

# EXHAUST GAS SILENCERS

## PRODUCT OVERVIEW

**ENEVA Exhaust Gas Silencers are high-performance acoustic solutions designed to reduce noise generated by high-temperature and high-flow exhaust gases without compromising equipment performance.**

They are widely used in gas engines, gas turbines, diesel generators and industrial process stacks where noise control is critical for environmental compliance, workplace safety and operational reliability.

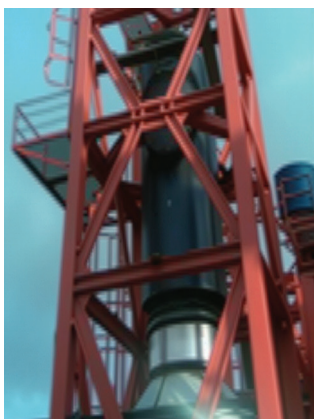
Each silencer is custom engineered to meet specific acoustic attenuation targets while maintaining acceptable back pressure limits for connected equipment.

## MAIN ADVANTAGES

- Effective attenuation of both low and high frequency noise
- Acoustic performance up to 50 dB(A) noise reduction
- Designed for high temperature exhaust gases (up to 600°C)
- Optimized back pressure to protect equipment performance
- Custom acoustic design based on project requirements
- Robust construction for heavy-duty industrial environments
- Long service life with minimal maintenance



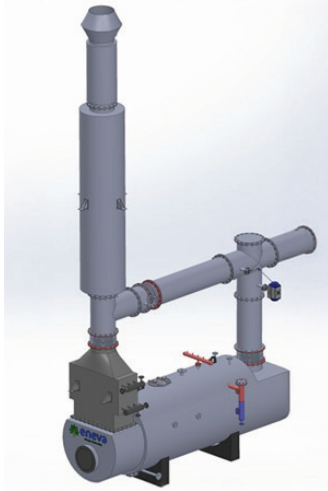
## ENEVA ENGINEERING APPROACH



**Each ENEVA silencer is designed through detailed acoustic and mechanical calculations:**

- Acoustic design based on required sound attenuation levels
- Compliance with engine/turbine back pressure limits
- Material selection based on exhaust gas composition and temperature
- Structural design considering thermal expansion and mechanical loads
- Optional integration of spark arresters, insulation and special connections

This project-based engineering approach ensures optimal performance for each application.



<b>Attenuation Performance</b>	Up to 50 dB(A)
<b>Operating Temperature</b>	Up to 600°C
<b>Inlet Diameter Range</b>	DN100 – DN2000
<b>Silencer Type</b>	Reactive / Absorptive / Combined
<b>Shell Geometry</b>	Circular, rectangular or oval
<b>Flow Configuration</b>	Axial or radial inlet/outlet
<b>Material Options</b>	Carbon steel, Corten steel, stainless steel
<b>Surface Treatment</b>	High temperature resistant coating
<b>Standards</b>	ISO 13920 (dimensional tolerances)

## TYPICAL APPLICATIONS

- Gas engines (natural gas, biogas, landfill gas)
- Gas turbines
- Diesel generator sets
- Marine and heavy-duty engines
- Industrial process stacks with high noise levels
- Compressor and blower intake systems

## DELIVERY OPTIONS

- Support saddles and lifting lugs
- Drain connections and inspection points
- Access doors (if required)
- Spark arresters (optional)
- External insulation (optional)
- Counter flanges and connection accessories

## DESIGN AND WORKING PRINCIPLE

ENEVA exhaust silencers operate based on reactive, absorptive or combined (reactive + absorptive) attenuation principles.

The system works as follows:

- Exhaust gas enters the silencer body
- Internal chambers and flow paths guide and expand the gas flow
- Acoustic energy is dissipated through reactive chambers and absorptive materials
- Noise levels are reduced to the required target level

The silencer dimensions (diameter and length) are determined according to exhaust gas flow rate, temperature and required noise attenuation level.

All designs ensure that noise reduction is achieved without exceeding allowable back pressure limits defined by equipment manufacturers.

## WHY ENEVA?

- Advanced acoustic and mechanical design capability
- Project-specific engineering approach
- Compliance with industrial and environmental standards
- High manufacturing quality and durability
- Reliable solutions for critical noise control applications

[www.enevaenerji.com.tr](http://www.enevaenerji.com.tr)

**HEAD OFFICE:** Adnan Kahveci Mah., Sishane Sok., Zigana Tria Ofis Plaza, No : 3/2, Daire : C 45, Beylikduzu / Istanbul / TR

**WORKSHOP:** Cumhuriyet Mah., Zubeyde Hanim Cad., Uysal 2 San. Sitesi, D1, Corlu / Tekirdag / TR

**T:** +90 (212) 982 46 14 **E:** info@enevaenerji.com.tr