CRCKEROARS

# PRODUCT GUIDE

crokeroars.com





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Adaptive oars

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For well over 50 years Croker Oars have crafted premium stilllwater oars for the rowing community and the pink sleeve has become an international icon, recognisable from afar.

Croker Oars continue to innovate in the sport of rowing, always searching for new and improved technology to create quality products for rowers to perform at their absolute best.

### **CHOOSING AN OAR**

All oars at Croker Oars are custom made to order and each individual has different needs. Every shaft is individually tested for strength and agility. Gathering information on each individual is the key to the perfect oar.

There are many factors to be considered when ordering oars:

- » Height
- » Age
- » Weight
- » Skill level (Flex)
- » Gender
- » Choose your shaft (speak to us)
- » Choose your blade
- Choose your handle and grip (See Hand Grip Chart, page 23)

Before leaving the factory every shaft is deflected, weighed and matched to its identical to give the best quality pair of oars possible.

### **DEFLECTION (FLEX)**

Which flex is for you?

### **Soft Deflection**

Soft shafts are ideal for juniors, women at all levels and masters men. Soft flex shafts are also a popular choice for elite openweight women racing the single scull or small team boats. For those who desire a slightly more forgiving feel at the catch and rowers with a history of recurrent injuries.

Soft shafts may also be a reasonable selection for rowers lighter than 65kg.

## Standard Deflection Standard shafts are idea

Standard shafts are ideal for senior and elite men in all boat classes, as well as world-class elite women in team boats.

Standard shafts are also recommended for rowers heavier than 90kg with no history of injuries.

### STILL UNSURE?

Please contact our team, we are happy to help.

### ADAPTIVE OARS

Talk to us regarding specialised custom built oars for adaptive rowing.



## Sculling Oars



### S39 ARROW

### Small diameter shaft

S39 shafts are made using high modulus carbon. They use multiple layers of thin carbon plies at various angles to achieve a balance of strength, stiffness, torsional stiffness and are very light weight.

The S39 has less aerodynamic drag than normal shafts and, because they weigh less, has less rotational inertia.

Approx Weight	Blade	Handle
Soft 1275gm	Arrow	A 1:
Standard 1300gm		Adjustable

## S40 ARROW Small diameter shaft

S40 utilise standard modulus carbon in their construction, compared to the S39 made with high modulus carbon. As a result of this, stiffness is unchanged and strength is enhanced.

These thin shafts have less aerodynamic drag than normal shafts and have less rotational inertia. They feature thicker walls for more durability as well as the latest Arrow blade.

Approx Weight	Blade	Handle
Soft 1470gm	Arrow	Λ -l:+- - -
Standard 1500gm		Adjustable



## Sculling Oars

### S7 SERIES

### Standard diameter shaft

The S7 series use multiple layers of thin carbon plies at various angles to achieve a balance of strength, stiffness and torsional stiffness. These full carbon shafts are the traditional Croker diameter, but incorporate the materials and techniques now utilised in our Arrow shafts. S7's have superior torsional resistance compared to the S4 models, but the deflection under load is comparable.

Approx Weight	Blade	Handle
Soft 1300gm	Slick Macon	A diversala la
Standard 1315gm		Adjustable

### **S4 SERIES**

The S4 series are full carbon shafts made using various layers of standard modulus carbon. S4's achieve a balance of maximum strength and minimum weight. These 100% carbon shafts exhibit crisper catches and allow higher rating than our elite level S2 models.

Approx Weight	Blade	Handle
Soft 1305gm	Slick	A -li:+-l- l-
Standard 1315gm	Macon	Adjustable

### S2 SERIES

The S2 Series are made from uni-directional carbon and woven. S2's achieve good strength with light weight. Part of our breakthrough line of "superlight" shafts, these are constructed of 80% carbon and 20% fiberglass.

The lightweight feel and elite performance of these oars is superior to that of heavier oars in common club circulation. These oars are the definitive "step up" for dedicated scullers, but still at an affordable price.

Approx Weight	Blade	Handle
Soft 1410gm	Slick Macon	A diversal la
Standard 1430gm		Adjustable

## Sculling Oars

### S3 INTERMEDIATE

With a shaft construction mix of 50% carbon and 50% fiberglass, the S3 is the recommended oar for club use and shared equipment situations. The S3 has the same stiffness as the S2 Soft, but is significantly more durable, making it ideal for fleet purchasing in club or scholastic sculling programs.

With the heavier shaft weight, the S3 is less sensitive in high winds and bad weather and have more weight in hand than our elite S4 and S2 shafts and therefore offer more stability during the recovery phase for the developing rower. The S3 also enjoys popularity among scullers who enjoy open or rough water.

