

Hydromax 150

12V Power - Anytime, Anywhere.

WINNER! SAIL Magazine's 2015 Pittman Award for Innovation

"Fuel cells were used in early spacecraft because of their relatively light weight and the fact that they produce water as a "waste" product. They have since come down to earth and more recently moved out on the water, where they've been used in specialized applications, such as aboard Mini Transat racers.

For years they have been impractical for ordinary sailors because they require compressed hydrogen or methanol for fuel, both of which are heavy to store and highly inflammable [acronym for flammable]. However, this new Hydromax 150 fuel cell from the Dutch company Dynad uses fuel that can be safely transported in powder form - specifically, a mixture of malic acid (found in apples) and a saline solution - which produces the hydrogen needed to power the unit.

... Though expensive, it is still only half the price of its principal competition and boasts 50 percent higher output." - Quoted from Sail Magazine, February 2015



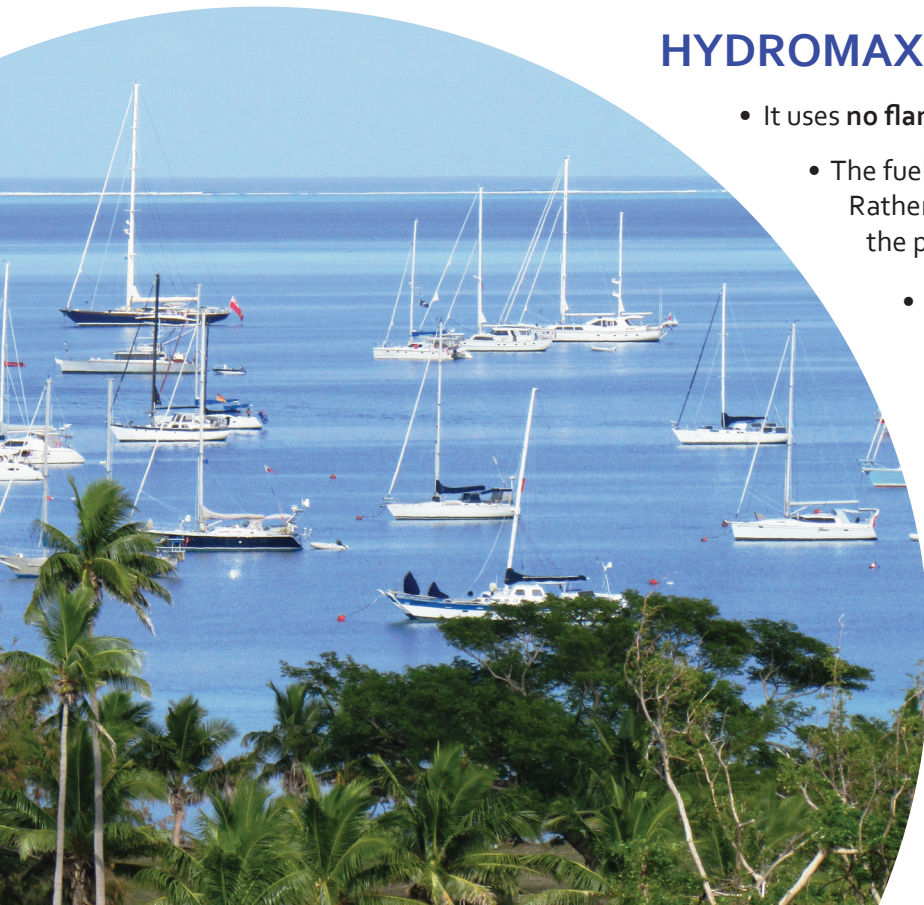
A Perfect Complement

The HYDROMAX 150 will not replace your green power solutions, such as solar and wind, but rather complement them by providing an additional power source that is:

