

## Safe cave diving training with Swiss Cave Diving Instructors

# Cave diving courses on level 1 - 3

### **Compulsory equipment for CMAS courses**

Beyond the so-called standard diving equipment there is the following list of specialized equipment that is compulsory for all international CMAS cave diving courses:

2 mono tanks, capacity 10-12L; DIN-outlets only; H- or Y-valve

[zone1 only!]

2 double tank rigs 2 x 10-12L; DIN outlets; no connection or one with isolator valve

[zones 2+3]

1-2 stage tanks (min. volume 7 l) each with a complete regulator rig (incl. pressure gauge)

[cd3 only]

Attention: - for penetrations beyond 500m (1500ft) a 3rd tank is compulsory (min. volume 7l)

- all tanks have to carry valid stamp from hydro testing (EMPA / CE / TÜV);
- every tank has to be equipped with a pressure gauge
- 1 jacket or wings (BC) with an inflated volume of at least 20l
- 2 complete regulator rigs, each with 1st/2nd stage, pressure gauge, inflator

Attention:: inflator hoses for BC and drysuit must NOT be connected to the same 1st stage

1 long hose, length approx. 1.8-2.1m (6-7ft) backmount / 1.5m (sidemount)

[all levels /all zones]

[from zone 2 on]

- 1 spare mask1 compass with self illuminating analogue display
- 1 dive computer with stage decompression stop mode
- 1 safety reel with min. 50m line, dia = 1.5 2mm

[all levels; all zones]

1 gap/jump-reel with min. 30m line, dia. = 1.5 - 2mm

[from zone 2 on]

1 primary reel with approx. 80m line, dia. = 1.5 - 2mm

[from zone 2 on]

1 helmet (ev. with lamps attached)

[from zone 2 on]

1 (min.) main lamp with 30-50W Halogen/12W HID/18W LED, output, min. burning time 2 hrs (must be carried in a way that both hands stay free) [all levels /all zones]

1 back-up lamp, output approx. 4-5W Xenon, min. burning time 2 hrs.

[cavern only / zone 1]

2 back-up lamps, output approx. 4-5W Xenon, min. burning time 2 hrs.

[from zone 2 on]

- 2 solid stainless cutting tools (knives, cutters, cutting pliers, scissors), secured against dropping
- 3 line arrows and 3 non-directional markers (can be purchased from Swiss Cave Diving)
- 3-4 D-rings on harness

for Nitrox divers: certificate + connection hose with high precision pressure gauge + O<sub>2</sub>-analyzer!

### Spare parts/equipment

- 1 pair of fins
- 1 pair of spare gloves (especially for dry suits)
- 1 complete regulator rig (incl. hose and pressure gauge)
- 1 depth gauge with self-illuminating display

some spare lead weights

batteries, accumulators, bulbs and fuses for lamps and chargers

#### plug boards and connectors for foreign sockets

1 1st aid box

Additional trekking equipment, spare parts and tools according to personal preferencies.

#### Hint:

backup-lamps (Heser), arrows and cookies, reels and spools can be purchased directly from us!