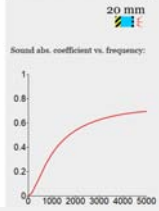


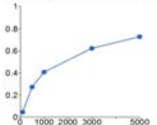
Influence of a perforated plate on an air-gap

The next figure presents the sound absorption coefficient of a + 0.5 mm-thick perforated plate (or facing screen) with:
 • a perforation rate of 20 %
 • and a perforation radius of 2 mm
 backed by an air-gap (or plenum) of 20 mm-thick.



Strut thickness: 100 microns.

ACOUSTIC PROPERTIES:
Sound abs. coefficient vs. frequency

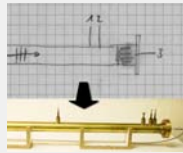
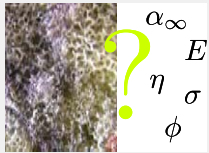


ELASTIC PARAMETERS:
E = 1100 kPa

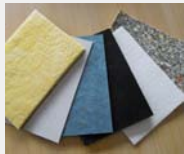
THERMAL CONDUCTIVITY:
lambda = 1.02 W/K/m



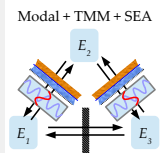
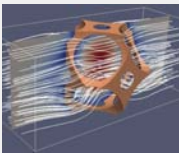
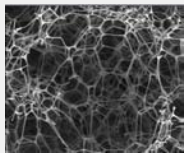
Prepare to be MATELYS approved !



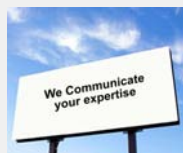
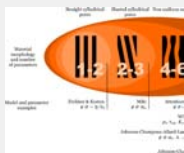
Characterization We characterize the acoustic and elastic parameters of porous materials. We also characterize sound sources.



Prescription At the interface between suppliers and customers, we prescribe noise control solutions and assist you to meet multi-functional specifications.



Research We lead R&D projects in materials, acoustics, mechanics, thermodynamics and flow.



Training We provide training sessions and design specific tools to disseminate your expertise : porous materials, perforated plates, micro-macro approaches, building acoustics, automotive acoustics...



Products We provide turnkey test rigs for porous material characterization and for acoustic & vibration measurements.



multi-layer prediction



Micro-Macro models



porous, screens & liners charac



material database



impedance tube meas



ISO 10140 & ISO 354 meas



piping meas & analysis

Software We develop original software products. As we are first users and developers, we offer a responsive and skilled support.