# A highly evolved regulator leads to off, but NIGEL WADE has also been intrigued by the first waterproof compact camera to shoot RAW – and a capacious pair of shorts!



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Scubapro Mk25 EVO/A700

Black Tech regulator.

## **REGULATOR** SCUBAPRO MK25 EVO/A700 BLACK TECH

**DIVE-GEAR MAKER SCUBAPRO IS NOT AN** outfit to sit on its laurels when it comes to evolving its products. A case in point is the development of its high-performing and popular MK25 first stage, now featuring coldwater compatibility and partnered with the metal-cased A700

second stage. Both components have been given a new and sexy black high-gloss finish, adding a cool look and what the maker claims to be

I took a set with me on an intense Red Sea outing to see how it performed.

The First Stage

rugged durability.

The MK25 Evo Black Tech first stage has an air-balanced flow-through piston to provide constant and effortless airflow, which the designers say is unaffected by depth, tank pressure or breathing demand.

The first stage on this model is also coldwater-compatible with Scubapro's extended thermal insulating system (XTIS). This fully isolates the mechanical components from the cold, and it's claimed that this increases the regulator's resistance to freezing by up to 30%, compared to a standard MK25 first stage.

The XTIS incorporates an insulated coating on the main spring, insulating bushing on the body, an anti-freeze cap and a bigger body and cap thread.

Externally, the marine-grade brass first stage has supplementary fins machined into its body to provide an extra thermal exchange, enhancing its coldwater-compatibility.

The turret-style body swivels, and has two high-pressure ports fixed either side of the main body and four low-pressure ports on the swivel portion, with an additional fifth lp port at the tip to further streamline hose configurations.

There is also an external intermediatepressure adjustment for use by service technicians, who won't need to strip down the components to adjust performance.

The latest rendition of the MK25 EVO has external surfaces that have been given a tough black polished Physical Vapour Deposition (PVD) coating. When applied on metal surfaces this increases their hardness, acting as a barrier

to protect the body from the corrosive properties of salt water, and giving it a scratchresistant finish.

The MK25 EVO Black Tech is available with either 232bar International or 300bar DIN connections.

#### The Second Stage

The A700 Black Tech second stage has an allmetal, screw-down case and demand-valve housing, again coated with the corrosion- and scratch-resistant PVD. The metal components also act as a heat-exchanger, adding to its coldwater capabilities.

The second stage is fitted with two controls: a diver-adjustable inhalation knob for fine-tuning breathing resistance, and a diver-adjustable Venturi Initiated Vacuum Assist (VIVA) for adding inhalation assistance or freeflow prevention.

The A700 is compact and features Scubapro's air-balanced valve technology for minimal inhalation effort, and a high-flow exhaust valve for ease of exhalation with a compact and narrow exhaust port.

The purge valve is controlled by a centrally positioned button crafted from high-grade polymers and incorporates the maker's logo in chrome. The intermediate hose is a large-bore super-flow version with Kevlar lining, and the mouthpiece is an orthodontic design made from high-quality silicon.

Both the MK25 EVO and A700 Black Tech components meet the latest CE EN250-2014 requirements for coldwater diving and are covered by a limited lifetime warranty.

#### In Use

I took the regulator combo with me on a weeklong trip of intensive diving around Egypt's Ras Mohammed marine park and the Straits of Tiran. This destination wasn't the ideal place to test the regulator's coldwater capabilities but, hey, everyone knows I'm a wuss when it comes to chilly water temperatures!

So I can't comment on this regulator's coldwater prowess, but what I can report is that in the balmy Red Sea the regulator's performance was simply outstanding.

Under water, the initial effort needed to crack the valves when starting the inhalation process was imperceptible, followed by a smooth flow of gas that stopped as soon as the pressure inside the second-stage body increased during exhalation.

This made the breathing process feel less mechanical and as near to natural as I've experienced.

I have found that some high-performing models with which I've dived in the past have seemed as if they were set "right on the edge", giving the disconcerting feeling that they would pass the tipping-point and go into an

### **SPECS**

PRICE >> £689 FIRST STAGE >> Air-balanced flow-through

PORTS → 5lp, 2hp

CONNECTIONS >> 300bar DIN, 232bar A-clamp **COLDWATER COMPATIBILITY** >>> Yes, with XTIS **SECOND STAGE →** Metal case with

air-balanced valve.

**CONTROLS** >>> VIVA. Adjustable inhalation

resistance

piston

WEIGHT → Combined stages 1.03kg

(DIN with mp hose)

NITROX >> FAN 40%

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DIVER GUIDE \*\*\*\*\*\*\*

uncontrolled freeflow at any second. The MK25/A700 didn't give this impression. Instead, it seemed not even to be there, blending into the background and allowing me to forget that I was breathing from a mechanical valve.

The adjustment controls were very easy to access, and they made a difference too. The VIVA stopped the second stage from discharging huge amounts of gas as I spat it out of my mouth at depth.

The breathing effort was easily adjusted to my own preference using the inhalationresistance control, simply turning the knob until I found the "sweet spot" at which it felt

natural and unrestricted.

The narrow exhaust port did send a few bubbles past my face when I was stationary taking pictures, but not enough to be of concern. There was no sign of any exhaust bubbles when I was on the move.

I found the purge button easy to find and operate and it gave a progressive delivery of gas to comfortably remove unwanted water from the mouthpiece without that violent rush of gas that freezes your teeth and sets your epiglottis wagging.

Hose routeing was as expected from the swivel turret design, which for me isn't always as neat and streamlined as

it is from fixed. angled ports, but I'm being picky here

because I didn't actually notice any difference in the water.

#### Conclusion

Scubapro has evolved the MK25 first stage by adding its XTIS coldwater capability and the allmetal A700 second stage.

It has then added an incredibly tough black PVD coating and given the combo the name "Tech Black" – though I'm not sure if "Tech" is the right word to use, as the second stage cannot be configured for true ambidextrous use with technical twin or side-mount configurations.

Rather, this is a regulator designed for single-

**DIVER TESTS** 

tank use in virtually any environment. In my humble opinion its top-quality materials, construction and outstanding performance make it more than worthy of its "flagship" status.

water in warm climes.

There is also something reassuring about using life-support equipment that appears to be bulletproof. ■



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