



DIESEL PARTICULATE FILTERS FOR MARINE AND RAIL APPLICATIONS

To meet ever-toughening regulatory requirements,
the MobiClean from MIRATECH is the one to bank on.

ADVANTAGE: ACTIVE OR PASSIVE REGENERATION

Most diesel particulate filters use engine exhaust heat to oxidize – or combust – particulate matter in the diesel exhaust stream. With this “passive regeneration,” your engine exhaust must reach a temperature of 700 to 1050° F to oxidize soot trapped by the filters. At cold starts and with light loads, carbon and lube oil ash, as well as unburned fuel lube oil, accumulate on the filters – and that buildup increases backpressure on the engine.

The MobiClean gives you the option of *active regeneration*, using its own built-in heat-source. You don’t have to wait for warm-up or rely on heavy loads or load banks. With active regeneration, the

MobiClean goes to work – trapping and burning 99 percent of diesel soot, including toxic sub-micron nanoparticles – as soon as you turn your engine on, with any engine load.

For high-temperature applications, the MobiClean also comes without a built-in burner, using engine exhaust heat to regenerate filters.

Either way, the MobiClean helps you meet the toughest particulate emission reduction requirements, regardless of what type of diesel fuel you use. Ultra low sulfur fuel isn’t needed. Easy to install and easy to maintain, it operates within OEM-specified engine backpressure limits. It even delivers sound attenuation and can replace an exhaust silencer.

» PROVEN APPLICATIONS



WHY MIRATECH?

- » Advanced Technology
- » Cost-Effective, Comprehensive Solutions
- » Unsurpassed Experience & Expertise
- » Fast, Responsive, Customer-Focused Service & Support

INDUSTRY SOLUTIONS

- » Power Generation
- » Rail
- » Marine
- » Gas Compression
- » Water Pumping
- » Air Compression

MobiClean DPF

HOW IT WORKS

All diesel particulate filters remove particulate matter (PM) from diesel exhaust. Then, most take the “passive” approach, using high-temperature exhaust heat to combust trapped particles or “regenerate” filters. At cold startup or with light loads, they simply can’t do the jobs you’ve bought them to do.

The MobiClean difference: *active regeneration*. For light or variable load applications, it comes with its own heat source, built-in – so it works as soon as your engine starts up, and its performance is independent of engine load or exhaust temperatures. The MobiClean traps PM on the surface of a porous silicon carbide filter. Monitoring backpressure on the engine and automatically activating a built-in diesel fuel duct burner, the system burns off particulates as they accumulate on the filter. This leaves only a small amount of ash on the filter surface that can be removed during regular maintenance.

For high temperature, steady-load applications, the MobiClean also comes without built-in burners, using exhaust heat to burn off particulates.

COMPLIANCE: ASSURED

Diesel particulate reduction requirements vary from place to place for Power Generation, Rail, and Marine applications. The MobiClean meets your needs for particulate emission reduction wherever you run your engines, no matter how strict applicable regulations may be. In fact, the MobiClean clears exhaust of 99 percent of diesel particulates – including toxic sub-micron carcinogens and nanoparticles. It also reduces visible smoke, which can be an issue for hospital HVAC systems, manufacturing applications – or facilities that simply need to be good neighbors.

THE DOLLAR-WISE SOLUTION

With the MobiClean, you avoid the need to switch to ultra low sulfur fuel: the MobiClean keeps your operation on the right side of the soot-reduction non-compliance fine-line with No. 2 diesel fuel or any other fuel you choose. That alone can save you tens of thousands of dollars each year, compared with other soot-control solutions.

The MobiClean operates within OEM engine back-pressure limits – with low pressure loss and minimal impact on engine performance and fuel consumption. Plus, you have only a single unit to install and maintain.

It even delivers noise reduction in addition to soot control, and can replace exhaust silencers. Designed and built for rugged, long-term, failsafe operation, each unit is easily accessible and comes equipped with modular components, which cuts maintenance time, costs, and hassles – and reduces the need for operational shutdowns. A proven performer in power generation, the MobiClean is tailor-made for marine and rail applications in the 500 kW - 7 MW range and can be customized for retrofit or OEM packages.



WHY THE MOBICLEAN DIESEL PARTICULATE FILTER?

- » Active Regeneration
 - Cost-Effective Compliance Assured: Anywhere, All The Time
 - Independent Of Exhaust Temperature Or Engine Load
- » For High Temperature Applications: Available Without Built-In Burners

APPLICATIONS

- » Diesel Engines (500kW-7MW)
 - Power Generation
 - Rail
 - Marine
 - Chillers
 - Compressors

FEATURES & BENEFITS

- » Traps & Oxidizes 99% Of Particulates – Including Nanoparticles
- » Meets The Toughest Soot-Control Regulations
- » Works With Any Diesel Fuel
- » Low Backpressure – Within Engine Manufacturer Specifications
- » Minimal Impact On Engine Performance & Fuel Consumption
- » Rugged Design: Failsafe, Long-Lasting, Low-Maintenance Operation
- » Easy Installation & Startup: Single Unit
- » Fast, Easy Maintenance: Easily Accessible; Modular Components
- » Proven In Power Generation & Rail Applications
- » Poison Resistant
- » Sound Attenuation Included – May Replace Exhaust Silencer
- » Competitively Priced

CONTACT MIRATECH

To fire up your compliance program with the MobiClean – or to find out more about other MIRATECH emissions solutions – simply give us a call: 918-933-6246. Better yet, visit our website at www.miratechcorp.com