

产品基本规格 Product Specification

1. 基本信息 Basic Information

- 1.1 设备名称 Equipment Name: 氢氧除碳机 Engine Carbon Cleaning Machine
- 1.2 颜色 Color: 蓝色 Blue
- 1.3 主要功能 Main Function: 清除发动机内部积碳 Remove carbon deposits inside the engine

2. 产品特点 Product Feature

- 2.1 高效快捷, 只需要 30 分钟彻底清除积碳
Efficient and fast, eliminate carbon deposits completely within 30min
- 2.2 除碳后提速顺畅, 发动动力可增强 10% (不同车型会有所不同)
Speeding up smoothly with enhancing 10% engine power after carbon cleaning (Effects vary from different car models)
- 2.3 除碳后降低油耗 (经研究测试表明, 油耗会降低 11%~28%, 不同车型会有所不同)
Reducing fuel consumption after carbon cleaning (The researches show fuel consumption reduced by 11%~28%, effects vary from different car models)
- 2.4 除碳后尾气中有害成分减少 50%~70%, 100%安全环保
Reducing the harmful ingredients in exhaust gas by 50% ~ 70% after carbon cleaning, 100% safe and environmental
- 2.5 除碳过程中不会造成任何二次污染 (氢氧气燃烧产物只有水)
Causing no secondary pollution in the process of carbon cleaning (The combustion product of hydrogen and oxygen gas is only water)
- 2.6 不需拆除引擎上的任何零部件, 仅需连接进气歧管
Free disassemble any parts from the engine, just connect to the intake manifold
- 2.7 去除积碳的物质为纯度超过 99.9%的气体, 非化学药品, 不伤害油封、垫圈及引擎
The substance removing carbon deposits is gas of a purity greater than 99.9% , non-chemical, and do not harm oil seals, gaskets and engines
- 2.8 适用于所有车型, 能清洗所有汽车发动机系统相关部件
Applicable to all models and all related car engine system parts

3. 详细参数/配置 Specific Parameter/Configuration

3.1 性能指标 Electrical Characteristics

- 3.1.1 额定电压 Rated Voltage: AC 220V 50/60Hz
- 3.1.2 最大功率 Max Power: 4.5KW
- 3.1.3 最大产气量 Max Gas Output: 1500L/H \pm 10%
- 3.1.4 最大工作压力 Max Working Pressure: \leq 2 Kg/cm²
- 3.1.5 电解液消耗量 Electrolyte consumption: \leq 240g/H
- 3.1.6 水箱容量 Water Tank Capacity: 17L
- 3.1.7 使用环境 Working Ambient: 5 $^{\circ}$ C~45 $^{\circ}$ C

3.2 产品配置 Product Configuration

- 3.2.1 供电电源 Power Supply: IGBT 供电系统 IGBT Power Supply System
- 3.2.2 超压保护 Overpressure Protection: 压力传感器和压力变送器

3.2.3 防回火装置 Anti-backfire system:	Pressure Sensor and Pressure Transmitter 工业级多功能干式防回火系统 Industry Multi-function Dry Anti-backfire System
3.2.4 液位保护 Electrolyte Level Protection:	高低液位传感器 High and Low Liquid Level Sensor
3.2.5 超温保护 Overtemperature Protection:	温度传感器 Temperature Sensor
3.2.6 集成电解槽 Integrated Electrolytic Cell:	防爆防漏 Anti-explosion and Anti-leakage
3.2.7 水气分离 Moisture Separation:	水气分离器 Moisture Separator
3.2.8 液晶触摸显示屏 LCD Touch Screen:	7.0Inch

