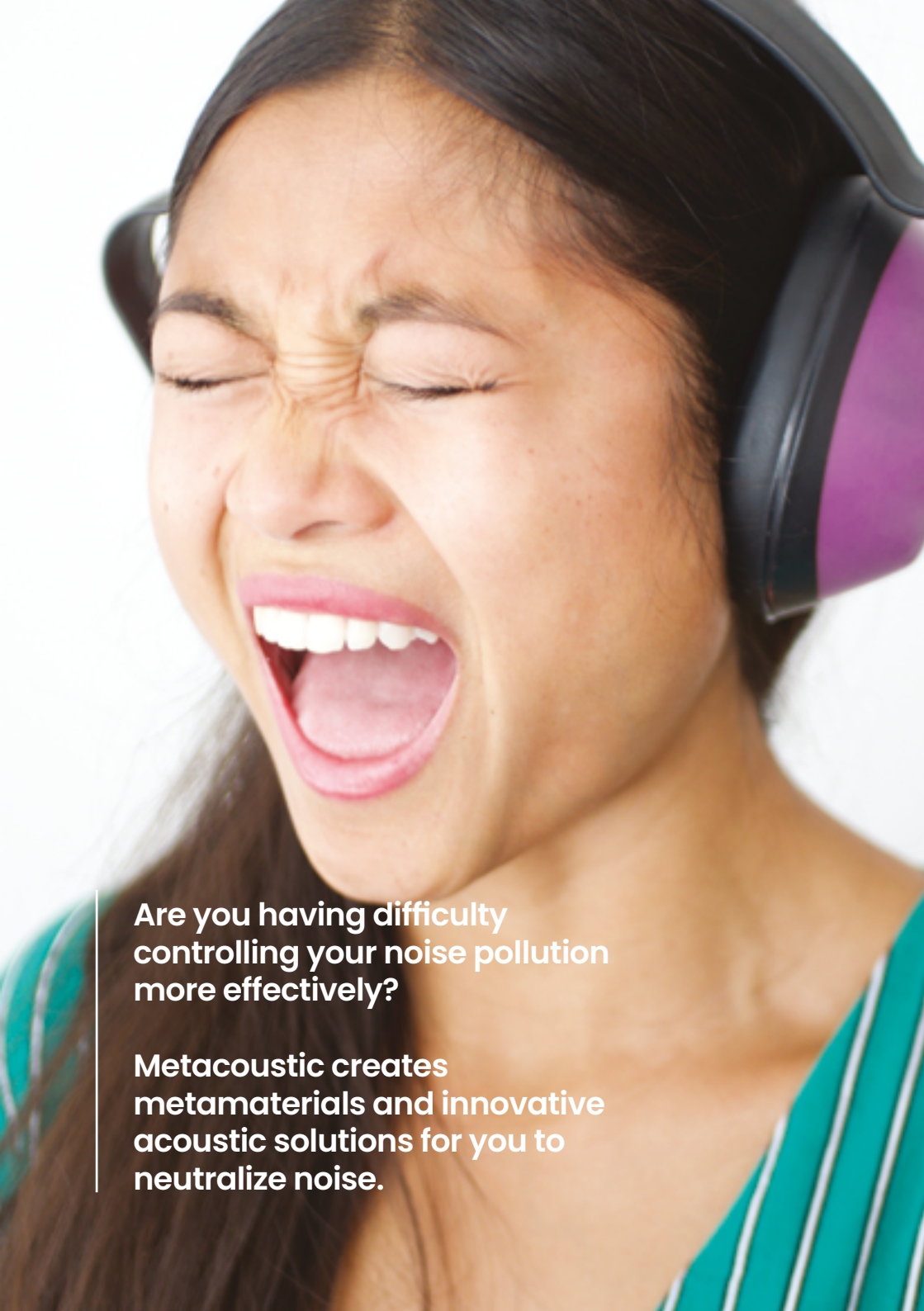


METACOUSTIC

Acoustic metamaterials and
innovative solutions creators





**Are you having difficulty
controlling your noise pollution
more effectively?**

**Metacoustic creates
metamaterials and innovative
acoustic solutions for you to
neutralize noise.**

Metamaterials

FROM GREEK «WHICH IS BEYOND MATERIAL»

Metamaterials are periodically structured composite materials with extraordinary properties. In acoustics, these are treatments that make it possible to counter the noise and obtain **exceptional performances** much lighter or thinner than standard solutions.