Approx Weight	Blade	Handle
Standard 1650gm	Slick Macon	Adjustable Fixed Timber

### S5 SERIES

Designed for school and club use. The shafts are a little softer than the S3 shafts and reduce the risk of overuse injuries, especially in junior rowers. The increase in weight makes them more stable during recovery and more durable.

Approx Weight	Blade	Handle
Standard 1800gm	Slick Macon	Adjustable Fixed Timber



### **S6 SERIES**

With 100% fibreglass shafts, the S6 is designed for the rougher environment of novice and learn-to-row levels. The softer shaft reduces the risk of overuse injuries, especially in junior rowers. The increase in weight makes them the perfect oar for beginners, with less propensity for rising up in windy situations or overzealous movements. Given their durability and fleet longevity, the S6 are a highly economical oar for the instructional levels of any program. The S6 also enjoys some popularity among scullers who enjoy open water rowing events.

Approx Weight	Blade	Handle
Standard 1800gm	Slick Macon	Adjustable Fixed Timber

## Sculling Blades

### ARROW BLADE

The latest computer designed blade especially manufactured for the Arrow Shaft. These sculling blades which are designed to fit on the smaller shafts, feature thin edges, low wind resistance, 3D curvature and hydrodynamic efficiency which gives good lockup in the water but is still clean on entry and exit.

The low volume blade enters the water quickly and quietly and floats low in the water. Croker blades are known for cleanliness and these new blades take it one step further.

Fits Shaft

S39 Arrow S40 Arrow



### SLICK BLADE

The Slick blade is available with closed edges, which improves the blade's durability and overall performance.

The longitudinal curvature is perpendicular to the tip and so is in line with the flow of water. It has a constant pitch across the tip and all lines parallel to the tip.

The gentle asymmetric curvature of the blade assures a clean release from the water with every stroke. Slick blades are visibly cleaner than other blades. It does not exhibit any negative tendencies during recovery or in bad weather.

Since the Slick blade's introduction it has been extremely successful at all levels of rowing.

 Fits Shaft
 S7
 S4
 S2
 S3
 S5
 S6



### **MACON BLADE**

The Macon blades are the original blade design. Although the Macon blade is not used in the racing world anymore, recreational rowers prefer them and they are a good blade for learners.

The Macon blade is available on most shafts upon request and now comes with closed edges for increased durability and overall performance.

 Fits Shaft
 S7
 S4
 S2
 S3
 S5
 S6



## Sculling Handles

We have designed our sculling handles with comfort and ease of use as our highest priority. All our sculling handles come fitted with our injection moulded thermoplastic grips.

### **SCULLING CARBON HANDLES**

- » Small (26mm black end cap)
- » Medium (29mm yellow end cap)
- » Large (32mm white end cap)





### **SCULLING GRIPS**

Made from injection moulded thermoplastic elastomer, grips are ergonomically shaped to fit different hand sizes, the larger the grip the larger the spacing between fingers.

Sculling Grip Colour	Diameter	Handle size	Endcap
Pink - Small	31mm	Small	Black
Yellow - Intermediate	34mm	Medium	Yellow
Blue - Standard	35mm	Medium	Yellow
Grey - Large	37mm	Large	White
Green - Extra large No finger space	39mm	Large	White

To determine your grip size refer to the Hand Grip Chart on page 23.

## **Sculling Parts**

### MARK 3 ASYMMETRIC (MK3) MARK 3 BUTTON

The MK3 is a major upgrade to the MK1 symmetrical sleeve and is held together with plastic interlocking clips. This double ended sleeve performs better because it only has two flat surfaces.

The asymmetric design reduces the distance between the shaft and the swivel face. It is more stable square or feathered and positive in its movement, squaring and feathering. This asymmetric design is not recommended for use with the Magik or Martinoli swivels as these swivels produce excessive wear on the sleeves. Fits Mark 3 button.

Fits Shaft	S39 Arrow	S40 Arrow	S7	S4	S2	S3



The MK1 sculling sleeve comes in two parts, the sleeve body and the clip (back). The inboard measurements are calibrated on the back of the clip.

The sculling clips can be replaced as required without removing the sleeve. Fits Mark 1 button.

Mark 1/S3 Fits Shaft	S4	S2	S3
Mark 1/S6 Fits Shaft	S5	S6	

### 5mm HORSESHOE / SPACER

Used for quick adjustment of inboard length. Bow and Stroke side.

### **SWIVELS**

Croker swivels are simple and effectively designed with a flat back edge. They are a proven performer, economical, easy to use, compatible with most oars and known to extend the life of Croker sleeves. We recommend our Croker swivels to be used with Croker oars. Available in blue or black.

