

Boat loading

Guidelines for boat loading

Most divers are aware of how sea conditions and diver positioning can affect the way that dive boats perform – but one aspect that is often overlooked is boat loading. As more of us dive with heavier and bulkier dive equipment so greater consideration must be given to this issue. Dive managers and boat handlers have to be careful that our RIBs are not overloaded, as overloading is not just uncomfortable – an overloaded boat is potentially unsafe, and could well invalidate our insurance!

When loading the RIBs we need to consider:

- Weighting
- Storage of equipment

Weighting

The equipment requirements of 6 trimix divers will greatly exceed that of 6 air divers and so the number of divers must be reduced accordingly. Shallower dives generally need less equipment than deeper dives. However, appropriate use of twin-sets and ponies is important for dive safety. As a guide, the average weight of a fully kitted diver wearing different rigs is as follows:

- Single 12l cylinder – 120 kg
- Single 15l cylinder + pony – 130 kg
- Rebreather – 135 kg
- Twin 12l cylinders – 140 kg
- Twin 12l cylinders + 2×7l slings – 160 kg

Thus, the “technical” diver using the twinset and slings is over 30% heavier than the single tank diver. Furthermore, since Totnes Diver 1 (orange boat) has a smaller engine it can support significantly less weight than Totnes Diver 2 (red and black boat).

For our RIBs with average kit deployment and a boat handler of average weight and no kit then:

- Totnes Diver 1 will safely support 4 to 5 averagely weighted divers (plus their kit) or 3 technical divers.
- Totnes Diver 2 will safely support 6-7 averagely weighted divers or 4 technical divers.

Storage

However, just because the boat will take the weight doesn't mean that the kit will fit! The following must also be considered:

- Rebreathers need to stand upright or lie on their “front.”
- As far as possible stow pony and stage cylinders in the bows (ponies should preferably be fixed with detachable mounts or front slung).
- Storage is more limited when extra petrol tanks are carried (Totnes Diver 1 only).