Metacoustic

CREATORS OF METAMATERIALS
AND INNOVATIVE ACOUSTIC
SOLUTIONS

Metacoustic develops its expertise in metamaterials and innovative acoustic treatments in order to offer **R&D services and patented solutions** for manufacturers encountering noise-related problems.

The studies range from the audit step to the industrial implementation of complex acoustic solutions. To do this, Metacoustic relies on its good understanding of vibro-acoustic phenomena and on its expertise in measurement and simulation, in particular with the finite element method.

On the other hand, Metacoustic offers patented solutions, such as **Metablocker**, a particularly light and thin insulating acoustic metamaterial to attenuate low frequencies.





CUSTOMISED R&D SERVICES

1 Acoustic diagnostics for industrial purpose

- Analysis of acoustic, vibration or sound issues and optimization advice
- Advanced diagnostics by simulations and measurements in situ or in a test center
- Acoustics seminar in your company

2 Implementation of metamaterials or innovative acoustic solutions

- Development and creation of specific solutions
- Acoustic optimisation by simulation
- Experimental validation on samples

3 Industrial proof of concept

- Development of industrial prototypes
- Production of pre-series
- In-situ or bench measurements of the final product

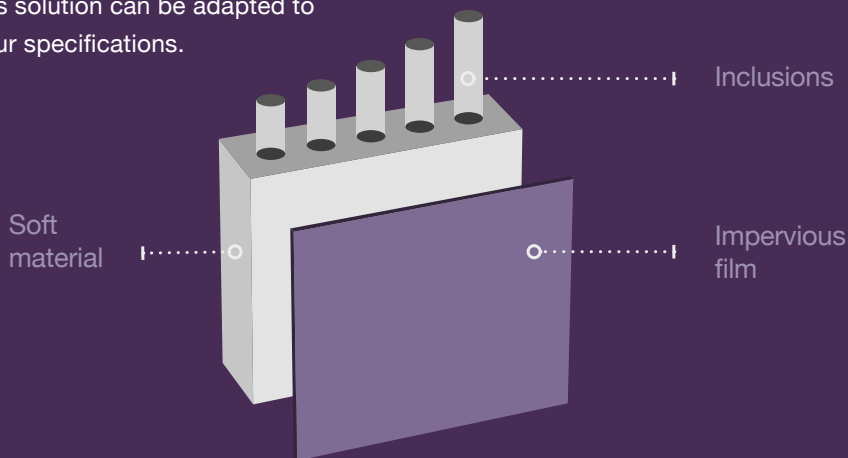


Metablocker

METABLOCKER IS A METAMATERIAL THAT NEUTRALIZES ACOUSTIC AND VIBRATION POLLUTION

It is composed of a flexible material and periodically arranged diffusers. It achieves unparalleled acoustic performance, particularly at low frequencies: it is possible to halve the level of noise perceived compared to a conventional solution, or to have a material that is **twice as light for equivalent efficiency**. Its flexibility allows it to accept a certain amount of deformation and thus to adapt to uneven surfaces.

Whatever your industrial sector, this solution can be adapted to your specifications.



- **Insulation gain* :**
 - + 8 dB Rw on average
 - + 20 dB at certain frequencies
- **Twice as light for the same performance**

*for a 3 cm thick metablocker, compared to standard solutions of the same size

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They trust us :

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DE L'ATLANTIQUE**

 **Faiveley** Transport
A Wabtec Company

atlantic 

 **BOSCH**

 **elm.leblanc**





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