

Your Partner in Exhaust and Emission

AFTERMARKET



going the extra mile

DinexEmission.com



Upgrade to the latest aftermarket standard

This important endeavour requires advanced exhaust and emission solutions. Dinex products meet or exceed the EPA norms, so truck manufacturers and the aftermarket naturally rely on us to help them equip for the new standard. In fact, we even deliver technologically advanced silencers for trucks, even though type approval is not yet required for these.

The cleaner, the better

Every day we work hard to reach even lower levels of particulate and NOx emissions, and we are every bit as ambitious with our aftermarket products as we are with our OEM parts.

We are constantly working on new technologies, new products and more effective solutions that may be applied in current and future exhaust systems. We work hard to ensure emission compliance with OE equipment, but also to find ways to improve on areas like noise reduction, back-pressure performance and fuel consumption.



**THE
CLEANER
THE
BETTER**



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Dinex USA is in Business to be a Catalyst for Commerce and Conservation

We are always looking for ways to improve your customer experience. Which means we want to hear from you. Have an idea how Dinex can do better? Email or call us. Innovation and success comes from us working together.



Why Partner with Dinex?

Dinex Program Benefits

Providing tools and support



Products

Kits: Competitively priced Dinex DPFs, DOCs, flex and bellows come in kits that include clamps and gaskets.

Warranty: Two years, unlimited miles for after-treatment systems (DPFs, DOCs) and one year, unlimited miles for pipe treatment systems.



Tools and Training

Cross-reference Website Database: DinexEmission.com makes finding the right ATS kit a breeze. The comprehensive cross reference system is easy to use. You can enter partial part numbers, search by engine make and model, and the fully responsive design allows for seamless access via your mobile.

Training: DPF and DOC technical and sales training provided.



Support

Customer Service: Talk to real people with dedicated aftermarket business support.

Sales Support and Training: DPF and DOC technical and sales training provided.

Cooperative Marketing: Co-branded flyers, emails – ready to send, social media promotions, and analytics offerings. Or, send us your co-branded marketing ideas!

True global widest product range from turbo to tailpipe

Global in-house manufacturing

Direct replacement of original exhaust parts

Next day delivery available

Local presence - Global footprint

Local sales training sessions

YOUR PARTNER IN EXHAUST AND EMISSION

going the extra mile



Why Dinex For Your Customers?

Warranty

Two years, unlimited miles for after-treatment systems (DPFs, DOCs) and one year, unlimited miles for pipe treatment systems.

Exact Fit

No guessing or worrying if it'll work. Dinex DPFs, DOCs, and flex & bellows kits are exact fit, saving you hassle and downtime in the shop.

Clamps and Gaskets Included

Clamps and gaskets are included in all Dinex kits, including DPF kits, DOC kits, and flex & bellows kits, saving you time and ordering hassles.

Flex & Bellows Kit Upgrades

Dinex flex & bellows kits decouple engine torque and heat expansion for a better regen. Bellows, 3S flex, and 2S kits come in multiple dimensions and lengths to fit your needs. Each kit comes with clamps and gaskets needed for install, saving money and time from ordering several parts.

Pipe Treatment Systems

Dinex develops and manufactures complete pipe treatment systems. We have decades of experience and know-how, which enable us to offer cost-efficient solutions of the highest quality.

COMING SOON



Dinex DPF Kits - Diesel Particulate Filters

Dinex aftermarket DPF Kits

- Are new
- Have no core requirements
- Include clamps and gaskets
- Are less expensive than OEM
- Meet or exceed OEM specs for particulate matter and back pressure
- Have a 2-Year, unlimited miles warranty
- Are built to last, using high grade stainless steel and platinum group metals
- Use proven technology with more than 30,000 Dinex DPF systems installed around the world



EXACT FIT FOR

Caterpillar

Cummins

Detroit Diesel

Hino

Isuzu

Mack

Mercedes

Navistar

Paccar

Sprinter

Volvo



Platinum Group Metallurgy

Dinex DPF Kits use a unique mix of precious metals washcoat and substrate to turn soot into EPA acceptable exhaust. Dinex emissions systems have been tried and tested to meet or exceed the standards set out by OE manufacturers.

