

50 Meter Dive – No Thanks Tanks!



Seven of the MKSAC hyperbaric chamber dive crew.

Midlands Diving Chamber is a hyperbaric chamber used to treat Divers DCI and Oxygen healing and diver training / fun dry dives – it was... a perfect environment / opportunity in a safe and water-free environment to test your diving ability at depth – ‘How Narked (Nitrogen narcosis) can you go’. Seeing Martini’s rule in action.

The Martini Rule - for every 30 feet/10 meters of depth the effect on a diver is similar to drinking one martini.

So nine divers from MKSAC (Milton Keynes Sub Aqua Dive Club) on Thursdays the 26th of October travelled to Rugby to visit the Midlands Diving Chamber team, undergo a briefing on hyperbaric medicine, DCI symptoms and dive down to 50 Meter all without getting wet. See dive plan below.



Midlands’s hyperbaric diving chamber.

The team proved their ability to clear their ears (required more frequently in air than in normal diving conditions) as the pressure was slowly increased. Toys within the chamber to demonstrate the physics behind the dive supplied plenty of fun – with shrinking polystyrene cups, imploding tennis balls and Ping-Pong balls, balloons shrinking on the way down and balloons inflated at 50 meters increasing dramatically on the way back up, becoming the hot potato around the team until their eventual explosion.



Chamber balloon volleyball reaching fever peach.

Points of interest:

- At 50 meters the increased air density could really be felt when waving your arms.
- As the pressure increased the temperature increased – as per filling a dive cylinder, but you are inside the cylinder in this case.
- As the pressure decreased the temperature dropped
- Neoprene seriously compresses at depth – becomes less effective.
- Your voice becomes high pitched at depth – ‘I am A Munchkin’.
- A ticking time bomb of an increasing balloon can travel really really quickly between your chamber team mates.



MKSAC hyperbaric chamber dive team decompressing on 100% O2. Diving members looking a little too happy not to be narked at depth.

Dive plan:

- Bottom Time – 12 minutes
- Ascent @9m / minute
- 1 minute decompression (Deco) @ 12 Meter on Air
- Ascent to 9 Meter
- 4 minute decompression (Deco) @9 Meter on 100% O2 @1.9 ppO2
- Ascent to 6 Meter
- 23 minute decompression (Deco) @ 6 Meter on 100% O2 @1.6 ppO2
- Off O2
- Surface

Total Deco Time 28 minute

Total Dive Time 48 minute

Please note:

- The medical scrubs worn due to the heightened fire risk of polyester fabrics etc. in the closed high O2 atmosphere.
- Masks worn to administer the 100% O2 during decompression (Deco).
- Smiles say it all – Narked of our faces having fun.
- The team paid for this Dry Dive and the NHS did not foot the bill.

Strange stories:

- Chinese man in a hyperbaric chamber under pressure full of 100% Oxygen thought it was a good idea to have a sneaky cigarette out of sight – Bang / fire etc. Family of the deceased are now sewing stating there should have been a no smoking sign!
- An American team treating a race horse in a very large hyperbaric chamber full of 100% Oxygen, forgot to take the metal horse shoes off. The resulting sparks and fire lead to the death of the horse and chamber team member.

Nine divers from MKSAC who attended the event: Steve and Dominic Tearle, Sue Watters, Pete Matson, Tony Farr, Mark Rowe, Mike Costello, Greg Roach and Philippe Bridgeman.

The Midlands Diving Chamber is run by Divers for Divers and are happy to receive your call for advice 24 hours a day: +44 (0)7931472602. It's a self-referral so if you think as a diver you are suffering from DCI give them a call for advice.

A massive thank you to the Midlands Diving Chamber team - Mathew Wormleighton, Robbie Renalson and Dathan Hughes AKA Spike, and for the MKSAC event organizers.