

The perfect stroke

This is the first in a series of three articles, which will look at good rowing, sculling and ergometer technique. The high performances 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

Moving 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 need to 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 techniques 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.

The handle should move away symmetrically in the drive and recovery phase (no twisting).

Catch



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



- ☐ Hands rise where they reach to
- ☐ Lock up and engage the handle

Drive phase

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



- ☐ Engage and push
- ☐ Legs and then body

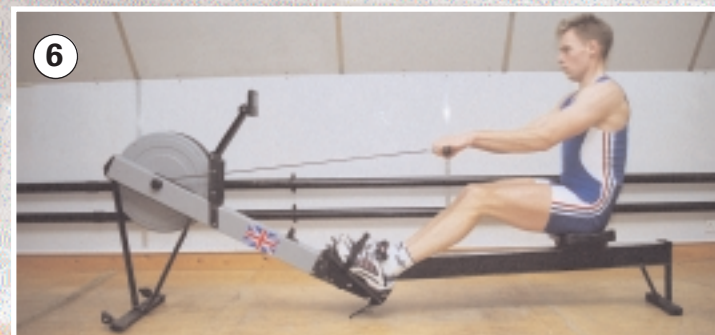


Drive phase

- ☐ Legs accelerate through the stroke



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



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



- ☐ Brush T-shirt with the thumbs

Extraction

Extraction



- ☐ Release the pressure on the handle just before the small circle around the finish



- ☐ Rock over to a comfortable and strong posture
- ☐ Pelvis moving from backstops
- ☐ All body swing by half way up the slide



Recovery phase

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

The perfect stroke

Feet adjustment is key to good rowing technique

Correct feet height adjustment is vital to ensure good rowing technique

Recovery phase

Catch position

Drive phase

Feet too high



Feet too high

If the feet are too high then it is difficult for the athlete to rock over from the pelvis at back stops, resulting in bending the lower back. This leads to a weak position at the catch which means it is difficult to hang the body weight effectively on the handle.

Correct foot height



Feet too low

Feet too low

The pelvis rock over is easy, but the body comes over the top of the thighs and not up to them. The result is that the body opens too early during the drive taking the direction of power application upwards. When the body opens dynamically in the early part of the stroke it puts a huge load on the lower back. The spine should be in a neutral and strong position in the early drive enabling the transfer of power from the legs to the handle.

