How to Use

Breathe Underwater in 3 Easy Steps:

Step 1: place mouth around mouthpiece and create an airtight seal

Step 2: clear water out of the regulator by exhaling through the purge valve or pressing the purge button

Step 3: breathe naturally

It’s That Simple

Business Plan

Unit Cost: $100
Unit Price: $400

Target Customers: Big Wave and Experienced Surfers
Market: 1000 surfers

Partners: Wetsuit manufacturers and big wave surfing competitions

Product Differentiation: safety, integration into wetsuit, aesthetics
Safety

Must be SCUBA certified to purchase, to reduce the risk of unregulated filling and misuse.

Pulmonary barotrauma are avoidable by exhaling on ascent, which lets out the expanding air inside the lungs. This is also covered in SCUBA certification.

Decompression sickness ("the bends") is not an issue for correct use of Airware. The effects of decompression at 70 ft, which is the deepest depth a surfer may encounter, only start to occur after 50 minutes at that depth.

The regulator is designed so that any excess pressure is relieved via the purge valve.

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How It Works

The pressure vessel is a flexible hose that runs along the back and down the legs of the wetsuit. Using a hose means retaining flexibility in order to make it unobstructive to the user.

Regulator

The air in the system is stored at 250 psi. When the user inhales, the pressure drop inside the regulator will depress the diaphragm.

The diaphragm presses down on a trigger’s lever arm, allowing the air to flow.

When the user stops inhaling, the airflow stops due to backpressure inflating the diaphragm.

This allows the user to regulate the airflow simply by breathing naturally.

Pressure Vessel

The pressure vessel is a flexible hose that runs along the back and down the legs of the wetsuit. Using a hose means retaining flexibility in order to make it unobstructive to the user.

Refilling

The pressure hose terminates with a female quick-disconnect valve. Connecting the included male adapter will connect the pressure vessel to the refill station or a standard SCUBA tank.