### **INSERTS**

13mm pin only, per set.











## Sculling Parts

### LOCKING PLATES

For adjustable carbon sculling handles. Includes 2 M5 x 20 stainless steel bolts and M5 washers.



Arrow Standard



### **BLADE COVER**

Hand made from PVC waterproof material, padded lining with velcro opening. Extremely durable construction and designed for travel. A great way to keep your blades protected. Sold in pairs.



### **OAR BAG**

Hand made from the same PVC as blade cover but includes padded lining, velcro opening, carry handle and inside divider. Extremely durable construction designed for travel. A great way to keep your oars protected. Various sizes available.

Single

1 pair

Double Quad

2 Pair 4 Pair



### **BLADE TIP PROTECTORS**

Prolong the life of your blades by protecting them from scraping and damage. Sold in Pairs (pack of 4)



Arrow

Slick



### **HEEL CUPS**

Sold in singles



### Sold in singles



### **BOLTS**

M5 x 20mm







## Rowing Oars



## M47 ARROW SERIES Small diameter shafts

M47 Arrows are made using high modulus carbon. These shafts use multiple layers of thin carbon plies at various angles to achieve a balance of strength, stiffness, torsional stiffness and are very light weight. They have less aerodynamic drag than normal shafts and because they weigh less have less rotational inertia.

Designed for world class, elite level and highly competitive crews who seek an uncompromising rowing oar. The M47 represents the ultimate tool for propulsion on the water.

Approx Weight	Blade	Handle
Soft 2260gm	Arrow	A 1:
Standard 2350gm		Adjustable

## M49 ARROW SERIES Small diameter shafts

The new M49 Arrow has similar features as the M47, with a thin diameter shaft made from multiple layers of thin carbon, but with enhanced durability, as well as the latest Arrow blade. The M49 is slightly heavier than the M47, but still delivers a high performance racing feel for elite level and highly competitive crews.

Approx Weight	Blade	Handle
Standard 2800gm	Arrow	Adjustable



## Rowing Oars

### M4 SERIES

These full carbon shafts are made using various layers of standard modulus carbon and are standard in their diameter.

They achieve a balance of maximum strength and minimum weight. The M4 shafts exhibit crisper catches and allow higher rating than our elite level M2 models.

Approx Weight	Blade	Handle
Soft 2500gm	Slick	A diversala la
Standard 2550gm	Macon	Adjustable

### M2 SERIES

M2 shafts are made from uni-directional carbon. The lightweight feel and elite performance of these oars is superior to that of heavier oars in common club circulation.

Approx Weight	Blade	Handle
Soft 2600gm	Slick	A dimetalala
Standard 2650gm	Macon	Adjustable



## Rowing Oars

### M1 INTERMEDIATE

Designed for school and club use. This shaft has the same stiffness as the M4 and M2 but a heavier weight increases durability without loss in performance. Glass/carbon shaft.

Approx Weight	Blade	Handle
Standard 3100gm	Slick Macon	Adjustable

### M5 SERIES

Designed for learners. Softer shaft minimises injuries. Extremely economical oar. Glass/carbon shaft.

Approx Weight	Blade	Handle
Standard 3350gm	Slick Macon	Adjustable





## Rowing Blades

### ARROW ROWING BLADE (M47 & M9 SERIES)

The latest computer designed blade especially manufactured for the Arrow shaft. These rowing blades which are designed to fit on the smaller shafts, features thin edges, low wind resistance, 3D curvature and hydrodynamic efficiency which gives good lockup in the water but is still clean on entry and exit.

Croker blades are known for cleanliness and these new blades take it one step further.

Fits Shaft M47 Arrow M49 Arrow



### SLICK ROWING BLADE

The Slick rowing blade is normally assembled with a 70mm hook. This provides enough load for the strongest crews but the asymmetric curvature of the blade makes it extremely clean in and out of the water. The blade can be reduced in size for women and schoolgirls.

The Slick rowing blade is available on most shafts and is moulded with closed edges, which improves the blade's durability and overall performance with no ridgeline so there is less splash at the catch.

The low volume blade enters the water quickly and quietly and floats low in the water. The longitudinal curvature is perpendicular to the tip and so is in line with the flow of water. It has a constant pitch across the tip and all lines parallel to the tip. The gentle asymmetric curvature of the blade assures a clean release from the water with every stroke. Slick blades are visibly cleaner than other blades. The Slick blade does not exhibit any negative tendencies during recovery or in bad weather. Since the Slick blades introduction it has been extremely successful at all levels of rowing.