4. 外形以及包装尺寸 Mechanical Characteristics

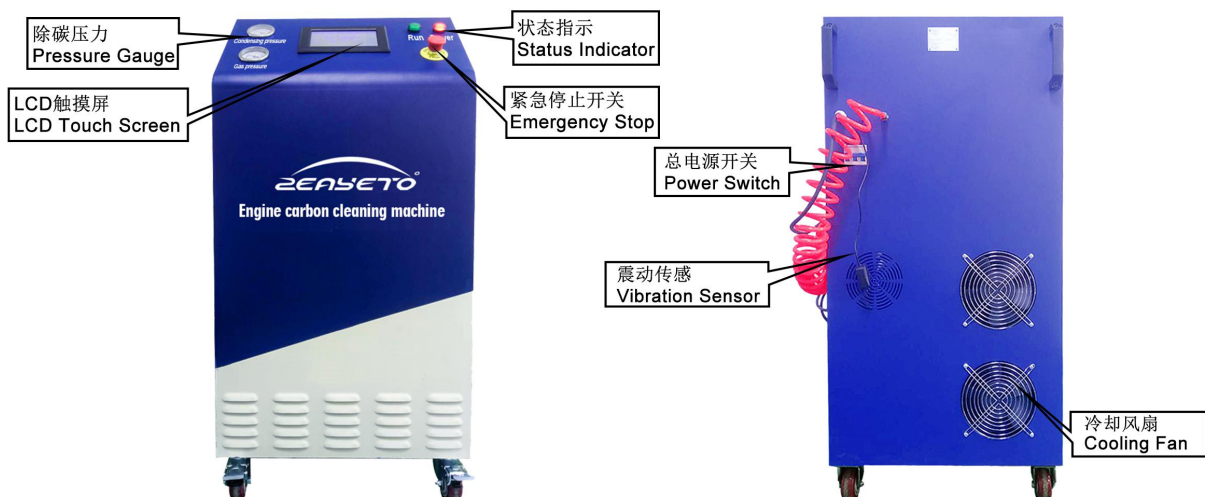
4.1 单台净重 Net Weight:	约 102KG (Approx 102Kg)
4.2 单台毛重 Gross Weight:	约 120KG (Approx 120Kg)
4.3 设备尺寸 Product Dimension:	555×600×1120mm
4.4 包装尺寸 Packaging Dimension:	600×650×1250mm
4.5 标识 Marks/Label :	氢氧除碳机 Engine Carbon Cleaning Machine
4.6 包装 Packing:	木箱包装 Wooden Package

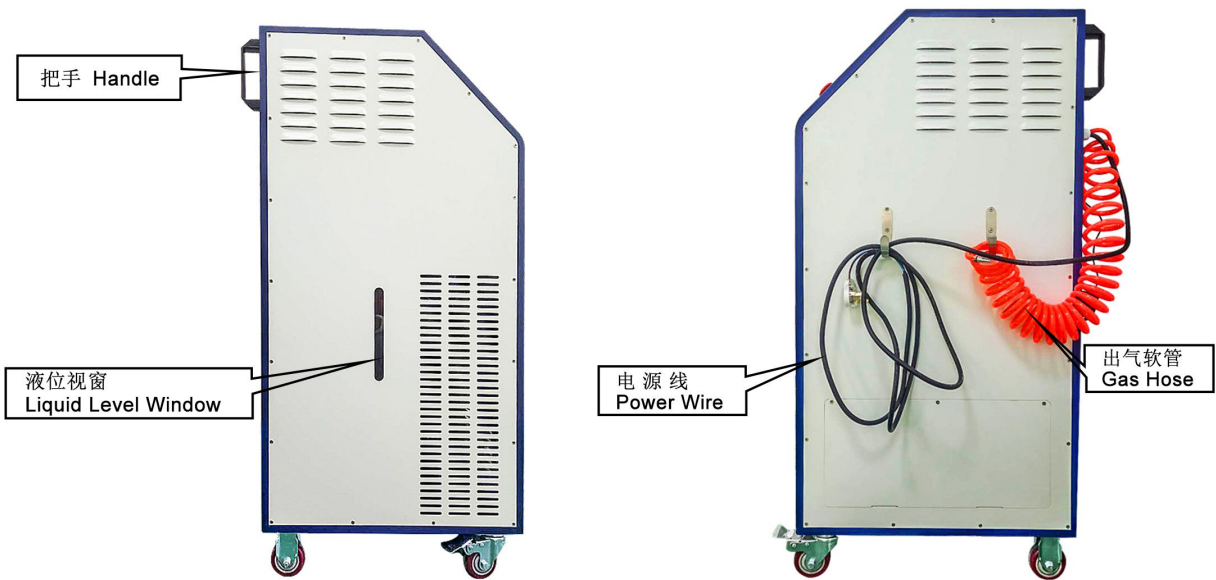
5. 工作原理 Working Principal

设备通过电解方式产生氢氧混合气流（布朗气），由发动机进气歧管输入发动机燃烧室参与燃烧。利用氢氧催化原理，富氧燃烧原理，水氢循环原理等布朗气特性对发动机积碳进行全面、彻底清除。由于氢氧燃烧后生成水，附在发动机内壁以及排气管内壁上的颗粒、污垢被湿润后熔解成液状，然后在排气压力的推动下，排出车外，实现了内部自动清洗的过程，并且不会对发动机造成任何损害，弥补了传统化学除碳剂的不足。

