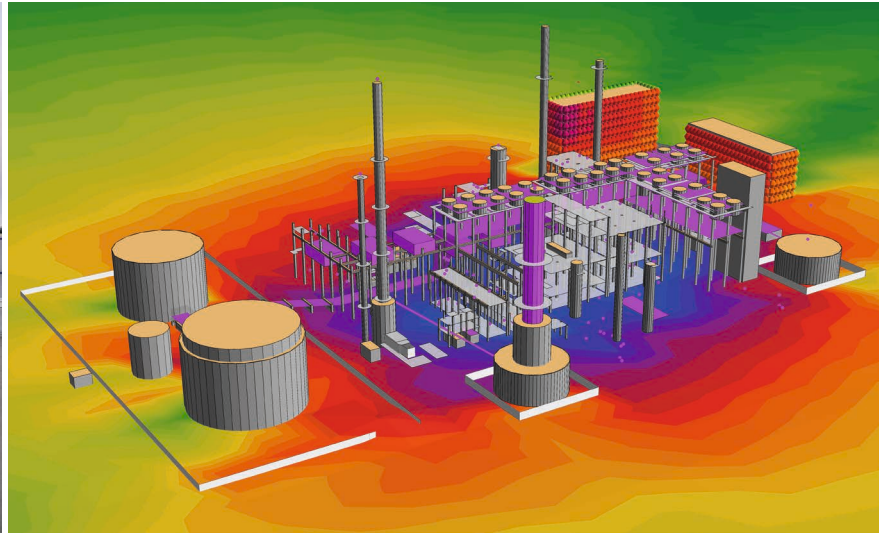


# SoundPLAN®

noise



## Tools Industrial Noise

### Extended display options

Frequency dependent result presentation of large industrial projects with numerous sources

### Sound power level

Calculate the source level based on measurements

### Optimization

Find the most efficient concept to reduce the noise in the surroundings

### Flexible

Define the frequency dependent sound power level of your source with freely definable formulas

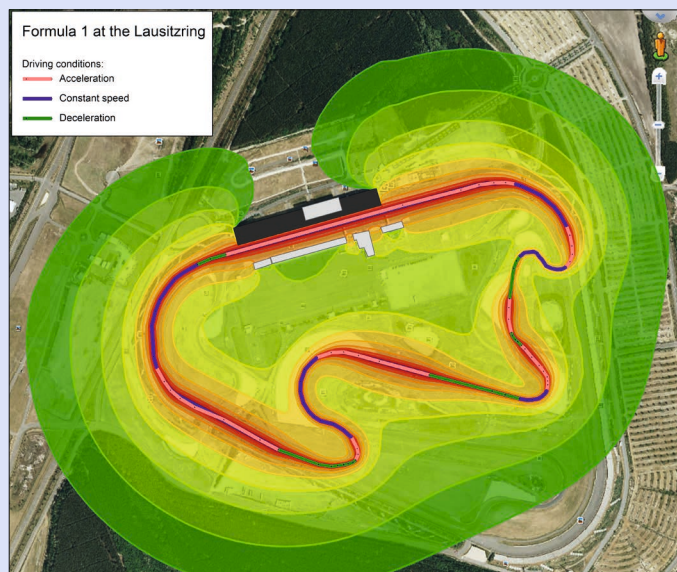
## Tools Industrial Noise

The additional module “Tools Industrial Noise” offers valuable additional possibilities to make your work as easy and efficient as possible.

Expert Industry is an analysis tool to develop noise control concepts for industrial complexes that often have very extensive and complex results data. By means of multiple visualizing options it is possible to view the data at the same time from different aspects. This helps in quickly figuring out the problematic receivers and the relevant sources, to recognize noise reduction potentials and to manually or automatically select the measure with the best ratio of cost to performance out of different noise control options.

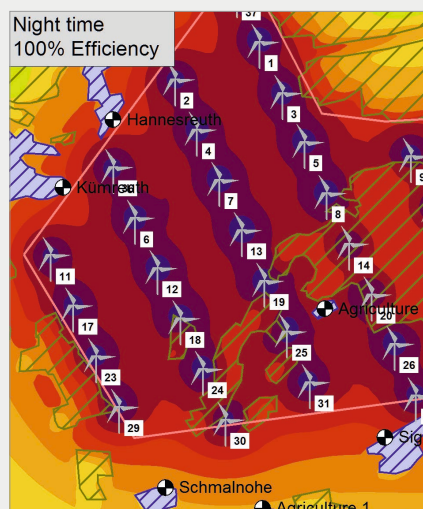
The sound power of a point, line or area source can be calculated with formulas from any desired technical parameters. With this tool it is, for example, possible to calculate the inner noise level of a pipe consisting of compressors, silencers and regular pipe elements and the emitted noise. This way the emission of a single line source (pipeline) automatically changes as a function of the distance from the beginning of the line or the position relative to the noise generators in the pipeline network.

The possibility to determine the frequency dependent



Source definition based on free definable formulas, even dependent on position and other sources

sound power level of one or several noise sources from in-situ measured sound pressure levels completes the module “Tools Industrial Noise”. This is especially helpful if there are no manufacturer specifications of the noise sources or if there is no possibility to measure them in isolation under laboratory conditions.

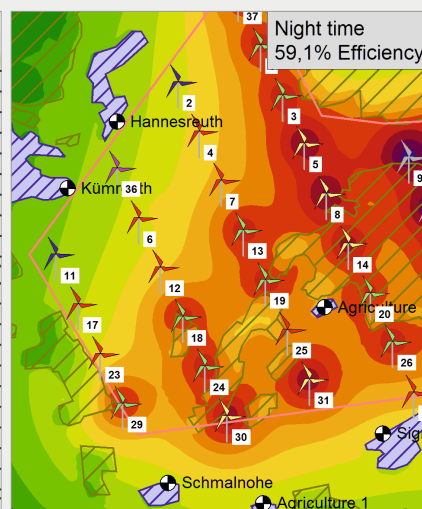


### Signs and symbols

- Wind turbine - operation mode day/evening/night - 100/100/10
- Wind turbine - operation mode day/evening/night - 100/100/95
- Wind turbine - operation mode day/evening/night - 100/100/90
- Wind turbine - operation mode day/evening/night - 100/100/0%
- Wind turbine - operation mode day/evening/night - 100/95/0%
- Wind turbine - operation mode day/evening/night - 100/90/0%
- Built up area
- Forest
- Point receiver

Optimization concept for a wind farm. SoundPLAN selects the most efficient noise reduction measures (turbine operation mode), to keep the noise limits for all relevant receiver points. This saves your time and assures the highest electrical output possible

Source name	Measures night	Loss of electrical output [%]
Turbine 01	OpM 2	10
Turbine 02	OpM 4	100
Turbine 03	OpM 2	10
Turbine 04	OpM 3	100
Turbine 05	OpM 1	5
Turbine 06	OpM 3	100
Turbine 07	OpM 3	100
Turbine 08	OpM 1	5
Turbine 11	OpM 4	100
Turbine 12	OpM 3	100
Turbine 29	OpM 2	10
Turbine 30	OpM 1	5
Turbine 31	OpM 1	5
Turbine 32	OpM 3	100
Turbine 33	OpM 2	10
Turbine 34	OpM 3	100
Turbine 35	OpM 2	10
Turbine 36	OpM 5	100
Turbine 37	OpM 2	10
Total loss of electrical output:		40.92%



Software Designer and  
Consulting Engineers for  
environmental protection  
noise control  
room acoustics



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