

Zenride Optimizer

Product and Function Description

TECHNICAL PRODUCT DOCUMENTATION

Technical description • Diesel optimisation • Fuel economy



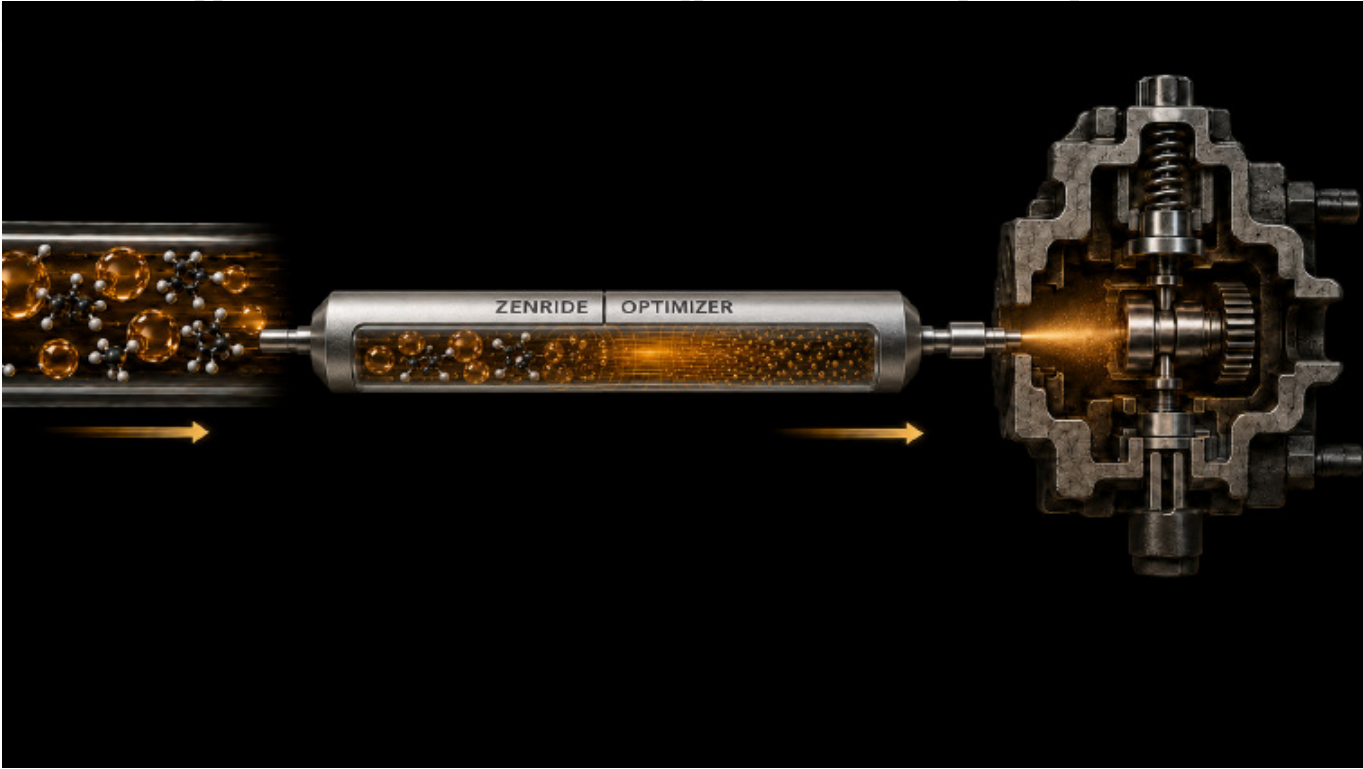
PRODUCT OVERVIEW

Zenride Optimizer

Zenride Optimizer is a mechanical fuel optimisation device for diesel engines. It is installed in the fuel system and designed to support more efficient utilisation of the fuel.

Purpose	Application	Construction
To reduce fuel consumption and improve the engine's utilisation of every litre of diesel.	Suitable for diesel engines in passenger cars, tractors, trucks and ships, among others.	Mechanical regulator, filter and magnetic system with optional external power connection.

THE FUEL PROCESS



01 BEFORE	02 CLEAR OPTIMIZER	03 SMALLER CLUSTERS	04 INTO THE PUMP
Diesel with larger droplets and molecular clusters enters the system.	A transparent demonstration version of the actual Zenride Optimizer shows the process during flow.	Molecular clusters are visually separated into smaller groups and more uniform fuel droplets.	A horizontal nozzle atomises the fuel into a fine spray cone directly into the pump chamber.

The illustration is a technical visualisation of fuel conditioning and atomisation. It does not depict atomic splitting in a physical or nuclear sense.

OPERATING PRINCIPLE

How the pressure regulator works

The pressure regulator controls the fuel supply. At the regulator inlet, the amount of fuel passing through the device is adjusted. The fuel passes through the filters and then through the magnetic system's central passage, where it is exposed to a magnetic field. It is then directed to the aluminium element in a heated state.

Pressure regulates the amount of fuel passing through the inlet, the main section and the Yiv-set system. According to the original product description, speed and friction help make the fuel easier to ignite and form vapour. The fuel then passes through the magnetic system and onward to the engine injectors.

The regulator can be connected to a 5 amp power supply if required. This is not essential to the device's operation, and the power supply is not supplied as standard with Zenride Optimizer.



BENEFITS AND EFFECT

What the product description states

Fuel savings

The original product description indicates a noticeable reduction in fuel consumption. It cites a 2.0-litre diesel car improving from 10 km/l to as much as 14 km/l after installation.

Engine output

For a 2.0-litre, 125 hp engine, a possible improvement of 5-15 hp and better acceleration is stated.

Engine operation

The system is described as supplying the fuel volume required by the engine without impeding normal piston operation or changing the engine's basic function.

Cleaner engine

The product description states that the system may contribute to cleaner valves, lower oil consumption and more complete utilisation of the fuel.

ENVIRONMENT AND APPLICATION

Emissions and vehicle types

Emissions and CO₂

The described function of Zenride Optimizer is based on heating, filtration and mechanical/magnetic influence on the fuel. Its purpose is to improve utilisation of the energy in the fuel. When an engine uses fewer litres of diesel for the same transport work, total CO₂ emissions are reduced accordingly.

Actual savings depend on the vehicle, engine, load, route, temperature, driving style and maintenance condition. Performance and savings should therefore be documented through a controlled before-and-after measurement on each vehicle.

Suitable vehicles

Zenride Optimizer is described for use on diesel engines of different sizes. These include:

- Passenger cars and vans
 - Small and large trucks
 - Ships and stationary diesel engines
- Tractors and construction machinery
 - Motorcycles and scooters with diesel engines
 - Other diesel engines following technical assessment

Documenting the result

For professional use, diesel data, kilometres, operating hours and load should be recorded before and after installation. Measurements should cover comparable periods so the actual effect can be documented credibly and reproducibly.

BEFORE	INSTALLATION	AFTER
Reference period with fuel, km and operating data	Record date, vehicle and configuration	Compare l/100 km, km/l and CO ₂

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