

## **ENGINE CARBON CLEAN PRO RANGE**

"BEST IN CLASS CARBON CLEANING SOLUTIONS IN THE WORLD"



AUTOMOTIVE ENVIRONMENTAL TECHNOLOGY WWW.CARBON-CLEAN.CO.UK

#### **About Us**

Carbon Clean began with a simple ethos of utilizing the best applications of new and existing technology to provide innovative carbon removal equipment to the automotive industry.

Employing an in-depth and wide ranging research methodology to find the best in class machines that will prove both labour saving and profitable for our customers. Our passion is to maintain an 'ecological focus' on the environmental impact of the systems and agents our machines employ.

Our state of the art machines are designed for easy use by any workshop. Made to last, with high quality components and little maintenance required they are also a great long term investment.



We're passionate about providing easy to use solutions to help the workshop, vehicle owner and of course the environment.







### Main Benefits of Carbon Removal

## **Fuel Economy**

Experience up to 5-10% increase in a vehicle's MPG after using our carbon removal technology.



## **Performance**

Over the years a vehicle will lose its performance in the main combustion chamber as well as power-train components like DPFs, EGR valves + turbos. Our machines restore the performance of your customers' engines.



## **Smoother Engine**

Clearing carbon reduces friction amongst components and helps your engine run smoother with less vibration and sound.



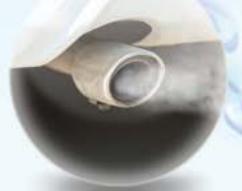
### Preservation

Our technology increases the longevity of engine components by reducing the damage caused by carbon build up. Prevention is always better than cure.



Lower Harmful Emissions

Our machines directly help the environment by reducing toxic carbon emissions from polluting the atmosphere. We understand this is a global concern and are proud to be helping improve air quality all over the world.



## **Carbon Cleaning Explained**

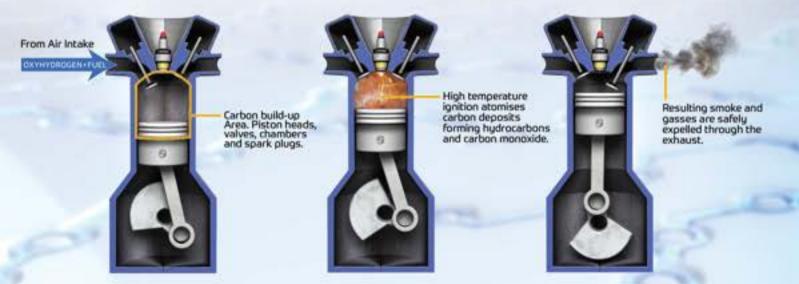
Carbon is produced due to incomplete combusion in the engine cylinders, and builds up layer upon layer of black, hardened carbon. This affects the smooth running of the engine and causes many other issues.

#### Oxyhydrogen Technology

Our products use cutting-edge Oxyhydrogen engine cleaning technology to solve the problem. Each machine uses electrolysis to split water molecules into the composite elements of oxygen and hydrogen to produce oxyhydrogen gas.

#### The Process

Our specially designed machines are set according to the engine size. The Oxyhydrogen is fed into the engine through the vehicle's air intake valve to mix with the air and fuel in the combustion chambers of the engine. Our machines can offer this service in a workshop or mobile location.



When this mixture ignites the HHO combusts at a higher temperature than the fuel alone. This effectively atomises the carbon deposits while the engine is running. It takes around 30-40 minutes to clean an engine depending on its size and condition.

### **Expelling the Carbon Safely**

The final products of the reaction are hydrocarbon (HC) and Carbon Monoxide (CO) gas. This is safely expelled through the exhaust system, having no adverse effects on either catalytic converters or DPFs. In fact running a second clean has been shown to have a restorative effect for DPFs.

This revolutionary technology is more efficient, ecological and much kinder to the engine than the traditional chemical methods used.

Employing Carbon Clean technology as part of your service options is both great for your customers' vehicles and a boost for workshop revenue. With all operations being off-ramp, our machines take up little valuable workshop space and minimal operator time. A carbon clean is recommended as part of any vehicles' regular service routine and can be used to improve or fix a long list of engine issues. As the trend for carbon cleaning continues to grow we see the profitability of our machines going from strength to strength.

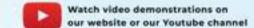
The perfect investment for the progressive workshop

#### AFTERCARE AND SUPPORT

All our machines come with in-depth literature and online video tutorials to take you through set up, operation and best practice to ensure you get top results from each clean you perform.

We also have a number of business support options tailored to help your carbon cleaning service thrive. This includes marketing support, online resources and inclusion to our national network of centres and engineers. To find out more call one of our dedicated team, visit our website or check our social media.





# **Product Features**

Touch Screen Display

Shutdown Protection



Perfect for mobile operators and small workshops

This compact, lightweight and portable model is a perfect entry-level machine. Get started in the engine carbon cleaning market with our CC-14 PRO Machine.







All products come with:

1. Shutdown protection CAMS leads / 2. Filling Funnel / 3. Mixing bottle



## **Product Description**

The CC14 PRO has all the safety features and usability of its larger counterparts. Specially designed for mobile operators or workshops with space restrictions. This is the CC range's reasonably priced entry level machine.

