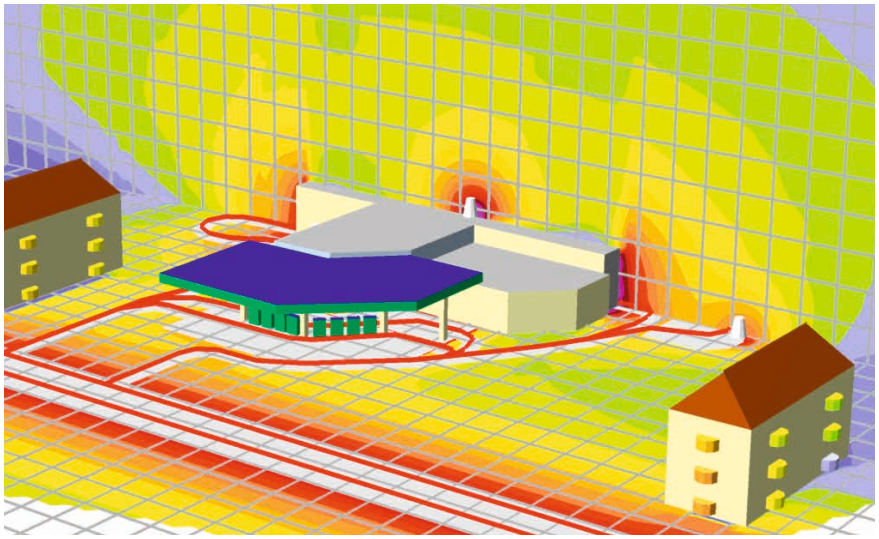
SoundPLAN® noise





Industrial Noise

Well-structured modeling
Geometry, source libraries and day histograms are clearly combined and assigned to the assessment time slices . The propagation calculation supports 1/1 and 1/3 octave bands from 1Hz to 20 kHz

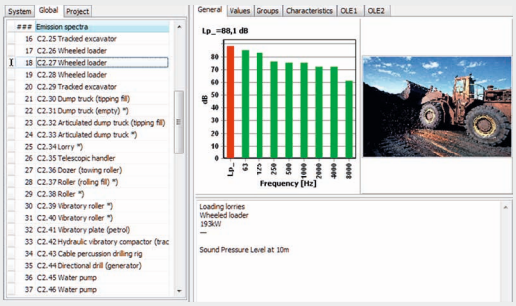
Integrated calculation with the industrial building
In one step the noise load in the surrounding is calculated from the indoor level taking into account the transmission properties of the facade elements

Detailed documentation
The calculation parameters, library elements, source properties and parameters of the propagation path are comprehensively documented

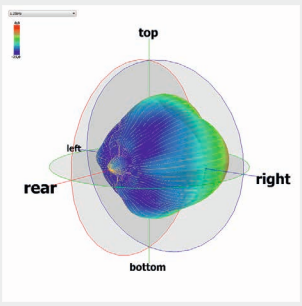
Sophisticated graphical representation
The results can be documented in groups, for single frequencies and frequency bands or as sum level with all the outstanding features of the graphical representation

Industrial Noise

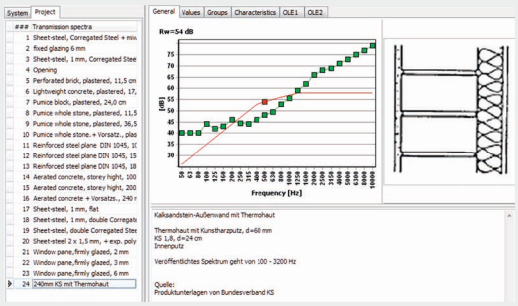
The flexible SoundPLAN concept allows a comfortable modeling of the geometrical situation. All important source properties such as frequency spectrum (in 1/1 or 1/3 octave bands from 1 - 20,000 Hz), directivity and day histogram are provided in libraries and combined with the sound source geometry. Additional features include the possibility to define an industrial building with emitting facades and embedded components on the basis of an indoor noise level. The transmission to the outside can be calculated allowing the building to be seamlessly integrated into an overall environmental noise calculation. Input parameters and results are documented in detail. The industrial noise module is complemented by the possibility to graphically present the immission of single groups or certain frequencies/frequency bands and the flexible libraries to administer two and three dimensional directivities including an interface to freely available loudspeaker data of different manufacturers. The automatic determination of frequency-dependent sound power levels from measurement values, the formula-dependent source definition (e.g. for pipelines) as well as the generation and optimization of attenuation concepts for complex industrial plants are part of the module “Tools Industrial Noise.”



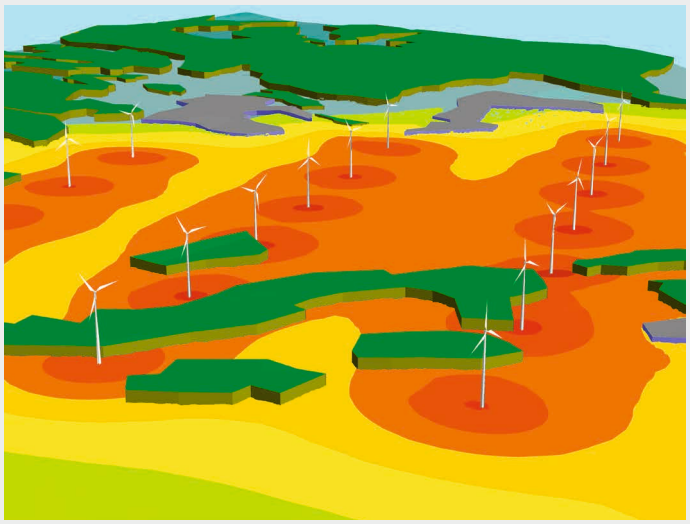
Emission library with hundreds of sources spectra



Visualization of a full 3D-directivity



Transmission library used for calculations from the inside to the outside of an noise emitting building



Calculation and optimization of wind turbines



Noise map calculated under consideration of coherency effects for 63 Hz (upper left) and 1000 Hz (lower right) of a complex stage setup with multiple line arrays

SOUNDPLAN - ONE PACKAGE - ONE PRICE - ALL GUIDELINES

Industry: ASJ CN-Model 2007 · BS 5228-1: 2009 · BUB: 2018/2021 · CNOSSOS-EU: 2015/2021 · Concawe · DIN 18005: 1987 · DIN 45691 · GPM:1982/2019 · HJ 2.4: 2009/2021 · HMRI-II.8: 1999 · Industry Noise Model - based on TNM: 1988 · ISO 9613-2: 1996/2024 · NF S 31-133: 2011 · Nord2000 · ÖAL 28: 1987 · ÖAL 28: 2019/2021 · ÖNORM ISO 9613-2: 2008 · Schall 03: 2012 (RuUBhf) · TA-Lärm einfaches Verfahren · VDI 2714: 1988

Wind turbines: BEK nr 1284 af 15/12/2011 · BEK nr 135 af 07/02/2019 · CNOSSOS-EU: 2015/2021 · IoA GPG Wind Turbine Noise · ISO 9613-2: 2024, Wind Turbines (Annex D) · ISO 9613-2 interim: 2015 · Nord2000 · ÖAL 28: 2019/2021 · ÖNORM ISO 9613-2: 2008

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