Measurement Information

- Measured Flow Velocities: u (m/s) = 10,3; 20,5; 39

(mean flow Velocity = 0.8 * Measured Flow Velocity)

- Pressure Drop without Tailpipe (at three velocities): delP (N/m2) = 126; 485; 1690
- Pressure Drop with Tailpipe (at three velocities): delP (N/m2) = 110; 440; 1544
- Density: Rho (kg/m3) = 1.2
- Temperature: T (C) = 20
- Tailpipe: Diameter D (m) = 0.11 ; Length L (m)=0.55

Data Info:

- **File Names:** the .dat/.mat files have the following name format → ***SPL_1_3_OCT_ TailpipeAttachement_FlowVelocity.mat***
    1.) ***Tailpipe attachment*** has two types:
        a. *'woTail'* = without attached Tailpipe
        b. *'wTail'* = with attached Tailpipe
    2.) ***FlowVelocity*** *has three types:*
        a. '*u10*' = Flow velocity is 10,3 m/s
        b. 'u20' = Flow velocity is 20,5 m/s
        c. 'u40' = Flow velocity is 39 m/s
- Apart from that .mat file **SPL_1_3_OCT_RSS1.mat** has the SPL measurements (in dB) of the reference sound source.
- **For Sound Power Level (SWL) of Reference Sound Source Calculations:**
    1. Load *RefSoundSource.mat*, the SWL in dB is in the variable *Ref_Ters* and corresponding frequencies are in the variable *Ref_Freq*.
- **For A weight Calculations:**
    2. Load *Aweight.mat*, the A weight difference to be added to the measured/calculated SPL/SWL (in dB) is in the variable *A* and corresponding frequencies are in the variable *Ref_Freq*.
- **.mat files Variables:**

1.) Variable **Frek**: Frequency datapoints of measurement in Hertz

2.) Variable **SPL_1_3_Oct**: 1/3rd Octave Sound pressure level (in dB)