

Software SILDIS® Module 1B: muffler mountings

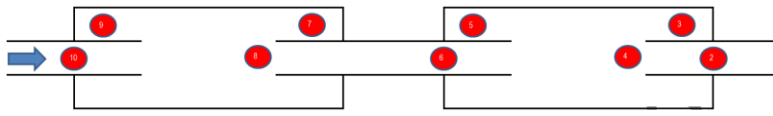
Muffler mountings with long expansion chambers

→ **chamber(s) with axial inlet & with axial outlet** - elements 4, 8, 12 can be either reacting or dissipative (*)

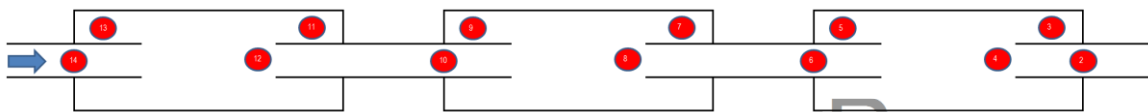
EC1 = 1 expansion chamber



EC2 = 2 expansion chambers, with 1 or more connecting tubes (without overlapping)

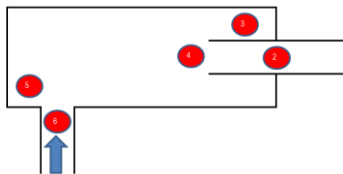


EC3 = 3 expansion chambers, with 1 or more connecting tubes (without overlapping)

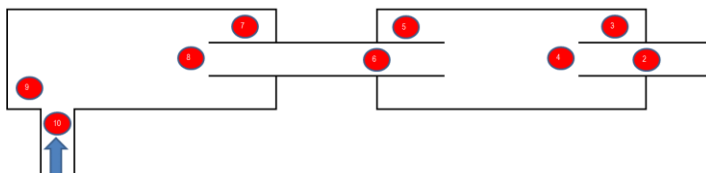


→ **Chamber(s) with side inlet** - for mounting EC2SI element 4 can be either reacting or dissipative (*) - for mounting EC3SI elements 4, 8 can be either reacting or dissipative (*)

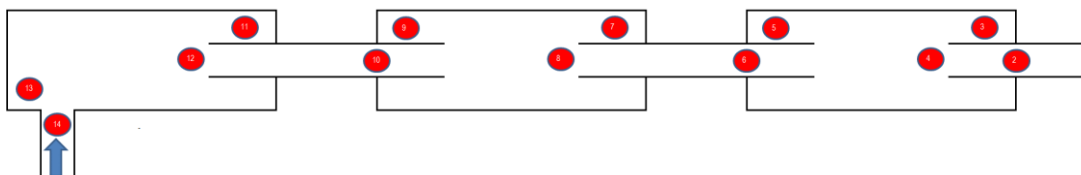
EC1SI = 1 expansion chamber, with side inlet



EC2SI = 2 expansion chambers, with 1 or more connecting tubes (without overlapping), with side inlet



EC3SI = 3 expansion chambers, with 1 or more connecting tubes (without overlapping), with side inlet



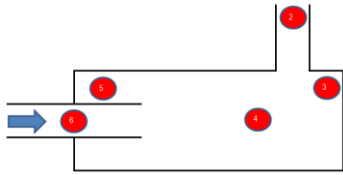
* output data of Module 1 of software SILDIS to be used as input data for module 1B

Software SILDIS® Module 1B: muffler mountings

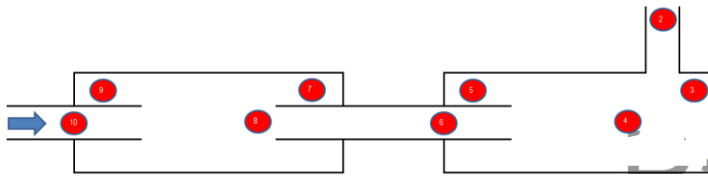
Muffler mountings with long expansion chambers

→ **chamber(s) with side outlet** - for mounting EC2SO element 8 can be either reacting or dissipative (*) - for mounting EC3SO elements 8, 12 can be either reacting or dissipative (*)

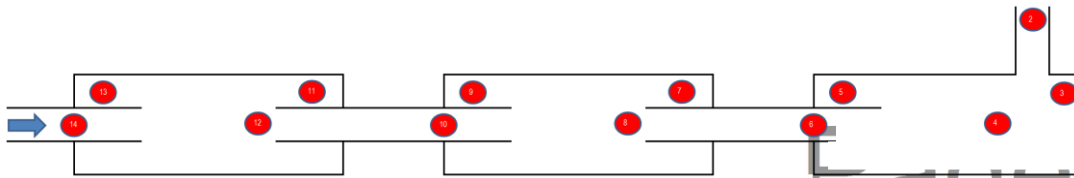
EC1SO = 1 expansion chamber, with side outlet



EC2SO = 2 expansion chambers, with 1 or more connecting tubes (without overlapping), with side outlet

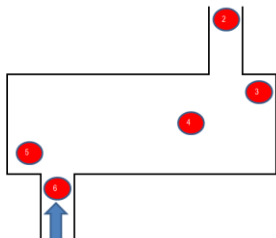


EC3SO = 3 expansion chambers, with 1 or more connecting tubes (without overlapping), with side outlet