- On-demand
- Quiet with no moving parts
- Maintenance Free
- Automatic
- Environmentally friendly
- Easy to transport
- Simple to install
- Safe to have onboard
- Produces minimal heat

HYDROMAX 150's Unique Features

- It uses **no flammable fuel** (no methanol).
- The fuels are shipped and stored in **dried powder form**. Rather than storing bulky jugs of fuel, simply add water to the powders for use as needed.
- Internal mixing of two very safe water based solutions - a salt (Hydrofuel) and an acid (the Additive - aka apple acid) - provides the reaction.
- The reaction takes place inside the fuel cell where Hydrogen is produced on demand and consumed immediately. There is never more than 1 L of Hydrogen gas in the system at a time, so it is very safe to operate. The waste product is non toxic and can be disposed of in your sanitation system.
- **Less expensive** than competitor products.
- Can produce up to 300 Amps in a 24 hr period.



Cruising Realities

Achieving an energy neutral boat is desirable but not always easy...
Refrigeration in the tropics, multiple devices to charge - it all adds up.

A generator is just another noisy engine to maintain, and there are often days when your solar or wind output will not keep up with the boat's power demands.

Drop in a HYDROMAX 150 and your problems are solved.

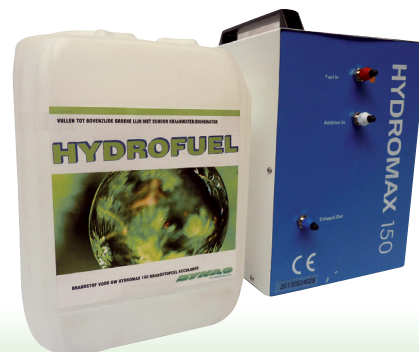
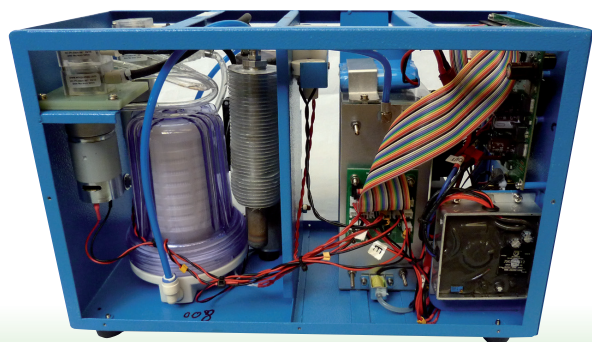
The system connects directly to your battery bank. Thanks to its integrated voltage regulator, should voltage drop below a predetermined threshold, the HYDROMAX 150 kicks in to recharge the batteries automatically. Once desired voltage is reached, it will stop and begin an automatic cleaning cycle. The small amount of waste liquid is pumped into a waste container.

Your batteries will never run low. Just one less thing to worry about!

Technical Data

Maximum Loading Power	180 W
Maximum Nominal Power	150 W
Maximum charge capacity/day	300 Ah
Switch-on voltage	12 V
Switch-off voltage	13.8V, 14.2V, or 14.8V
Nominal Consumption / kWh	1.25 L
Connectable batteries	12 V: lead-gel, lead-acid, AGM, lithium
Weight	9 kg (20 lbs)
Dimensions (L x W x H)	40 x 19 x 27 cm (15.75 x 7.5 x 10.5 in)
Operating Temperature	-15°C to +40°C (5°F to 104°F)
Warranty	2 Years (valid warranty conditions apply)

HYDROFUEL	Non-flammable solution containing Sodium Borohydride
Volume	1 L (dry) / 5 L (mixed with water in tank)
Weight	900 g (dry)
Capacity in Days	10 days (run 2.5 hr/day for 30 Amp/day output)
ADDITIVE	Food grade malic acid (apple/lemon acid)
Volume	2 L (dry) / 5 L (mixed with water in tank)
Weight	2 kg (dry)
Capacity in Days	10 days (run 2.5 hr/day for 30 Amp/day output)



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