

British rowing technique

The perfect stroke

This is the third in a series of three articles, which look at good rowing, sculling and ergometer technique. The high performance coaches – including Jürgen Grobler, Marty Aitken, Paul Thompson and Pete Sheppard – have got together to define British rowing technique, which has been endorsed and adopted by the coaching development officers and incorporated into the coaching award scheme and national junior rowing programme. The 'perfect stroke' is shown in the series of photographs published here.

Good technique is about producing maximum power for minimum effort

This will enable you to move the boat as far as possible each stroke in the most efficient way or, on the ergometer, producing the fastest split or highest wattage possible in the most efficient way.

Coaches need to understand that in order to move a boat or ergometer well, several concepts about technique must be understood. Differences in size, strength and ability mean that different athletes achieve maximum efficiency in slightly different ways. Coaches need to be able to spot where changes in technique can be made to maximise efficiency.

Link together kinetic chain

Most of the concepts that contribute to efficient technique can be summed up in one or more of the pictures. However, the concept of 'link together kinetic chain' applies to the whole stroke. The rowing stroke requires constant movement and application of power or controlled recovery to be effective. The whole of the body is engaged in the activity and therefore each part of the body chain needs to transfer the power. Hence posture and trunk stability are key to rowing efficiently.

Rowing technique

The hands should be no more than two hands-widths apart on the handle. Outside hand on the end of the blade controls the blade height, the inside hand controls the square and feathering. Rotation is around the rigger with the outside shoulder, enabling the body to follow the arc of the blade handle

Photographs: John West

Catch

- Outside hand raises the handle and locks the blade in the water



- Shins vertical. No gap between thighs and body
- Lower back set at catch
- Body in pre-stretched position



- Hands rise where they reach to
- Blade in at furthest point forward
- Lock up the face of the blade in the water

Drive phase

- Legs accelerate through the stroke



- Blade locked into the water
- Engage and push
- Legs and then body



- Back opening when the handle is in front of the knees

Drive phase

- Hang/suspend body weight on the handle. The connection is low down in the body, not in the shoulders



- Legs, upper body, shoulders and arms all contribute to the power



- Weight still hanging on the blade

Extraction



- Outside hand controls the blade movement at the extraction
- Brush the T-shirt with the outside hand



- Release the pressure on the handle just before the small circle around the finish
- Blades square as long as possible
- Hands down and away

Recovery phase

- Good organisation of body movement
- Weight transferred early onto the feet
- Smooth movement forward
- Hands body and slide



- Hands lead the recovery



- The pelvis rocks over from backstops into a comfortable and strong position



- Prepare early by squaring as the blades pass the knees
- Body pre-stretched and ready for the catch on the last part of the slide
- Outside shoulder around the rigger

The perfect stroke

The roll of the hands
The outside wrist remains flat throughout the stroke cycle

Catch

- ☐ Outside hand raises the handle and locks the blade in the water



Approach to the catch

- ☐ The blade is rolled onto the square by the inside hand



- ☐ Outside hand hooks the blade into the water
- ☐ Body back and legs remain in the same position
- ☐ Blade engaged at further point forward



- ☐ Blade face covered
- ☐ Body weight hanging on the handle

Extraction

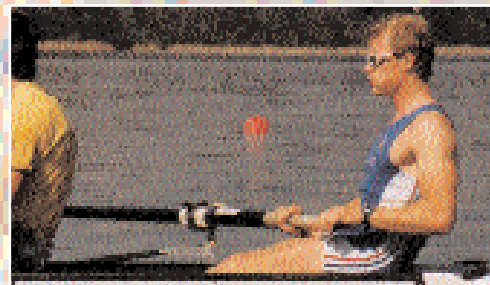
- ☐ Outside wrist remains flat



- ☐ Blade square as long as possible



- ☐ Outside hand pushes the blade handle down
- ☐ Then the inside hand rotates the blade smoothly onto the feather



- ☐ The blade handle is carried at an even height out of the recovery with enough room to square the blade

The rotation of the body

All the pictures on this page show the outside shoulder following the arc of the blade handle



- ☐ Once the handle passes 90o the shoulder starts to rotate



- ☐ The outside shoulder remains parallel to the blade

Athlete:
Rick Dunn was a member of the world championships coxed four in 2000, the world championships coxless four in 2001 and the silver medal-winning coxless four in 2002. John West – who took these photographs – has coached him in all three boats