

Adaptive Rowing Equipment

Guidance

Introduction

Adaptive Rowing uses equipment that is adapted to enable the individual to take part in the sport. The way people adapt to their disability is an individual process. Two rowers with the same disability may require completely different equipment modifications, so it is important to work with athletes to determine what is optimal to enhance their rowing activity.

- **Personal equipment** – something that the rower wears designed to enhance body function such as a prosthetic limb or orthosis



- **Activity-specific equipment** – designed to enhance the performance of an activity or participation in rowing, such as a postural support seat, pontoons, strapping or hand-gloves

Boats

The following are examples of the types of boats used in Adaptive Rowing. In addition to this, clubs are encouraged to use standard equipment that they have in their boathouse and not allow Adaptive Rowing specific boats to be a barrier to the inclusion of individuals with a disability.

British Rowing adopts the FISA Para-Rowing system of classification which places rowers into classes according to how much their impairment impacts their rowing.

In addition to this, British Rowing offers Adaptive Rowing classes which is a categorisation for individuals who are not eligible to meet the FISA requirements for Para-Rowing classification. These classes are accepted at competitions that offer Adaptive Rowing events.

For further explanation please read the following – [Applying for Classification](#)

PR3 and AR3

For athletes classified in the PR3 and AR3 category, standard equipment that complies with British Rowing Rules of Racing is generally used. No further restrictions shall apply.



PR3 and AR3 equipment considerations

When considering a suitable boat for PR3 and AR3 athletes many of the principles that apply to able bodied rigging set-ups will still apply. Considerations should be given to the following:

- Mixed gender crews (strength, height, stroke length)
- Disability mix within boat (physical, visual, learning)
- Mobility range of athlete
- Use of orthotics or prosthetics for amputees and the effect of these on their stroke length and balance

Further information is available in [Adaptive Rowing: A Guide](#)

PR2 and AR2 fixed seat

Below is an example of a typical PR2 and AR2 double scull, which has a fixed seat and may have stabilising pontoons. The hull, the pontoons (where fitted), and the seat fixing are part of the standard specifications. The seat itself and the rigger design of the standard adaptive PR2/AR2 double scull are not restricted.

PR2 and AR2 rowers are required to comply with the strapping requirements as detailed in the [Adaptive Rowing Safety Guidance for Event Organisers](#) document.



PR2 and AR2 equipment considerations

- Fixed seat
- Knee strap (required over thigh as close to the knee as possible)
- Lap/hip strap (optional)
- Seat back may be removed
- Rigger with reduced span
- Shorter overall length of oars/sculls and reduced inboard
- Pontoons optional

PR1 and AR1 upright

The standard adaptive single scull has a fixed seat and must have stabilising pontoons installed, attached to the riggers no further inboard than the centreline of the swivel (oarlock). The pontoons must be fixed in position so that when the rower is seated in the balanced boat both pontoons are horizontal and at a minimum, touch the water. The hull, the pontoons and the seat fixing are part of the standard specifications.

The seat itself and the rigger design of the standard PR1 and AR1 single scull are not restricted, except that the design of the seat must be compatible with the standard seat fixing. The design of the rigger must allow the stabilising pontoons to be correctly fixed.

PR1 and AR1 rowers are required to comply with the strapping requirements detailed in the [Adaptive Rowing Safety Guidance for Event Organisers](#) document.



PR1 and AR1 equipment considerations

- Fixed seat
- Chest strap (required)

- Knee strap (required) over thighs as close to the knee as possible
- Pontoons (required) just touching the water
- Narrow span rigger
- Shorter oars (no overlap)

Pontoons

The provision of stabilising pontoons for PRI and ARI provides a more stable platform, by providing additional lateral stability for rowing boats.

For safety reasons and fairness during competition, the pontoon attachment to the riggers should be no further inboard than the centreline of the swivel (oarlock). The pontoons must be fixed in a position so that when the rower is seated in the balanced boat, both pontoons are horizontal and, at a minimum, touch the water.



IMPORTANT:

British Rowing recommends that caution is taken with rowers who rely on pontoon floats for stability when changing rigger spans. By bringing the pins towards the centreline of the boat, stability will be compromised. See [Adaptive Rowing Safety Guidance for Event Organisers](#).

Seats

Adaptive rowers in the PRI and ARI category are likely to have compromised sitting balance and require a postural support seat on the indoor rowing machine and boat. Below are some examples of these seats available from a number of boat builders.



Seat cushions

CAUTION:

Individuals who may be predisposed to developing pressure sores, such as someone with a spinal cord injury should seek medical advice as to the most suitable interface between themselves and the seat. Cushions should not only provide comfort, but help protect against the direct sitting pressures and shearing forces incurred when rowing.

Many adaptive rowers will have his/her own preferred method of skin protection system that the coach should if possible attempt to utilise in and out of the boat.

Examples



Akton Gel Pad



Vicar Allrounder



Roho Cushion

For further information, contact Simon.Goodey@britishrowing.org.

Strapping

The use of strapping is twofold. Firstly safety, to ensure that the rower is supported in the seat and, secondly, to negate some degree of trunk flexion and knee flexion, given the broad range of abilities in the PR1/AR1 and PR2/AR2 rowers.

Strapping should be made of a material which will not induce pressure marking or chaffing	
HANDS	must be quick mouth release
TRUNK	must be ONE DIRECTION quick release
THIGHS	must be ONE DIRECTION quick release
IMPORTANT: British Rowing recommends that all chest, leg and hand strapping is evaluated for safety by the rower before using on open water, by conducting a controlled capsized drill in a swimming pool.	

For further information see [Adaptive Rowing Safety Guidance for Event Organisers](#).

Hand gloves



Active Hand splints (General Purpose Gripping Aid - AH1)

The *Active Hands*[™] general purpose gripping aids consist of a self-closing Velcro glove. The glove tensions to wrap fingers around the oar/scull handle and are widely used by adaptive rowers. The gloves are ideal for people with tetraplegia/quadriplegia, cerebral palsy, stroke recovery, finger amputees or any disability that affects hand function. It functions by the tightening of a strap in the upper section, which gently pulls the hand into a fist shape, in order to facilitate grip on an indoor rowing machine, oar or scull handle. The wrist strap is also adjustable and the aid is padded to reduce chafing.



Looped Exercise Aids (AH3)

Ideal for use on the indoor rowing machine, the Looped Exercise Aids feature strong loops which can be slipped over the handle with an adjustable padded wrist strap. When not under tension, the aids easily slide on and off the handle, allowing complete individual independence and the ability to 'let go' during rest periods

For further information

<http://www.activehands.co.uk/products.htm>

[Adaptive Rowing: A Guide](#)