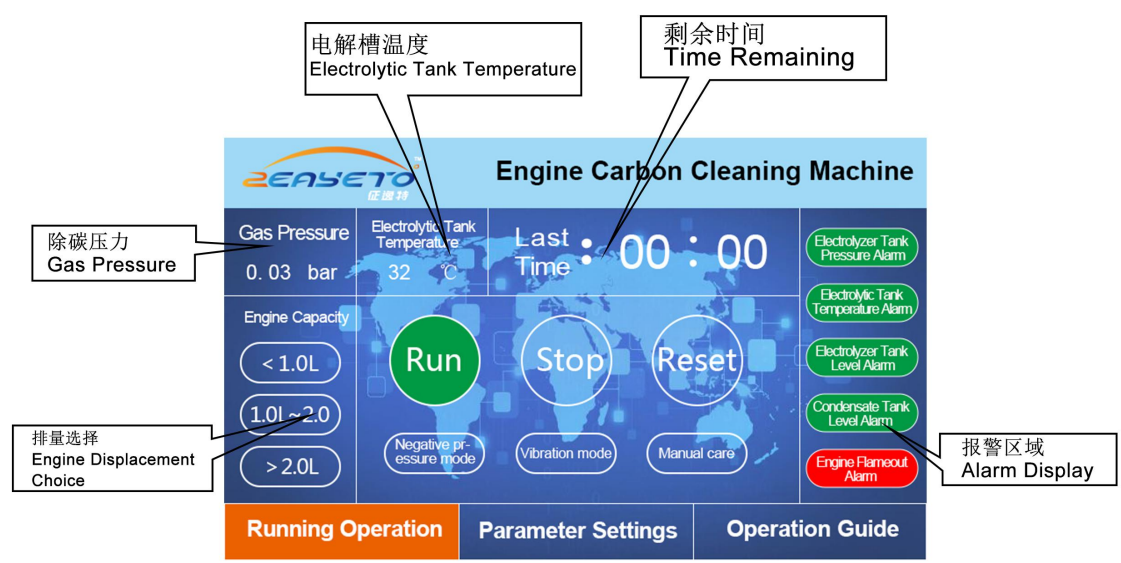
The equipment generates hydrogen and oxygen mixed air stream (brown gas) through electrolysis, which is fed into engine combustion chamber by engine intake manifold. Brownian gas characteristics such as hydrogen and oxygen catalysis principle, oxygen-rich combustion principle and water and hydrogen cycle principle are used to completely and thoroughly remove engine carbon. Due to hydrogen combustion generated after water, attached to the internal walls and makings, dirt on the exhaust pipe inner surface is wet melted into liquid, and then under the impetus of the exhaust pressure, out of the car, realized the internal automatic cleaning process, and will not cause any damage to the engine, make up for the deficiency of the traditional chemical carbon removal.

6. 设备外观 Product Show





进入操作界面按钮
Enter The Operation Interface Button



7. 使用方法 Operation Instruction

- (1) 连接车辆，将设备出气管与车辆进气真空管连接（无真空管的车辆，直接将出气管从空气滤清器处插入发动机进气管）
Connect the outlet pipe of the equipment to the vacuum pipe of the vehicle (For vehicles without vacuum pipe, insert the outlet pipe directly from the air filter to the engine inlet pipe)
- (2) 启动车辆，怠速运行 Start the vehicle at idle
- (3) 打开设备电源，通过触摸屏选择相应的排气量
Turn on the equipment power and select the corresponding exhaust volume through the touch screen
- (4) 选择负压模式或者震动模式，点击开始按钮，开始除碳
Select negative pressure mode or vibration mode, and click the start button to start carbon removal
- (5) 除碳 30 分钟后，设备报警，提示除碳完成，设备自动停止产气
After 30 minutes of decarburization, the device will alarm, indicating that the decarburization is completed and the equipment will automatically stop gas production
- (6) 等待约 1 分钟后，熄火，恢复汽车管路
After waiting for about 1 minute, turn off the engine and resume the automobile pipeline.
- (7) 重新启动车辆 Restart the vehicle
- (8) 匀速踩油门至转速 3000-3500 转再松开，间隔 3 秒再踩，如此重复 8~10 次，将排气管中的水分以及脏物排出，除碳结束
Step on the accelerator at a constant speed to a rotating speed of 3,000-3500 RPM and then release, and then step on it at an interval of 3 seconds. Repeat this for 8 ~ 10 times to expel the water and dirt in the exhaust pipe and end the carbon removal

8. 质保时间 Warranty Period: 一年 One Year

质保说明 Limited Warranty

自购买之日起，征逸特氢氧除碳机及组成该变速箱换油机的各种零部件的材料和工艺缺陷保证一年。如果征逸特发现任何由征逸特制造的零部件存在缺陷，则征逸特将自行选择修复或更换该等缺陷零部件。

本保证不包括正常磨损、疏忽、热损伤、任何部件的研磨或更改，或滥用。如果产品的使用目的与产品的预期目的不同，或者其使用方式与产品的使用说明不一致，则产品也不包括在此范围内。此外，本保修不包括任何电池或电机以及除征逸特外由其他公司制造的零件，均由各自的制造商单独担保。

这是精简版的征逸特保修说明。如需完整版本，请直接与征逸特联系。

Zeayeto Engine Carbon Cleaning Machine and the various parts and components which comprise them are warranted against defects in materials and workmanship for one full year from the date of purchase. If any part or component manufactured by Zeayeto is found by Zeayeto, in its sole judgment to be defective, Zeayeto will, at its option, either repair or replace such defective part or component.

