



### **Introduction to Ergometer Technique**

To understand the perfect rowing stroke, you need to be able to break it down.

A rowing stroke is made up of two distinct movements, the recovery is where you move up the machine, and the drive is where you push back with your legs and arms.

Then there are basically three parts you need to master for the complete rowing stroke: hands, body and legs. First, start to row bit by bit, beginning with the hands.

Sit with your legs out stretched with your hands on each end of the handle. Your thumb knuckle should almost be touching your lower ribs.

Start by slowly pushing and pulling your hands in and out to their full extension. Keep your body perfectly still and your wrists flat. Your torso should be tilted just a few degrees back from vertical. As you pull your hands through, your elbows need to about the same level as your hands.

With your arms out at full stretch, imagine someone is pulling the handle away from you and feel your body rock over at your hips up to the point where you have a comfortable stretch, which may be about 20 to 45 degrees over vertical.

For the moment row with your legs flat and just rock over forward then lean back and pull your elbows through. This is a great way to warm up before every rowing session and it will improve your rowing technique.

Do this at a comfortable pace, you don't need to puff or sweat when doing this, if you are slow down.

As your body stretches over, slowly allow your knees to bend and glide up the machine until your shins are about 45 degrees to the ground. At this point, stop and push back. Leave your body and arms in position until your knees are almost locked down.

When you feel confident with this movement, increase the angle of your shins on each stroke. Come forward until you feel stretched, but comfortable. If you're particularly fit or flexible, come all the way up until your shins are all the way vertical, or 90 degrees to the floor. You don't need to go any further.

When you get to the front, reverse the process. Push back with your arms and body stretched out comfortably. When your legs are almost flat, lean your body back against the handle. Then when your body is almost back over your hips, draw your elbows back past your body.

This completes the full rowing stroke.

### **Body Sensations**

What should your body be feeling during a rowing stroke?

As you push on your feet, you should feel a stretch across your shoulders and down your straight arms. The muscles under your arms should feel outstretched. If you're feeling tense or fatigued in your forearms, make sure they're outstretched to their fullest until your legs are almost completely flat.

Once your knees are locked down, as you pull your elbows past your body, you should be feeling the muscles in your stomach and buttocks switched on. As you finish the stroke you should feel your shoulder blades pull just back a little bit. Open your chest and feel the air rush out and in.

Some other sensations you should feel are some tension under your legs as you stretch over, then a bit of pressure on the balls of your feet as you slide along the machine towards the front.

Think about your posture at the finish of the stroke. Use the stabilizing muscles in the abdomen and glutes as you did in the warmup. As you can see and feel, you're using all the major muscle groups in this action. With some time and persistence your body will really thank you.

Go gently for now. If you're new to the game just row for 5 or 10 minutes at a time, a few times a week and slowly build up your time.

### **Common Errors**

While the rowing stroke is fairly simple. Loss of concentration, fatigue or bad habits will cause you to row incorrectly. It's generally towards the end of a session when people are feeling fatigued that errors can creep in.

Generally, there are four common errors people tend to make when rowing.

The first is on the recovery when you allow your legs to break before your hands and body have moved. You can correct this easily by remembering to pass your hands over your knees before they break.

Another common error occurs at the front of the stroke when you push the seat back and leave the body behind. This is called seat shooting. You fix this by remembering to feel strain across your shoulders and lean back against the handle.

A third error that also occurs at the front is when you pull with your arms too early. You can solve this by remembering to leave your arms locked until your legs are almost flat.

Finally, a common mistake is to sit back too far at the finish. An excellent way to remedy this is to take your feet out of the straps. If your body moves too far back, you'll fall off the back of the machine. If you can row without falling off the back while your feet are unfastened, then your finish position will almost certainly be correct.

In the upper right hand corner of the machine it displays the cadence or stroke rating, this is how many strokes you will take in a minute at your current pace. Try to stay around 18-20 strokes a minute to work on technique, and if you're new to the machine you may want to go even slower.