A notable feature is the CAMS (Charge Activated Machine Shutdown) Failsafe safety cut out system that reacts to the variable charge from the vehicle battery as it runs. In the event of the engine stopping during the cleaning process the CC14 PRO will automatically shut down preventing any unused gas escaping. This also means that once the process is set up it can just be left to run safely.

## **Product Specification**

Description Oxyhydrogen Engine Cleaner

Model No CC-14 PRO

Input Power 220 V / 13A / 1PH

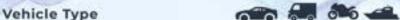
**Output Power** 1.4 kWh

**Display Mode Touch Screen Interface** 

**Net Weight** 40kg

**Dimensions** 650(L) x 350(W) x 860(H)(MM)

Cells Wet Cell/ 3X3 RAID Technology



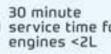
















our website or our Youtube channel

# **CARBON CLEAN RANGE - CC-16 PRO**

# **Product Features**



Suitable for larger engines, boats & light commercial vehicles.

Introducing our most popular Engine Carbon Clean Machine. An very effective machine, capable of performing a professional carbon removal service for most engines in the market.







Power and Working Indicators







## **Product Description**

Our machine offers more scope for bigger engine types with the same notable added features. Powerful 4Kw produces up to 1800 litres of HHO per hour which can perform a clean on a 4 litre engine in just 30 minutes. Our patent 9x9 RAID technology ensures no loss of performance during the lifetime of the machine. The PCB can also be used to set variable gas flows which the operator sets manually depending on the engine displacement ensuring the best clean for any given vehicle. CAMS (Charge Activated Machine Shutdown) Failsafe safety cut out system that reacts to the variable charge from the vehicle battery as it runs. In the event of the engine stopping during the cleaning process the CC16 PRO will automatically shut down preventing any unused gas escaping. This also means that once the process is set up it can just be left to run without supervision.

### **Product Specification**

Description Oxyhydrogen Engine Cleaner

Model No CC-16 PRO

Input Power 220 V / 16A / 1PH

Output Power 4 kWh

Display Mode Touch Screen Interface

Nett Weight 115kg

Dimensions 570(W) x 810(L) x 1140(H)(MM)

Cells Wet Cell/ 9X9 RAID Technology

Vehicle Type

All products come with:

1. Shutdown protection CAMS leads / 2. Filling Funnel / 3. Mixing bottle



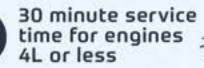














# **CARBON CLEAN RANGE - CC-18 PRO**

# **Product Features**



A heavy duty Carbon Clean Machine designed for commercial and industrial engines.

A very powerful HHO machine equipped to easily handle any combustion engine from passenger vehicles to heavy goods vehicles and even agricultural engines! You can also easily manage fleets with our top-of-the-range CC-18 machine.







## **Product Description**

Specifically developed for the commercial and industrial sector the CC18 PRO has double the electrolytic tank and power ball configuration of the CC16 running 18 separate HHO generators at 6.6KW. This gives the unit the gas production necessary to be able to efficiently clean any engine. Our patent 18x18 RAID technology ensures no loss of performance during the lifetime of the machine. 18 independent power balls run in parallel to 18 independent tanks. These are regulated by a single PCB to redistribute charge if any of the 18 power balls should fail maintaining a constant 6.6Kw charge and optimum generation of HHO gas. The PCB can also be used to set variable gas flows which the operator sets manually depending on the engine displacement ensuring the best clean for any given vehicle. The CC18 has custom settings for 4-8, 8-12, 12-16 and 16+ litre engines.

## **Product Specification**

Description Oxyhydrogen Engine Cleaner

Model No CC-18 PRO

Input Power 220V / 32A / 1PH

**Output Power** 6.6 kW/h

**Display Mode Touch Screen Interface** 

**Nett Weight** 175 kg

**Dimensions** 570(W) x 1000(L) x 1140(H)(MM)

Wet Cell/ 18X18 RAID Technology

Cells



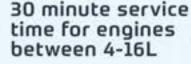














1. Shutdown protection CAMS leads / 2. Filling Funnel / 3. Mixing bottle

#### CC RANGE **OXYHYDROGEN ENGINE CARBON REMOVAL**









APPLICATION









220 V / 32A



INPUT POWER 220 V / 13A 1PH

220 V / 16A 1PH

1PH



POWER GENERATION 1.4 KW/H

4 KW/H

6.6 KW/H



WEIGHT

40 KG

115 KG

175 KG



DISPLACEMENT

Constant Gas Flow

Variable Gas Flow

Variable Gas Flow



ENGINE RANGE SELECTION

N/A (600L Constant) 1.0 - 1.92.0 - 2.9 3.0 - 3.9 4.0+

4.0 - 8.0 8.0 - 12.0 12.0 - 16.0 16.0 •

TANK SIZE

8L

24L

48L



RATIO OF **ELECTROLYTE TO** WATER TO BE USED\* 1:10 - 2:10 Electrolyte Soln

1:10 - 2:10 Electrolyte Soln

1:10 - 2:10 Electrolyte Soln



CELLS

3 x 3 RAID Technology (Generators) 9 x 9 RAID Technology (Generators) 18 x 18 RAID Technology (Generators)



**CELL TYPE** 

Wet cell

Wet cell

Wet cell



TOUCH SCREEN CONTROL









CARBON CLOUD CONNECT







\*Not essential but recommended.

Carbon Clean Ltd. 181 Forest Rd Hainault Essex, IG6 3HZ, UK



