Diesel Fuel Vaporizer

External Fuel Dosing Technology



Emission control innovation, accelerated[™]

.



Forward thinking. Forward moving.

Reliable DPF regeneration, every time

Performance is everything. When it comes to emission control, you need a solution you can trust to achieve full DPF regeneration and keep your vehicles performing optimally. Tenneco's Diesel Fuel Vaporizer is that technology. An external-dosing solution with a proprietary no-clog design, it's proven to provide efficient regeneration, every time.

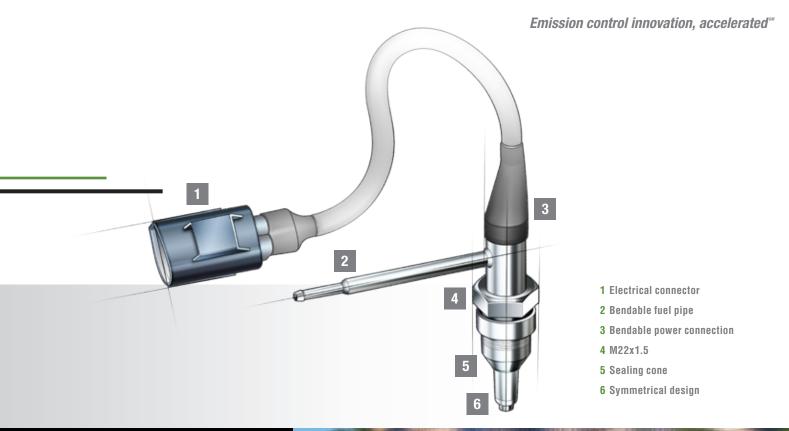


For full DPF regeneration, exhaust gas temperatures need to be high enough for soot combustion to occur. Many vehicles rely on post-injection to achieve this, enriching exhaust gas with unburned fuel, then converting it downstream in the diesel oxidation catalyst (DOC). But this can cause oil dilution, along with premature engine wear if the vehicle isn't serviced enough.

Tenneco's Diesel Fuel Vaporizer empowers customers to get the most out of their engines and their emission control strategies, avoiding the challenges of post-injection and the clogging common with other vaporizers. Using an electrically heated glow plug that evaporates the diesel fuel, then injects it into the exhaust gas stream directly before the DOC, the Vaporizer incinerates particulate matter (PM) without oil dilution and requires no additional cooling—helping to improve fuel economy and CO₂ emissions.

The Vaporizer also enables more frequent regeneration with low load conditions and when idling, allowing for an extended operating range. Currently, a 200W size is available for light vehicle (LV) applications and a 400W size is in development for commercial vehicle (CVS) applications.

Flexibility, efficiency and a proprietary design that works to virtually eliminate clogging over the vehicle's lifetime make Tenneco's Diesel Fuel Vaporizer the optimal solution for full and reliable DPF regeneration and better performance, every time.



The Diesel Fuel Vaporizer is proven to avoid clogging and oil dilution, and reliably achieve full DPF regeneration.



DIESEL FUEL VAPORIZER FEATURES & BENEFITS

- Proprietary design works to virtually eliminate clogging over the lifetime of the product, and provides good diesel fuel distribution and low backpressure
- Standardized and scalable, with two sizes— 200W and 400W (in development)—for flexibility, adaptability and optimal systems integration

.....

- Avoids oil dilution, and the engine breakdowns and increased need for oil service that may result from it
- Extended operating range, enabling more frequent regeneration, and regeneration at low load points and at idle
- Minimized heat losses resulting in fuel-efficient
 DPF regeneration due to heat generations close
 to DPF
- No secondary emission
- Requires less mixing length and no additional cooling, compared to an injector

Experience the emission control technology that drives better performance.



Partnership built on performance

At Tenneco, we don't simply provide a product. We provide a partnershiptaking into account customers' entire systems, their unique needs and applications, technology requirements, market challenges and goals. With the Diesel Fuel Vaporizer and our full suite of advanced solutions, we offer a partnership that drives the innovation that maximizes performance and enables true emission control.

.....

THE ENGINE OF INNOVATION IN **EMISSION CONTROL**

At Tenneco, innovation is a hallmark of everything we do. In our advanced emission control technologies and solutions. In our unique, total-system integration expertise and approach. In our commitment to partnership and collaboration. We're always looking beyond the technology horizon to foresee and develop the next-generation emission control solutions that accelerate our customers' success and keep them moving toward the future.

From development through delivery and beyond-we help our partners drive transportation innovation, full speed ahead.

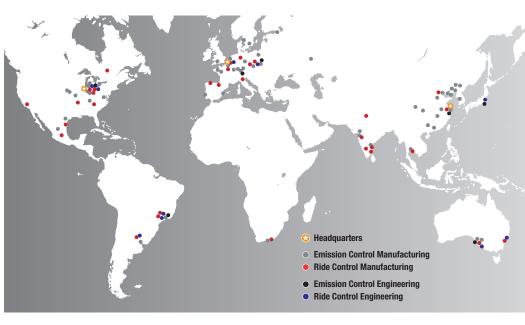


Our reach is global, but our focus is local, helping customers in each region adapt our global capabilities and technologies for local applications.

- 22,000 people
- More than 80 manufacturing facilities
- 14 state-of-the-art research and development centers
- 4 dedicated research and development centers for emission control engineering

Markets served:

- Light vehicle
- · Commercial vehicle
 - On-road
 - Off-road
- Locomotive
- Marine
- Stationary • Large engine
- Retrofit



PLEASE CONTACT OUR EMISSION CONTROL TEAMS AROUND THE WORLD

North America 3901 Willis Road Grass Lake, MI 49240 +1 517-522-5525

Europe Luitpoldstrasse 83 67483 Edenkoben Germany +49 6323 47-0

China C-D, 17F No. 686 Jiu Jiang Road Huang Pu District Shanghai 200001 P.R. China +86 21-6957-3026

Japan 20-20 Hiradai, Tsuzuki-ku Yokohama-shi Kanagawa, 224-0064 Japan +81-45-942-5231

South America Praça Vereador Marcos Portiolli Nr. 26 Santa Luzia Cep.: 13807-900 Mogi Mirim - São Paulo +55 19 3805-7000

TENNECO USA