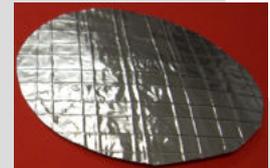


TubeCell

*Don't change your setup,
just improve the way you are using it !*



TubeCell is an acquisition software to manage **impedance tube measurements**.

It is adapted for both the assessment of surface properties and **porous material characterization**.

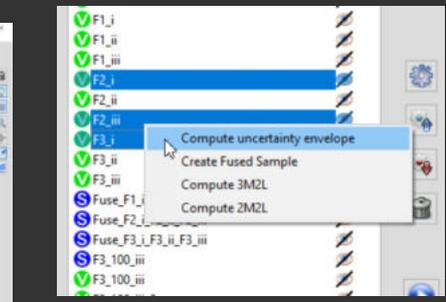
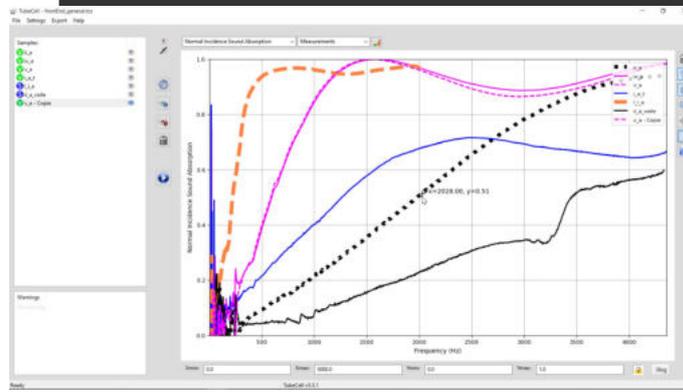
Working under a measurement mode or a post-processing mode, it will simplify your measurement campaign.

It is asked for by technicians and required by engineers.

Prepare to be **MATELYS** approved !



TubeCell

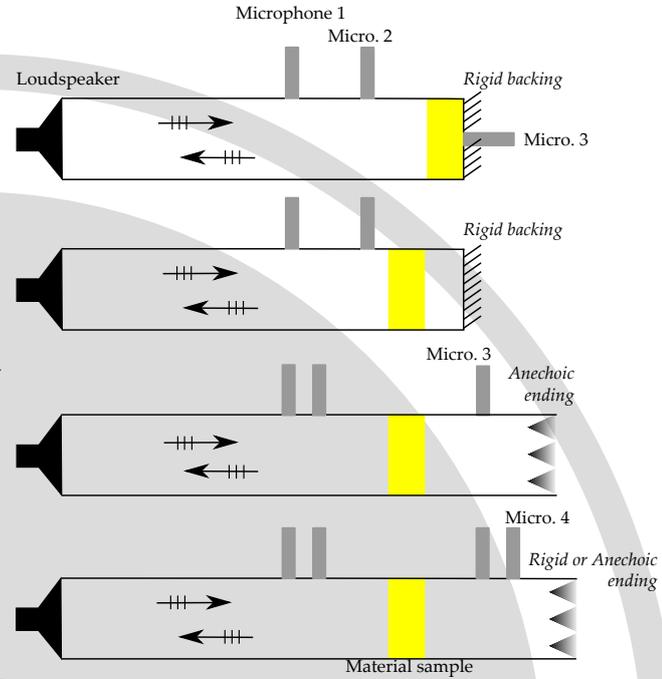


For surface properties measurements or porous characterization

- adapted to your existing setup
- handles arbitrary impedance tube configurations
- manages the pre- and post-processing.

Key features

- complying **ISO 10534-2, ASTM E1050-12, ASTM E2611**
- various source signals : **PRN, white noise** ...
- individual microphone **calibration**
- **ICP** and power conditioned microphones
- **guided** measurement procedure
- **asymmetric** material measurement (ρ_{eq}, K_{eq}, χ)
- measurement **uncertainty envelopes**
- **inter sample dispersion envelopes**
- **quality check**
- handles temperature, pressure and humidity conditions



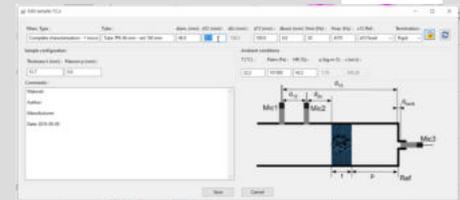
Surface properties

- absorption
- transmission
- reflection coefficient
- surface impedance
- microphone transfer functions
- coherences & autospectra
- transfer matrix coefficients



Bulk properties

- dynamic mass density
- dynamic compressibility
- characteristic wave number
- characteristic wave impedance
- dissipated powers

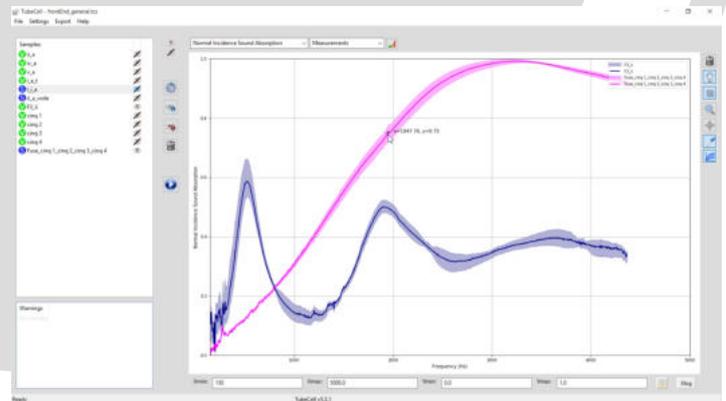


Dedicated features

- **2M2L & 3M2L** methods
- **overlapping** procedure
- **multiple sample** export
- **third octave band post-processing**
- native export of **impedance data** :

OptiStruct, Actran, Coustyx, VA-One ...

- export to **AlphaCell**
- export to **RokCell**



MATELYS also provides **turnkey impedance tubes and characterization setups** for :
porosity, resistivity, tortuosity, elastic modulus ...

AlphaCell

RokCell