length, so please see the chart below for details.

Rec – Recreational:

As with the regular length oars, the Rec oar shafts are 40% carbon, and blades are made from carbon & fiberglass, with PCV foam core, and light grey polyurethane paint finish. Weight and stiffness vary with length, so please see the chart below for details.

	Club Performance (CP)	Recreational (Rec)
Total weight – (per piece) - Long	1.42+/-0.2kg	1.47+/-0.2kg
Total weight – kg (per piece) - Medium	1.36+/-0.2kg	1.41+/-0.2kg
Total weight – kg (per piece) - Short	1.34+/-0.2kg	1.39+/-0.2kg
Maximum variation per pair - kg	20g	30g
Shaft stiffness – cm – Long (weight)	35mm	40mm
Shaft stiffness – cm – Medium (weight)	28mm	34mm
Shaft stiffness – cm – Short (weight)	24mm	28mm
Maximum Variation per pair - cm	2mm	2mm

*Stiffness is measured the same way as for regular oars, with the weight suspended from at the connection point of shaft and blade.

*The sleeve is positioned so that when used in Swift Cadets or Cadet Minis, small rowers can achieve the same length of rowing stroke and similar or lighter gearing/loading, as taller people in bigger singles.

There are 3 lengths of Cadet Scull Oars:

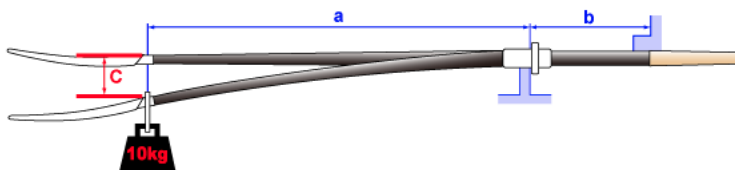
	A2 Blade	A3 Blade
Long - Length	268-280	273-285
Long Cadet - Outboard	1.36+/-0.2kg	1.41+/-0.2kg

Total weight - kg (per piece) - Short	20g	1.39+/-0.2kg
Maximum variation per pair - kg		30g
Shaft stiffness - cm - Long (weight)	35mm	40mm
Shaft stiffness - cm - Medium (weight)	28mm	34mm
Shaft stiffness 0 cm - Short (weight)	24mm	28mm
Maximum variation per pair - cm	2mm	2mm

*For the Kiddy 1x, we recommend the medium or short cadet oars.

STIFNESS

Stiffness of regular oars is measured by hanging 10kg weight as shown in the diagram below and measuring the deflection. For regular oars, a = 150cm and b = 65cm.



ADAPTIVE ROWING RIGGING GUIDE

The following is our guide to choosing scull oars and deciding rigging for Adaptive rowers and will be suitable for most Adaptive rowers.

Rowers with a very short range of movement, such as Arms & Shoulders rowers, should have narrow rigger spans, to help achieve a longer rowing stroke/arc. Range of movement is also determined by height, arm length and flexibility.

Most Adaptive rowers have little or no overlap (of handles). The Outboard measurement, which is simply the total oar length minus inboard, when divided by inboard determines the level of gearing/loading (that is, how heavy the stroke is/feels).

Example Calculations:

For example, if span is 140cm, inboard will be around 70cm.

- With oars that are 260cm long, outboard = 190cm, so gearing = $190/70$.
- With oars that are 245cm long, outboard = 175cm, so gearing = $175/70$.

Stronger and more experienced rowers can have higher gearing and beginners and weaker rowers need lower gearing to maximize performance and reduce injury.

	Span (cm)	Inboard	Length (cm)	Outboard (cm)	Gearing
AS beginner	130-140	About ½ of span	230-250	160-185	2.3-2.7
AS	125-140	About ½ of span	240-270	170-200	3.5-3.2
TA beginner	140-155	About ½ of span	245-270	165-190	2.3-2.5
TA	135-155	About ½ of span	260-285	180-205	2.4-2.8
For comparison					
Sliding seat 1x	157-160	87-90	286-291	198-202	2.2-2.3

