

**Reduce emissions and save money**

# Hydrogen-Diesel Introduction System

## What is it?

The self-contained Direct Hydrogen 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.

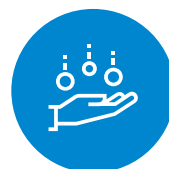
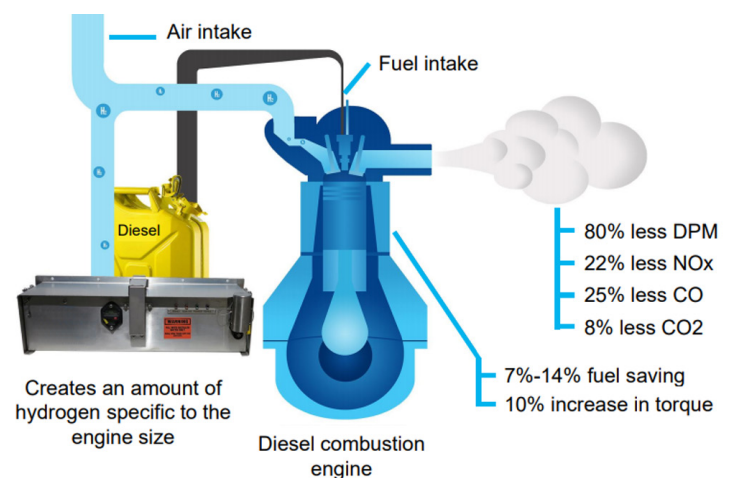
Reducing fuel consumption by up to 14% and increasing torque by up to 10%, the system delivers an excellent return on investment with proven performance and reliability in multiple applications and environments.

Using demineralised water only, the system starts and operates only when the engine is running and is retrofittable to existing diesel engines.

## Applications

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

## How it works



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



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



**Efficient**  
Hydrogen has nearly **3 times** the energy content of diesel

## POWER SOLUTIONS FOR A CHANGING WORLD

**Contact** Paul Dekker Kleyn **Email** paul.dekkerkleyn@priorpower.com **Mob** +44 (0)7904 553272  
**Tel** +44 (0)1493 441383 **Email** info@priorpower.com **Web** 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.

## Outline Specification

Dimensions	
HY500, 1000 & 2500 -V (Vertical)	W 700mm x D 260mm x H 175mm
HY500, 1000 & 2500 - H (Horizontal)	W 220mm x D 250mm x H 660mm
HY3000 & HY6000 - H (Horizontal)	W 672mm x D 345mm x H 672mm

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

## Applications



**Logistics**



**Quarries & Construction**



**Industrial & Manufacturing**



**Power Generation**



**Transport & Marine**

## POWER SOLUTIONS FOR A CHANGING WORLD

**Contact** Paul Dekker Kleyn **Email** paul.dekkerkleyn@priorpower.com **Mob** +44 (0)7904 553272

**Tel** +44 (0)1493 441383 **Email** info@priorpower.com **Web** www.priorpower.com