TREDLAB



OXY HYDRO ALL IN 1

Engine decarbonization system that cleans the intake manifold and the DPF

www.tredlab.it

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Combustion inside internal combustion engines is highly complex, and only in the last 20 years have its mechanisms been understood in detail.
Among the various by-products formed, such as CO, HC, and CO2, particular attention in recent years has focused on nitrogen oxides and compounds like soot, fundamentally referred to as carbon deposits.
To maintain high performance and low emissions, it is essential to thoroughly clean accumulated soot. Soot is a particulate matter composed of both organic and solid fractions.
There are several methods to remove carbon residues, for example by adding chemical additives to the fuel tank or through disassembly and cleaning of components.

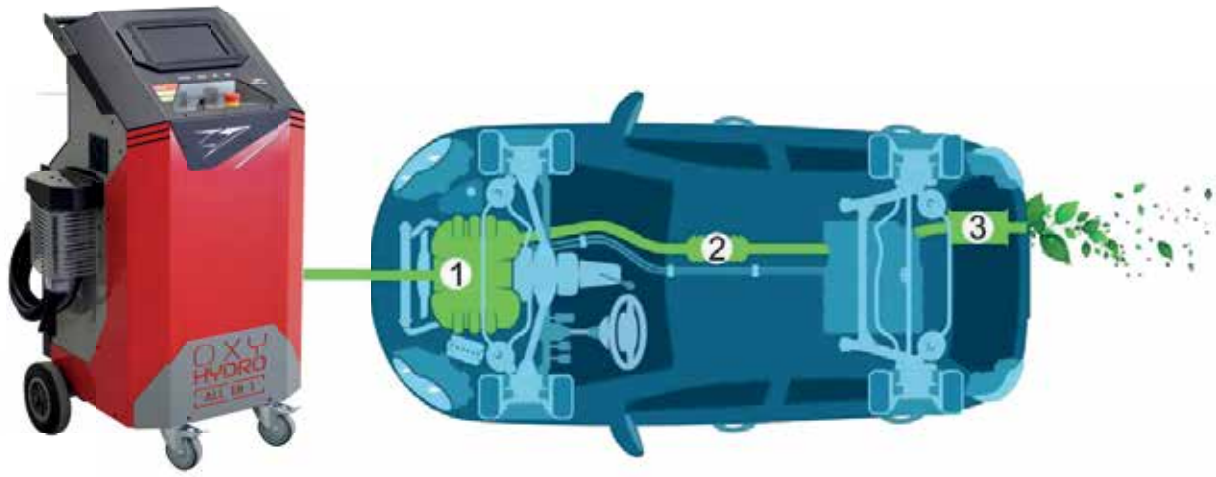
Soot production is higher in diesel engines and significantly increases with reduced oxygen levels during combustion.
Due to exhaust gas recirculation, these carbon residues also accumulate in the intake ducts.





DECARBONIZATION AND CLEANING OF ENGINE HOT ZONES

Utilizing HHO technology, engine performance can be restored efficiently and rapidly.
Electrolysis generates a reactive gas introduced into the intake manifold, where it mixes with the intake air filtered by the air intake system.
The gas initiates its action within the combustion chamber through an implosion process, sharply increasing combustion temperature and inducing controlled implosive pyrolysis. This process effectively removes carbon deposits from critical engine components such as piston crowns, cylinders, injector nozzles, valves, and glow plugs without significantly increasing the temperature of the metal parts, as heat is concentrated within the exhaust gases.
The generated heat, combined with moisture from the gas combustion, is expelled via the exhaust stream, facilitating the decarbonization of the EGR valve, turbocharger turbine, oxygen (lambda) sensor, catalytic converter, and Diesel Particulate Filter (DPF).





INTAKE MANIFOLD | CATALYTIC CONVERTER | GLOW PLUGS | DPF | COMBUSTION CHAMBER | INJECTOR

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DECARBONIZATION AND CLEANING OF INTAKE MANIFOLDS

The cleaning process of the intake manifolds employs a newly developed detergent specifically engineered for the IMCS system, compatible with all types of internal combustion engines. This advancement marks a significant improvement over the previous model by incorporating an innovative, high-precision injection system that delivers direct and highly efficient treatment. The detergent, upon injection, chemically interacts with carbon deposits within the intake system, effectively softening and facilitating their progressive removal. Soot accumulation is notably higher in diesel engines, particularly under conditions of reduced oxygen availability during combustion. Furthermore, due to Exhaust Gas Recirculation (EGR), carbonaceous deposits also accumulate extensively within the intake ducts.



BEFORE



AFTER





OUR STRENGTHS

Maximum effectiveness, zero complications
The system is now integrated with the FAP Cleaner treatment, providing a complete intervention across the entire engine system—from intake ducts to the diesel particulate filter (DPF), including the combustion chamber. Everything is guided, simple, and fast: just follow the app and the OBD connection

Injection-based IMCS
More power, deeper cleaning. The new IMCS system is even more effective thanks to the use of injection technology, allowing for deep and targeted cleaning of the intake ducts, increasing efficiency while reducing intervention times..

OxyBoost
The core of performance. The electrolysis process is now enhanced by the new OxyBoost liquid, a chemical solution that guarantees a constant, pure, and high-efficiency HHO generation

Production capacity
From initial diagnosis to the final report, EasyLab guides you through every step, automatically generating precise diagnostics and a detailed report ready to be shared with the customer. More efficiency, less effort, maximum professionalism.

Everything under control, always guided
With high production capacity, the OxyHydro All-in-1 delivers sufficient power to perform decarbonization treatments, optimizing engine performance while reducing fuel consumption and emissions.

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COD. ART. FPMP006KFAP



COD. ART. ISPL001LICQ



COD. ART. TDS10001MBL

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OXYBOOST

Additive specifically formulated to enhance hydrogen-oxygen (HHO) production and improve treatment efficiency over time.





AVALAIBLE IN TRUCK VERSION



Plus

HHO Tecnology	Advanced system for engine cleaning and optimization
Enhanced cleaning performance	Effectively removes carbon deposits
Improved combustion	Optimizes engine performance and reduces fuel consumption and emissions
Professional engine decarbonization	Service provided by specialized workshops
Suitable for all engines	Compatible with both small and large engine displacements
Production capacity	With an effective hydrogen production capacity of approximately 1,200 liters per hour, the OxyHydro Trucks system delivers higher power, making it suitable for decarbonization treatments on industrial vehicles, trucks, boats, and virtually any other type of vehicle

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Technical data

Voltage:	220-240V / 16A
Frequency:	50 Hz
Power:	3500 W
Display:	Touch Screen 10”
Connectivity:	Wi-fi Bluetooth
Materiale:	Steel, Aisi 316L
Weight:	125 Kg empty
Cell/reservoir:	60l
Production:	750 l/h
HHO process:	Automatic/Manual
Certification:	CE, Compliance ind. 4.0
IMCS evo process:	Manual/Automatic
IMCS evo reservoir:	2l
Dpf process:	Automatic
Asp/HHO/dpf proces:	Separate
Buzzer:	Alerts
App:	Pre- and post-diagnosis and alerts

Plus

HHO Tecnology	Advanced system for engine cleaning and optimization
Enhanced cleaning performance	Effectively removes carbon deposits
Improved combustion	Optimizes engine performance and reduces fuel consumption and emissions
Professional engine decarbonization	Service provided by specialized workshops
Integrated with IMCS Evo or Fap Cleaner treatment	For a complete service on the entire engine system — from the particulate filter to the intake ducts. Everything is guided, simple, and fast: just follow the app and connect via OBD

Where innovation meets precision and success.

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