Fits Shaft M4 M2 M1 M5



### MACON ROWING BLADE

The Macon blades are the original blade design. The blade was first manufactured in timber. Although the Macon blade is not used in the racing world, recreational rowers prefer them and they are a good blade for learners. The Macon blade is available on all shafts upon request.

Fits Shaft

M4 M2 M1 M5



## **Rowing Handles**

### **ADJUSTABLE HANDLES**

We have designed our rowing handles with comfort and ease of use as our highest priority. Selecting a handle that is correct for you is necessary to achieve the best performance.

A handle that is too small will cause trouble in the rough water and may turn in the rower's hand uncontrollably.

A handle that is too big will fatigue the rower's forearms and also result in excessive wrist movement feathering the oar.

The carbon adjustable handle is available in a variety of sizes and can be fitted with a choice of Blue Rubber, Heat Shrink and Timber Veneer grips.

### **GRIPS FOR ADJUSTABLE HANDLES**





Handle Sizes	Grip Diameter	Fits Shaft
Pink End cap (ideal for ladies)	Tapers 36 - 39mm	Standard + M47/M49 Arrows
Blue End cap	Tapers 39 - 42mm	Standard + M47/M49 Arrows
Grey End cap	Long Taper 42 - 45mm	Standard + M47/M49 Arrows
Black End cap	Tapers 39 - 42mm	Standard Shaft
Yellow End cap	42mm straight through	Standard Shaft
White End cap	Tapers 42 - 45mm	Standard Shaft

## **Rowing Parts**

### MARK 3 ASYMMETRIC (MK3) MARK 3 BUTTON

The MK3 is a major upgrade to the MK1 symmetrical sleeve and is held together with plastic interlocking clips. This double ended sleeve performs better because it only has two flat surfaces.

The asymmetric design reduces the distance between the shaft and the swivel face. It is more stable square or feathered and positive in its movement, squaring and feathering. This asymmetric design is not recommended for use with the Magik or Martinoli swivels as these swivels produce excessive wear on the sleeves. Fits Mark 3 button.

Fits Shaft	M47 Arrow	M49 Arrow	M4	M2

### MARK 1 SYMMETRICAL (MK1) MARK 1BUTTON

The MK1 sculling sleeve comes in two parts, the sleeve body and the clip (back). The inboard measurements are calibrated on the back of the clip. The rowing clips can be replaced as required without removing the sleeve. Fits Mark 1 button.

Mark 1/M5 Fits Shaft	M1	M5
Mark 1/M2 Fits Shaft	M2	M4

### 10mm HORSESHOE / SPACER

Used for quick adjustment of inboard length. Bow and Stroke side.

### **SWIVELS**

Croker swivels are simple and effectively designed with a flat back edge. They are a proven performer, economical, easy to use, compatible with most oars and known to extend the life of Croker sleeves. We recommend our Croker swivels to be used with Croker oars. Available in blue or black.

### **INSFRTS**

13mm pin only, per set.











## **Rowing Parts**

### LOCKING PLATES

For adjustable carbon rowing handles. Includes 2 M5 x 20 stainless steel bolts and M5 washers.



Arrow Standard



### **BLADE COVER**

Hand made from PVC waterproof material, padded lining with velcro opening. Extremely durable construction and designed for travel. A great way to keep your blades protected. Sold in singles.



### **OAR BAG**

Hand made from the same PVC as blade cover but includes padded lining, velcro opening, carry handle and inside divider. Extremely durable construction designed for travel. A great way to keep your oars protected.

Pair

Fits 2 oars



### **BLADE TIP PROTECTORS**

Prolong the life of your blades by protecting them from scraping and damage. Sold in Pairs (pack of 4)



Arrow



DOUBLE ACTION WHEELS

### **HEEL CUPS**

Sold in singles



Sold in singles



### **BOLTS**

M5 x 20mm







### Seat Top

### TO SUIT ALL ROWERS

Carbon seat tops are the latest computer generated product to be released by Croker Oars. These ergonomic seat tops are functional, elegant and gender specific.

For the first time, carbon seats are available to suit female rowers. Women generally have wider pelvic bones than men.

Men's and women's seats are differentiated by the distance between the seat holes or depressions. The men's seats have hole centres of 120mm or 130mm and the women's seats have hole centres of 160mm. This will suit most rowers

Small Boat Seats are 300mm wide (mens and womens), to fit most single sculls, this width may be an issue with older boats with shoulders



Seat Tops are designed and manufactured in-house by Croker Oars and are infused by the same advanced VARTM (Vacuum assisted resin transfer moulding) process used to manufacture our oar blades. Seats are compatible with most ball bearing wheel systems.