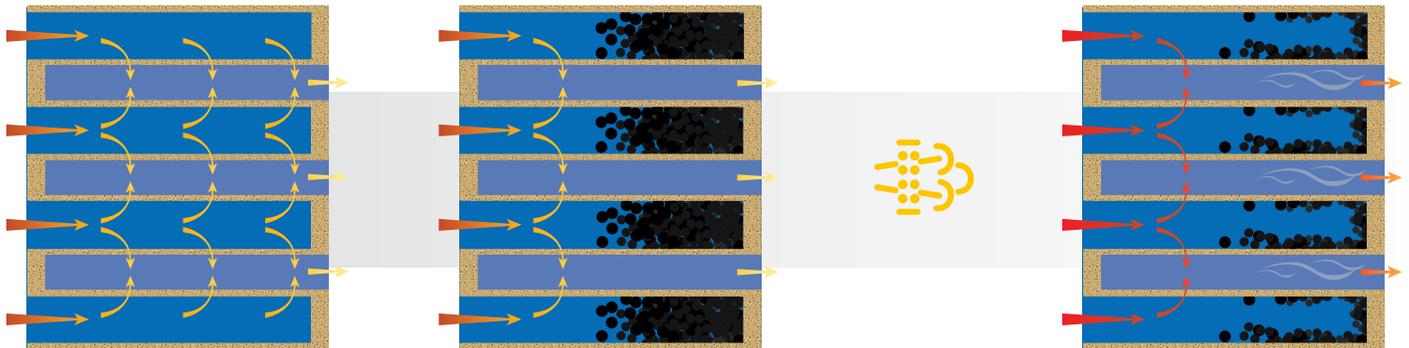


What is a DPF?

DPF stands for Diesel Particulate Filter.

Its purpose is to filter Diesel Particulate Matter (DPM), also known as soot, out of exhaust gasses.

How Does a DPF Work?



Exhaust gasses containing soot enter the DPF. The filter traps any matter larger than one micron, allowing gasses through.

Over time, soot builds up in the DPF. Eventually, this causes backpressure detected by the Engine Control Unit (ECU) necessitating regeneration.

Regeneration (regen) requires high exhaust temperatures of 570°-750°C. Combining high temperatures and a unique mix of precious metals washcoat and substrate turns soot into ash. The DPF is now regenerated and ready for use.

Primary Components of a DPF



Filter

Cordierite wall flow filter traps matter larger than one micron

Metal Case

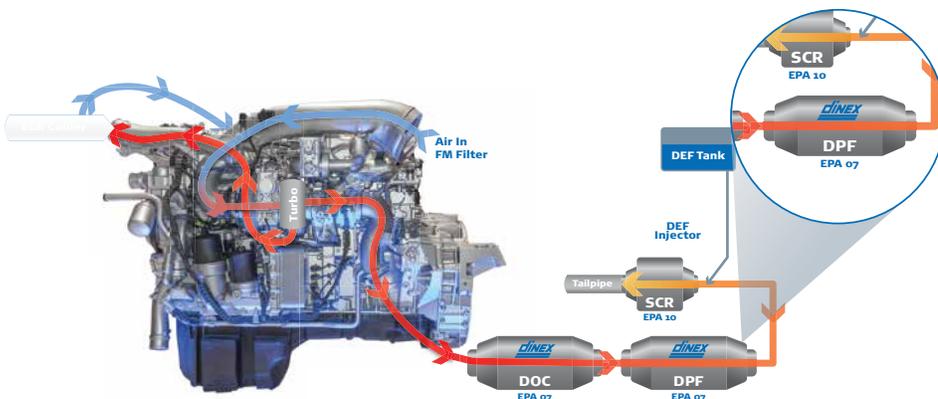
Stainless steel metal casing designed to withstand extreme temperatures

Types of Regen

Passive: Automatic regen that occurs when the DPF reaches the correct exhaust temperatures.

Active: If a regen doesn't complete a cycle, but sensors indicate DPF has reached capacity, an active regen occurs. The DPF dashboard light indicator will come on and the vehicle must continue to move to finish the cycle.

Manual: If an active regen can't complete, typically due to short drive times, then a manual regen will be required in a shop.



Dinex DOC Kits - Diesel Oxidation Catalyst



Metal Core

Have a metallic core, which makes for a more durable DOC than comparable ceramic cores, keeping you on the road longer.

Clamps and Gaskets Included

Comes with clamps and gaskets needed for install, saving money and time from ordering several parts.

Built to Last

Are built with a full drum weld to ensure the DOC cannot breach.

Perfect Fit

Fit perfectly with Dinex DPF Kits, providing for an easy install experience.