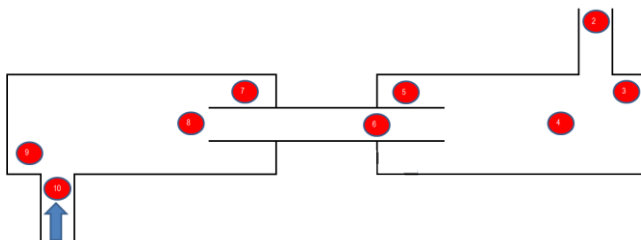


→ **chamber(s) with side inlet & with side outlet** - for mounting EC2SISO dissipative (*) - for mounting EC3SISO element 8 can be either reacting or dissipative (*)

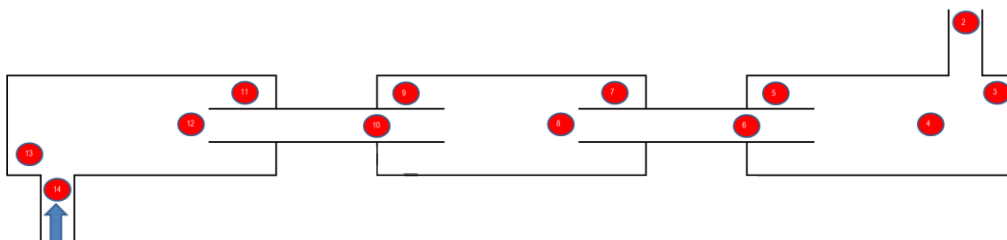
EC1SISO = 1 expansion chamber, with side inlet, with side outlet



EC2SISO = 2 expansion chambers, with 1 or more connecting tubes (without overlapping), with side inlet, with side outlet



EC3SISO = 3 expansion chambers, with 1 or more connecting tubes (without overlapping), with side inlet, with side outlet



* output data of Module 1 of software SILDIS to be used as input data for module 1B

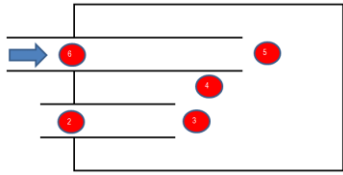
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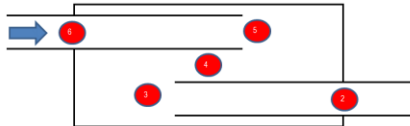
Muffler mountings with long expansion chambers

→ **chamber(s) with overlapping tubes**

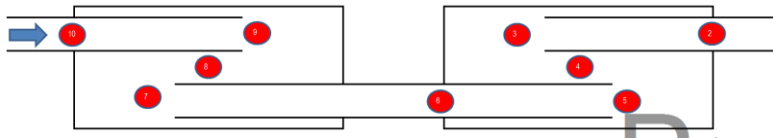
EC1R1 = 1 expansion chamber, with 2 overlapping tubes on a same side



EC1R2 = 1 expansion chamber, with 2 overlapping tubes



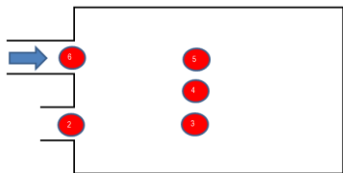
EC2R22 = 2 expansion chambers, with 2 overlapping tubes in each expansion chamber



Muffler mountings with short expansion chambers

→ **chamber with elliptical geometry**

EC1R1* = 1 expansion chamber, with 1 flow reversal



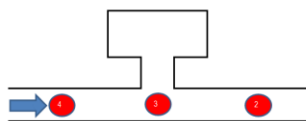
Software SILDIS® Module 1B: muffler mountings

Muffler mountings with Helmholtz resonators

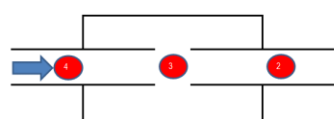
→ **cavity(ies) with Short neck or with Long Neck** - for mounting ECHRLNEC element 4,10 can be either reacting or dissipative (*)

HR1SN = single Helmholtz Resonator Short Neck & HR1LN = single Helmholtz Resonator Long Neck

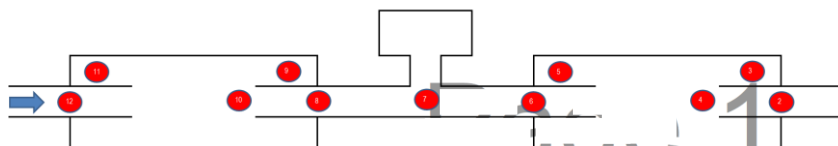
Side branch



Concentric

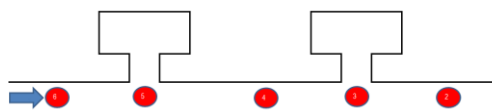


ECHRLNEC = Expansion Chamber + Helmholtz Resonator Long Neck + Expansion Chamber

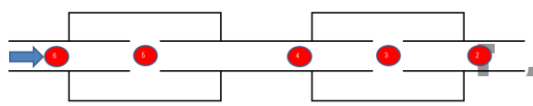


HR2SN = double Helmholtz Resonator Short Neck & HR2LN = double Helmholtz Resonator Long Neck

Side branch



Concentric



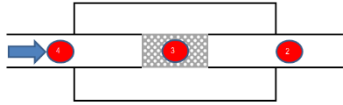
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Software SILDIS® Module 1B: muffler elements

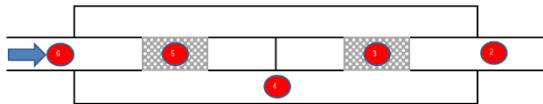
Muffler mountings with perforated tubes

→ **concentric resonator(s)**

EC1P1 = 1 expansion chamber, with 1 perforated tube



EC1P2 = 1 expansion chamber, with 2 perforated tubes (plug silencer)



EC1P1+ = 1 expansion chamber, with 1 perforated tube & with an extension like for a vent silencer diffuser