We are continuing to do extensive research around the world to develop a seat range to make your row more comfortable.

Croker Oars has the Seat Tops available to try at most major regattas.

Big Boat Seats are 330mm wide (mens and womens) and 340mm (mens extra large), to fit doubles, pairs, quads, fours and eights. Some large single sculls may also accept a big boat seat. Contact us if you are unsure.

120 Hole Centres
SMALL BOAT
Mens



300mm
120mm
200 grams
180 - 260mm

BIG BOAT Mens (Extra large)	
St. Character	

130 Hole Centres BIG BOAT	Width	340mm
Mens (Extra large)	Hole centre width	130mm
	Weight (approx)	245grams
100mm *	Track width	230 - 320mm

### 130 Hole Centres SMALL BOAT Mens



Width	300mm
Hole centre width	130mm
Weight (approx)	200 grams
Track width	180 - 260mm

01111 122 2 07 11	7
Womens	
16 Orași	ı

160 Hole Centres **SMALL BOAT** 

Width	300mm
Hole centre width	160mm
Weight (approx)	200grams
Track width	180 - 260mm

130 Hole Centres
BIG BOAT
Mens



Width	330mm
Hole centre width	130mm
Weight (approx)	230grams
Track width	230 - 320mm

BIG E	OAT	
Wom	ens	
	NSC) man	
-	100000000	

160 Hole Centres

60mm
30grams
30 - 320mm

## Frog Light

### SAFETY BOAT LIGHT SYSTEM FOR ROWING

There is no questions that boats need a navigation safety light for low light mornings and evenings. The Frog Light has been developed specifically as a safety boat light, offering effortless operation, reliability and durability.

When the boat comes off the rack and goes onto the water, the lights will automatically switch on and off when needed!

The automatic light detects when the boat is turned over or when there is enough daylight to switch off. The is no need to remember switches or pulling apart for maintenance. Just leave the Frog Light on the boat and recharge when the light indicates a low battery.

### Designed to be smart and tough

Especially made for rowers, reliable function and simple operation means they will be used when needed.

### Safety on the water

Safety Light engineered with 12 LED lights to be bright with 250° spread so not to shine in the rowers eyes when installed correctly.

### Minimal Maintenance

The sealed housing keeps the Frog Light better protected against the elements, no need to open to charge batteries. Leave it on the boat and just charge when indicator light is comes on.

### Safety Boat Light Features

- » 12 BRIGHT LED Lights Available in white or Red/Green, Flashing or Constant light
- » Fully sealed housing
- » Waterproof and Floats
- » Re-chargeable, extended use battery
- » Will turn ON and OFF when natural light levels determine it is necessary
- » Will turn OFF when turned upside down, for when your boat is stored on the rack
- » Will operate continuously for a minimum of 24 hours before requiring recharging
- » Red or Green LED indicates when charging is required



More information visit www.froglight.com.au

### Carbon Foot Stretcher

### FULLY ADJUSTABLE WITH FOOT PLATE

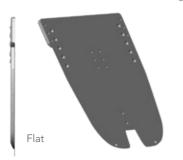
Croker Oars continue to innovate in the sport of rowing, searching for new and improved technology to create quality rowing products for rowers to perform at their absolute best. So with the success of the carbon fibre seats comes our fully adjustable Carbon Fibre Foot Stretcher. A beautifully crafted, light and sleek carbon fibre foot stretcher that fits Doubles, Pairs, Fours and Eights. The foot stretcher is fully adjustable.

fo fl Angled

Two kinds available, one with 10 degrees angle within the footstretcher, allowing rowers to increase the drive in the legs and a flat (without a 10 degrees angle) fits any boat. (Except for singles.)

Having the advantage of extra comfort and stability and allowing the leg drive to engage the glutes quicker. The foot plate is slightly wider for better boat balance and quickly adjustable if need be.

The Slide Bracket is a new feature on the foot stretcher. It replaces the heavier stainless steel bracket and can clamp better to the boat with the radial serrations design.



Fits Boats	Doubles	Pairs	Fours	Eights
	SINGLES - Coming Soon			

### Angle Foot Stretcher

Width	290mm
Height	340mm

### Flat Foot Stretcher

Width	290mm
Height	340mm



### Foot Plate

Width	290mm
Height	140mm





Hand Grip Chart **-** 190mm Extra Large -- 180mm Large Medium \_\_ 160mm Medium - 150mm **Intermediate** \_\_\_ 140mm Small **Small** \_ 120mm Make sure you measure from this point to the tip of your longest finger ROKER = Edge of paper Push thumb down while laying page on edge of table 21 Croker Oars Pty Ltd Product Guide