Dinex aftermarket DOC Kits

- Are new
- Have no core requirements
- Are less expensive than OEM
- Have a 2-Year, unlimited miles warranty
- Are built to last, using high grade stainless steel used in canning



Looped Ends

Looped ends provide a greater adjustment range and band tension.

360° Seal

Full 360° seal means lower leakage rates.

Beveled Shape

Beveling provides a better seal.

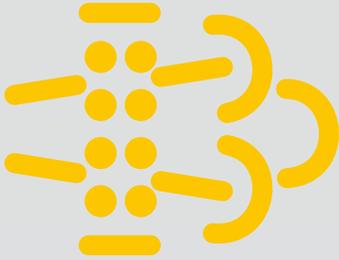
Dinex premium clamps are designed to form around the shape of each DPF/DOC pipe, fasteners working independently to provide maximum deformation, resulting in the best fit.

What is a DOC?

DOC stands for Diesel Oxidation Catalyst.

The DOC works in conjunction with the DPF by heating the exhaust going into the DPF so the exhaust is hot enough to burn the soot out of the DPF.

How Does a DOC Work?



When an active or manual regen is required, the HC (hydrocarbon) injector adds a bit of fuel into the exhaust system.



The HC injector is also called the fuel doser or after treatment injector.



The dosed diesel goes onto the DOC, which, by catalytic reaction heats up the DPF.

The Ideal Gas Law

$$PV = nRT$$

Diagram illustrating the Ideal Gas Law equation $PV = nRT$. The variables are labeled as follows:

- P**: pressure (indicated by a downward arrow)
- V**: volume (indicated by an upward arrow)
- n**: amount of substance (indicated by a downward arrow)
- R**: ideal gas constant (indicated by an upward arrow)
- T**: temperature (indicated by a downward arrow)

Leaks in upstream pipe. To see how leaks in upstream pipes affects proper DOC and DPF function, we just need to look at the physics. Take a look at the Ideal Gas Law. In a manufactured structure such as a truck exhaust system, there are constants. Gas volume (V), gas mass (n), and gas constant (R) are predetermined by the exhaust makeup. However, pressure (P) and temperature (T) are variables in this system. If the pressure is low due to leaks in the upstream pipe, then the temperature will, by the laws of physics, be lower too.

Regen cannot take place if the system can't get up to temperature. Possible leak sources include the turbo, the EGR cooler, pipes, at the clamps, and bellows.

When Do You See Failures in the DOC?

Typically, it is not the DOC that fails, but a failure happens upstream. This causes the DOC to stop working and you get cool regen.

Common Upstream Failures

The HC injector clogged.

Fuel can mix with soot to clog the injector.

The air filter is full. The DOC needs air when it ramps up to go through regen. If the air filter is full or clogged, the DOC can't get air.



COMING SOON

For direct replacement
of OE sensors

NOx sensors

The new NOx Sensor ensures accurate Urea dosing and can replace the OE sensor directly.

An essential part of modern trucks

A NOx (nitrogen oxide) sensor is typically a high-temperature device that measures the level of nitrogen oxides in exhaust systems, which is strictly regulated by authorities in all parts of the world.

The measurement also helps optimize engine operation, ensuring proper functioning of the exhaust after-treatment system.

Thoroughly tested

All NOx Sensor products match OE criteria and are calibrated and controlled at test facilities.

The Dinex Group is a leading global manufacturer and distributor of innovative engineered exhaust and emission control products and solutions for the heavy duty and gas engine industry.

Today, the Dinex Group, headquartered in Denmark, operates through 16 companies and employs approximately 1.400 dedicated people worldwide. The Dinex Group is present in 14 different countries with production and sales facilities in Denmark, UK, Finland, Germany, Latvia, USA, Turkey, Russia and China. Additionally, the Dinex Group has sales companies in Spain, Italy, France, Germany, UK, Poland and Serbia.



