



Reduce emissions and save costs

# Hydrogen-Diesel Introduction System

## What is it?

The self-contained Hydrogen-Diesel Introduction System, incorporating a hydrogen-on-demand generation system, considerably reduces emissions on internal combustion engines.

The technology includes sophisticated electronics which are demand responsive to hydrogen flow to optimise engine performance.

Reducing fuel consumption by up to 14% and increasing torque by up to 10%, the system delivers an excellent return on investment with proven performance and reliability in multiple applications and environments.

Available as horizontal or vertical configuration for easy installation, using pure distilled water only, the system starts and operates only when the engine is running and is retrofittable to existing diesel engines.



## Applications

Applications for the Hydrogen-Diesel Introduction System are incredibly wide ranging from: **Logistics, Quarries & Construction, Industrial & Manufacturing, Power Generation to Transport & Marine.**



### Economic

Reduces fuel consumption by **up to 14%**



### Environmental

Reduces harmful emissions by **up to 80%**



### Safe

No hydrogen storage and no acids or chemicals used

**POWER SOLUTIONS FOR A CHANGING WORLD**

Tel +44 (0)1493 441383 Email [info@priorpower.com](mailto:info@priorpower.com) Web [www.priorpower.com](http://www.priorpower.com)

# Hydrogen-Diesel Introduction System

## Frequently Asked Questions

**Q** Where is the hydrogen stored?

**A** There is no hydrogen storage, the hydrogen is produced from demineralised water on demand.

**Q** How is the water supply topped up for long running times?

**A** An automatic water refill option\* from a reservoir is available for long run times, including operations running 24/7.

**Q** Can the unit be used on higher output engines?

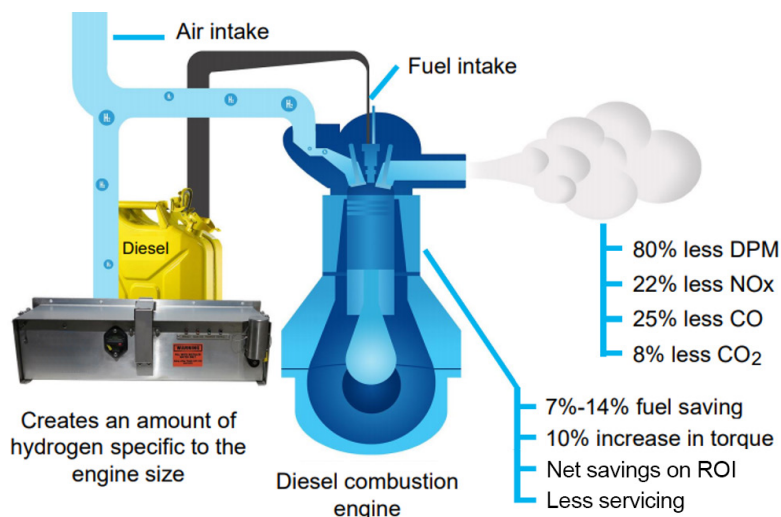
**A** Yes, multiple units can be daisy-chained for such scenarios.

**Q** Will it work with biodiesel?

**A** Yes, it works with all biodiesels and biofuels.

\*Additional cost.

## How it works



## Outline Specification

Models	Dimensions	Engine Size	Engine Size
HY1500 & HY2500 - V (Vertical)	W 700mm x D 260mm x H 175mm	HY1500 up to 15 litre	HY2500 up to 25 litre
HY1500 & HY2500 - H (Horizontal)	W 220mm x D 250mm x H 660mm	HY1500 up to 15 litre	HY2500 up to 25 litre
HY3000 & HY6000 - H (Horizontal)	W 672mm x D 345mm x H 672mm	HY3000 up to 30 litre	HY6000 up to 60 litre

Weights (including/excluding water)	
Horizontal	21.3kg / 19kg
Vertical	21.3kg / 19kg
Cooling block (if fitted)	4kg
Hydrogen output	Approximately 0.7 litres per minute (varies with power setting)
Construction	316 stainless steel, folder and welded. Weatherproof and dustproof
Activation	Operates only when the engine is running
Electrical input	Adjustable, range 7 amp to 30 amp on 12v or 24v systems
Consumable	Demineralised water, app. 1 litre / 37 hours
Water capacity	2.3 litre internal tank
Operating temperature	1°C to 60°C (heated blanket available for sub zero operating temps)
Service period	Every six (6) months 24/7 operation

NB: Above figures based on standard model on a 16 litre engine

## POWER SOLUTIONS FOR A CHANGING WORLD

Tel +44 (0)1493 441383 Email [info@priorpower.com](mailto:info@priorpower.com) Web [www.priorpower.com](http://www.priorpower.com)