# Worcester Divers: Kit for New Divers

## Introduction

When you start out diving, it can seem like you need a huge amount of really expensive equipment. We've written this to help you buy good equipment, without needing to spend loads of money right at the beginning. This gives a general introduction, but it's also well worth talking to club members about their kit and what they would buy if starting again – also they might have something they're willing to sell at a good price!

## Prioritise what you buy

You don't need to buy everything all at once. Worcester Divers have lots of good quality and well-maintained equipment available for you to use. Plan to use that while you start, and start by buying things in two categories:

- Things that you can't borrow/hire;
- Things where it's really important that they fit you well.

The table below shows how we'd suggest you prioritise:

	First				Last
Main Priority	Mask	Hood&Gloves Suit, Fins, Goody Bag	Computer Weightbelt	Regulator BC	Cylinders Weights
Extras	Snorkel Pool Fins			SMB & Reel Torch	

## Where to buy things

## **Physical Shops**

There are two main dive shops in the Worcester area: Seastyle and Dive 90.

- Scuba School in Studley; their website is here https://www.scubaschool.org.uk/
- Dive 90 is near Cheltenham; their website is here: http://www.dive90.co.uk

Supporting our local dive shops is important, because we can't get our cylinders filled over the internet!

## Online shops

There are lots of online dive shops. Google is your friend.

#### **eBay**

There is lots of second hand dive kit on eBay. The main thing to watch out for is the cost of servicing kit that you buy from eBay.

#### The Go Diving Show

The Go Diving Show happens at NAEC Stoneleigh, Warwickshire in March. It's a good opportunity to have a look at lots of different equipment and try things on. Some of the shops/manufacturers do some good deals over the weekend.





## **Equipment Details**

#### Masks

The most important things to look for in a mask are that it fits well and that it is comfortable. This means you need to buy it in person (i.e. not online).

There's a simple way to tell whether a mask fits you – ask an instructor at the pool to show you this: hold it up against your face (making sure your hair isn't in the seal), breathe in through your nose and let go with your hands. If the mask stays on your face it fits, if it doesn't – it doesn't.

There's nothing much to choose between masks – so start with the cheapest and try a few on, working your way towards more expensive ones. One thing that you do need to look for is that the lens is made of tempered glass (they'll normally have a little label on the lens saying so if it is) – the toy masks you get from a newsagent at the beach generally aren't suitable for diving. A mask is realistically going to cost between £25 and £50.

#### **Pool Fins**

While you are learning in the pool, having your own set of fins is a nice to have. The club has several sets available to borrow.

There are two types of fins: shoe fins (left) and open-heel fins (right). Shoe fins have a little rubber shoe on the end, whereas open-heel fins have straps.





Figure 1: Shoe fins (left) and Open-heel fins (right).

For the pool, shoe fins are fine. There isn't really anything to choose between shoe fins, but don't buy the very small swimmer's fins. They are sold by shoe sizes, so buying these in person or online is normally ok. A set of shoe fins will cost between £20 and £50.

For using in the sea, you will eventually need open heel fins (see "Fins" below) and these can be used in the pool with wetsuit boots (below). This way you only buy one set of fins, but will need wetsuit boots (and your fins might not fit on your drysuit boots (if you go for a drysuit – see below) unless you check.



Figure 2: Wetsuit boots, for use with open-heel fins in the pool or with a wetsuit.





#### **Snorkels**

By and large, a snorkel is a snorkel and you are unlikely to use it very much. The club have some you can borrow in the pool and you are unlikely to use one in open water. Don't buy an expensive one.

#### **Hood and Gloves**

As with masks, getting a hood and a pair of gloves that fit you well is very important, so these are pieces of kit to buy in person.

Gloves come in different thicknesses of neoprene, typically 3mm or 5mm. Thicker neoprene means warmer hands, but less dexterity; thinner neoprene means more dexterity but colder hands (and cold hands mean less dexterity...). Try both on and see how they feel.

Getting gloves that fit is really important. You need to have no 'flappy bits' at the end of your fingers and no 'webbing' in between your fingers.

Most hoods are 5mm, but you can get extra thick 7mm hoods. Hoods will normally feel a bit restrictive, but you need to be able to comfortably open your mouth with it on. Some suits (both wet and dry) will come with a hood, so it is probably worth

#### Suits

The first question on suits is Wetsuit or Drysuit. Semi-dry suits are good wetsuits.

Wetsuits are relatively cheap (£100-£200 new) and easier to learn in. However, you will be colder in the water (especially on the second dive of a day) and they aren't really warm enough to dive early in the season or through the winter.

There are two really important things about wetsuits: firstly that you get one thick enough (you'll need a 2-piece suit that's at least 5mm thick for the UK) and that it fits you well. Wetsuits need to be snug enough to make sure that cold water doesn't flush in and out of the suit. As well as a wetsuit, you'll also need to buy neoprene boots.

Almost every diver in the UK eventually moves to a drysuit. They are slightly more awkward to learn in, but much warmer and more comfortable once you are used to them.

There are roughly three (informal) categories of drysuit: "First Suits", "Good Suits" and "Forever Suits".

A "First Suit" is one that is good enough to get you through a couple of years of diving, so normally second hand (eBay can be a good option). It would be worth budgeting £150-£300 for a First Suit.

A "Good Suit" is the sort of sort that you would buy once you've decided that you definitely like UK diving, want to do some over the next few years and are in the market for a new suit. It would be worth budgeting around £500-£900 for a Good Suit.

A "Forever Suit" is what the mega-keen hardcore of the club use; these go for £1000+.