Global Headquarter

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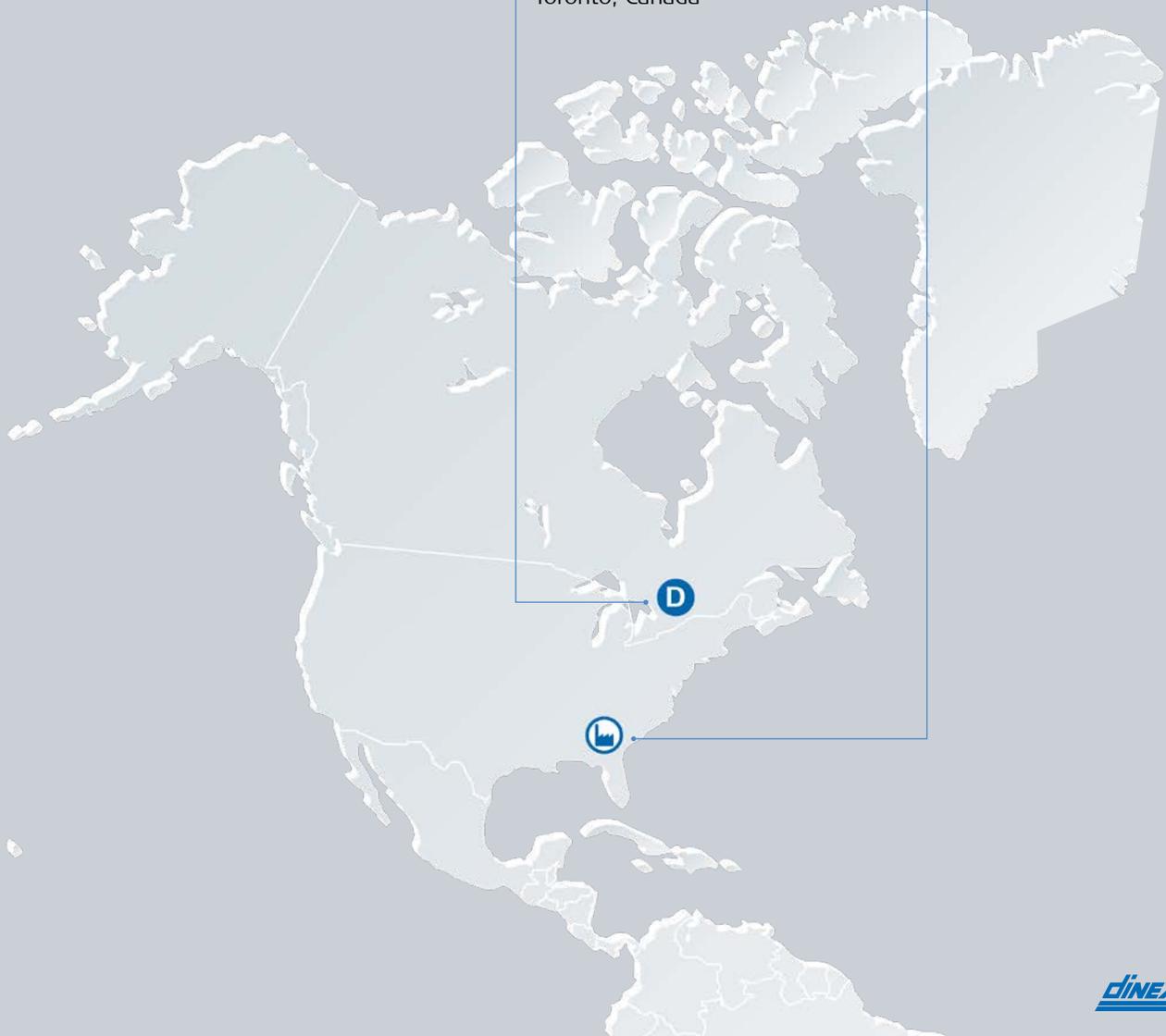
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**American
Made**



in Dublin, Georgia

Quality from Turbo to Tailpipe

DOCs and Emission Technologies

Particulate filters and SCR cats installed into our muffler systems.

Insulation Techniques

Keeping heat where it should be. Hot inside and cool outside.

Mufflers

Lock seamed, stamped or welded units. We supply aluminized or stainless steel in 125 different sizes from our own tooling shop.

Flex Pipes & Bellows

Dinex offers our well-known 3S flex pipes. Additionally, we have developed a low-leakage bellow for emission applications.

Clamps

A complete range of low-leakage clamps "tight-fit".

Exhaust Fittings

All fittings are made in-house for complete systems supply.

Pipes

Bends from 2" to 6" in aluminized or stainless steel.

Advanced Production

Advanced production techniques ensure our parts work over long distances and times.

We produce our ceramics, coatings, and formed metal in-house to ensure every part going out the door meets our standards.

Dinex employs processes to reduce the number of welds and joints to create longer lasting products.

Standards Driven

Dinex is ISO 9001 certified, as well as holding a number of international certifications.

The Dinex Difference



Dinex is ready to serve you

01-2019 / 1A0024

going the extra mile



DinexEmission.com