This warranty does not cover normal wear, neglect, heat damage, the grinding or alteration of any part whatsoever, or abuse in general. Nor does it cover the product if it is used for a purpose other than that for which it was intended, or if it is used in a manner inconsistent with any instructions regarding its use. Also, this warranty does not cover any batteries or electric motors which are sold with it. All electric motors, as well as parts manufactured by companies other than Zeayeto, are separately warranted by their respective manufacturers.

This is a condensed version .For a complete copy, contact ["service@zeayeto.com"](mailto:service@zeayeto.com) directly.

使用一般注意事项 **General Instructions For Users**

- (1) 氢氧除碳机需安装于干净、平稳的地面上，且需通风散热良好
Engine Carbon Cleaning Machine should be installed on a clean and stable ground with good ventilation and heat dissipation
- (2) 本机器采用单相 **220V** 或 **380V** 电源供电，请建立适当的接地线连接
This machine uses single-phase 220V or 380V power supply, please grounded properly
- (3) 除碳过程中发动机熄火需要慎重对待，请严格按照说明书上相关条目操作，否则可能导致严重后果
Please treat the engine stalling with caution in the process of carbon removal. Please strictly follow the relevant items in the instructions, otherwise it may be possible lead serious consequences
- (4) 氢氧除碳机安装位置与汽车之间的软管连接长度应小于 **10 米**,最好控制在 **5 米**左右
The connection length of hose between the installation position of Engine Carbon Cleaning Machine and the car should be less than 10 meters, preferably controlled at about 5 meters
- (5) 在本机运转工作前，请确认汽油充足，以便汽车能怠速运行 **30 分钟**以上而不出现中途熄火。在开始除碳前,请确认汽车没有其他不良故障(如怠速不稳，漏机油，冒黑烟，发动机异响，点火系统故障，喷油系统故障等)
Please make sure there is enough gasoline so that the car can idle for more than 30 minutes without stalling. Before starting to remove carbon, please confirm the car has no other faults (such as unstable idle speed, oil leakage, black smoke, abnormal engine noise, ignition system fault, injection system fault etc.).
- (6) 请勿使用任何溶剂擦拭机器 Do not use any to wipe the machine

小技巧 **TIP:**

出现以下任何情况之一，建议进行发动机除碳：

If any of the following occurs, it is recommended to proceed engine decarbonization:

- 1、发动机怠速不稳、抖动、收油熄火 The engine idles unsteadily, dither and flameout

出现这种故障的主要原因是怠速马达和怠速通道受到积碳污染。怠速通道积碳污染后，气流通过数量受到了限制，需要怠速马达和节气门不断进行调整以维持发动机的正常工作。一方面由于怠速马达和节气门自身的积碳污染使调节功能受到了限制。另一方面，随着积碳污染的不断加重，怠速系统的调节功能也会达到临界值从而导致无法进行调节。此时的 **ECU** 会认为是怠速马达或节气门出现了故障，实际上是由于怠速系统中有了积碳。

The main cause of this fault is carbon accumulation of idling motor and idling channel. The amount of airflow through the idling channel is limited by carbon accumulation, which need to constantly adjust the idling motor and throttle valve to maintain the normal operation of the engine. On the one hand, the regulation function is restrained by the carbon accumulation of idle motor and throttle valve. On the other hand, the regulation function of idle system will reach the critical value with the continuous increase of carbon accumulation, and thus lead function failure eventually. The ECU will deem that the idle motor or throttle is malfunctioning, It's actually due to carbon accumulation in the idle system.

- 2、动力下降、加速不良 Engine power diminishing, poor acceleration

这种故障的主要表现形式是发动机急加速时反应迟钝，响应滞后，全动力行驶时，动力不充沛。

The main manifestation of this fault is the engine response lag upon rapid acceleration, power is not abundant while full power driving,

- 3、冷车启动困难、喘振、噪音增大、尾气排放超标

Cold start difficulty, surge, increased noise, excessive exhaust emission

- 4、为了预防积碳对车辆的损伤，建议每行驶 **20,000 公里**后进行一次发动机除碳

In order to prevent the damage of carbon accumulation to vehicles, it is recommended to proceed

engine decarbonization after every 20,000 kilometers mileage

以上事项，使用中请充分注意，如遇到不能确认的其它问题，请直接与技术人员联络确认。

Please pay fully attention to the items mentioned above. If other issues during application, please kindly contact ["service@zeayeto.com"](mailto:service@zeayeto.com) for further information.