Drysuits come in two materials: neoprene and membrane. If you ask anyone which is best, then it will be whichever they are currently diving – in reality there isn't much difference. The only material worth avoiding is very thick (7-8mm) neoprene suits.





When buying a second-hand suit, it's useful to have an idea of how much it costs to fix/change things on a suit.

Repair	Rough Cost		
New wrist seals	£40		
New neck seal	£40		
New zip	£140		
New boots/socks	£80		

It's relatively simple to fix small holes in a suit. You should probably expect to change at least some of the seals on a second-hand suit (either because they are perished or because they are too big). If a suit needs a new zip, then it is unlikely to be worth buying.

You will need to wear warm clothes underneath your drysuit. For starting out, wooly jumpers and fleeces are fine. Buying undersuits second hand is a good place to save some money on kitting yourself out.

How many layers you need depends on how much you feel the cold, but the following table shows roughly how much you'll want to wear:

Suit Thickness	Undersuit Required	
5mm neoprene (or thicker)	Walking or Skiing thermals	
2-3mm neoprene	Fleece, thinner diving undersuit, or arctics	
Membrane	Thicker diving undersuit	

For arctics, allow £200 for new Fourth Element Arctics (the original), or £50-£80 for any of several other brands clones (plenty good enough). A diving undersuit will cost around £100 new (up to whatever you want to pay...).

### **Fins**

In open water, you will need open-heel fins. It's important that they fit over your (wetsuit or drysuit) boots. There are hundreds of designs; it is best to keep it simple. Spring/bungee straps are a very good idea. Buying second hand fins is a good way to economise.

## **Goody Bag**

When you go away on a diving trip, you will want to be able to pack all of your 'soft kit' (hoods, gloves, masks, fins, etc) into a bag that keeps it together on the boat. A simple mesh bag is good for this.

#### Computers

The main distinguishing features of dive computers are: the size/clarity of the display and whether it supports Nitrox. It is well worth buying a Nitrox computer, because they can also be used for air, are no more expensive, and means that it is a future-proof.

A Sunnto Zoop (or the slightly older Suunto Gekko) is a good purchase and they come up on ebay relatively frequently (buying second hand is a good way to save some cash here too).





## Weightbelts

There are three main ways to carry weight when you are diving: weightbelts, harnesses and integrated BCs. I would suggest starting with a simple weightbelt, as they are relatively inexpensive and, if necessary, you can experiment with other systems as you do more diving.

Weightbelts are cheap, simple and work well for most people. If you don't have much of a waist, then they can slip down so a harness or an integrated BC can be better. There are two main ways to attach weight to you: threading it onto a belt, or putting it in a (secure) pocket. Adding weights to the pockets of your BC is generally not such a good idea because they can fall out more easily than proper weight pockets or weight belts.

Weights come in two main types: block and shot. Block is big lumps of lead that you can either thread onto a belt or put in pockets, whereas shot is small balls of lead in a fabric bag that have to go into pockets.

### Regulators

Regulators are probably the one area where it isn't worth considering second hand, because the cost of getting them serviced is often relatively large compared to the cost of buying new. A set of Apeks ATX40s and with a DS4 first stage is hard to beat for value for money.

Don't forget to budget for a contents gauge; you can get consoles with a contents gauge, depth gauge (good back up for your computer) and/or a compass included. You should also get a couple of good clips, for tidying up your hoses (octopus and gauge).

There are two ways to attach your regulators to a cylinder: DIN and A-Clamp. I would buy DIN regulators and a DIN-to-A-Clamp adapter (about £25); that way you can use any cylinder.

#### **BCs**

The main choice for a BC is whether to get one with integrated weights or not – opinions are divided on the benefits (some love them, some don't). Other than that, a BC is largely a BC – it's not something to get too worried about. A backplate, wing and harness is an alternative, but I wouldn't worry much about those to begin with.

You should make sure that it fits and allow enough space for when you are wearing your suit. Other thing to look for are: the size and locations of pockets (often they are too small to be really useful), how many D-rings and clips you have to attach hoses/torches/reels/etc (more is better!), and that you can easily work the buckles.

If you are buying second hand, you want to check that it stays inflated (i.e. the bladder doesn't leak) and that the direct feed and dumps work and don't leak. It's worth getting someone to look over it (although they aren't generally serviced as frequently or as rigorously as regulators).

#### Reel and SMB

It's hard to go wrong with a Mini-MacMahon reel and an AP Valves SMB (self-sealing, don't bother getting one with a cylinder). The BSAC online shop does good members' prices – make sure you log in! You should also get a clip to attach it to your kit, and a clip for the end of the line on your reel.





#### Torch

A small torch like an LED Lenser Frogman is a good place to start, because it means you can look for interesting creatures in dark holes. A reasonable first torch will cost about £40 new.

I'd expect to buy a second/bigger torch as you do more diving, at which point your first torch becomes a useful spare.

## Weights

Hopefully by the time you are buying weights you will know: how much you need, and in what form (block or shot). Buying second hand is often not much cheaper than new, because old lead isn't any lighter than new lead!

## **Cylinders**

Eventually, you will probably want two cylinders (so that you can do a whole day's diving without needing a fill). I would start with a 12litre Faber cylinder, then you can choose whether to buy another, or opt for a 15litre cylinder to go a bit deeper.

There are some good second-hand deals available, but beware that posting cylinders is difficult/impossible. Cylinders need to be tested every 2.5 years, which costs about £50. There is no guarantee that an old and out-of-test cylinder will pass.



