

ArtemiS SUITE
Project

Code 50570

APR 570 Metric Project

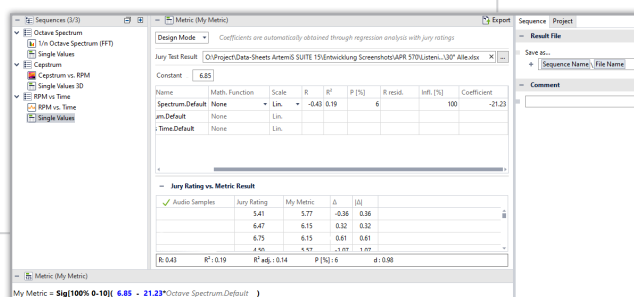
The Metric Project of ArtemiS SUITE enables the modeling of sound metrics consisting of a combination of several weighted single value results.

OPTIONS

ALL OPTIONS NOT INCLUDED IN APR 570 OR APR 000 MUST BE LICENSED SEPARATELY

SOURCES

- › SQala Projects (*.hsp)
- › Excel files (*.xls, *.xlsx, and *.xslm)
- › HDF files need to be stored besides the Excel file in the same folder



EXPORT

- › Metric Project (*.hmsx)
- › Performing Metric Projects with
 - › Pool Projects (APR 010 is required)
 - › Automation Projects (APR 050 is required)
 - › Standardized Test Projects (APR 220 is required)

SEQUENCES

- › Basic Analysis (ASP 001)
 - › FFT vs. Time, ...
 - › 1/n Octave Spectrum (FFT), ...
 - › Level vs. Time, ...
 - › Power Spectral Density, ...
 - › Single Value: Level
 - › ...
- › Basic Analysis vs. Control Ch. (ASP 002)
 - › Analyses from ASP 001 vs. Control Ch.
- › Advanced Analysis (ASP 003)
 - › VFR, ...
 - › HSA, ...
 - › Gated DFT, ...
 - › Wavelet
 - › ...
- › Advanced Analysis vs. Control Ch. (ASP 004)
 - › Analyses from ASP 003 vs. Control Ch.
- › Modulation Analysis (ASP 005)
 - › Modulation analyses vs. Time, vs. RPM, vs. Band, ...
- › Order Analysis (ASP 006)
 - › Order Spectrum vs. Time, vs. RPM, ...
 - › Time Signal vs. Rotation
- › Octave Analysis (ASP 007)
 - › 1/n Octave Spectrum (Filter) vs. Time, vs. RPM, ...
- › ASX 06 (Data Processing Add-In API)
 - › Analysis Add-In 3D
 - › Filter Add-In
 - › Analysis Add-In 2D, 3D
- › Psychoacoustics - Basic Analysis (ASP 101)
 - › (Specific) Loudness, ...
 - › (Specific) Sharpness, ...
 - › Tonality DIN 45681, ...
 - › Specific Fluctuation Strength, ...
 - › ...
- › Psychoacoustics - Basic Analysis vs. Control Ch. (ASP 102)
 - › Analyses from ASP 101 vs. Control Ch.
- › Psychoacoustics - Adv. Analysis (ASP 103)
 - › (Specific) Loudness (Hearing Model)
 - › (Specific) Roughness (Hearing Model), ...
 - › (Specific) Tonality (Hearing Model), ...
 - › (Specific) Impulsiveness (Hearing Model), ...
 - › Spectrum (Hearing Model)
 - › Relative Approach, ...
 - › ...
- › Psychoacoustics - Adv. Analysis vs. Control Ch. (ASP 104)
 - › Analyses from ASP 103 vs. Control Ch.
- › Speech Intelligibility Analysis (ASP 106)
 - › Speech Intelligibility Index vs. Time, ...
 - › ...
- › Offline Filters (ASP 301)
 - › IIR Filter, FIR Filter
 - › Differentiate, Integrate, Resample
 - › Unit Conversion
 - › ...
- › System Analysis (ASP 201)
 - › Transfer Function, ...
 - › Impulse Response, ...
 - › (Multiple, Partial) Coherence, ...
 - › (Cross, Auto) Correlation, ...
 - › (Cross, Auto) Spectrum, ...
 - › Harmonic Distortion, ...
 - › ...
- › System Analysis vs. Control Ch. (ASP 202)
 - › Analyses from ASP 201 vs. Control Ch.
- › Sound Power Analysis (ASP 203)
 - › Sound Power vs. Time, ...
 - › Noise Spectrum
 - › Sound Power K2 Environmental Correction Spectrum
- › Data Preparation (ASP 302)
 - › Concatenate Channels
 - › Cut 2D from 3D, ...
 - › Linear Smoothing
 - › Spectral Smoothing
 - › Single Value from Documentation
 - › Data Reduction, ...
 - › ...
- › Statistics (ASP 303)
 - › Min, Max, Sum, ...
 - › Distribution (Recording, Analysis), ...
 - › Difference (Channel, File), ...
 - › Statistic (File, Channel), ...
 - › ...

Sequences

Sequences are the core of the Metric Project. Each sequence can consist of any number of successive individual processes and provides one or several single value results for the metric.

The manual mode for linking the sequences can be used, for example, to implement a known combination of several partial values into a quality index.

Using the semi-automatic mode, users can have the weighting of their sequences calculated automatically based on listening test results.

The Metric Project is suitable for processing monaural sound samples. In case of multi-channel files, only the first channel is used.

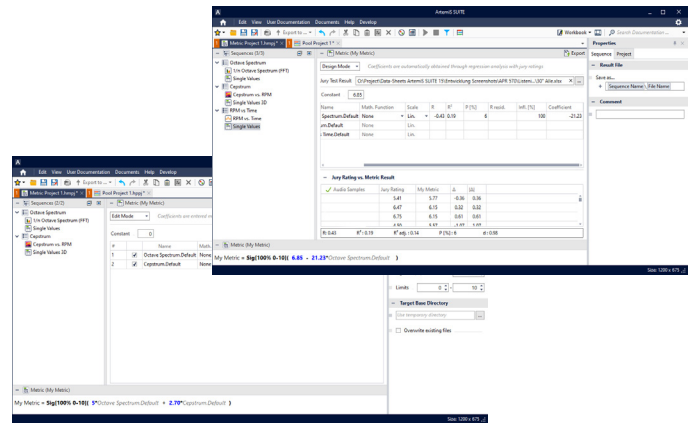
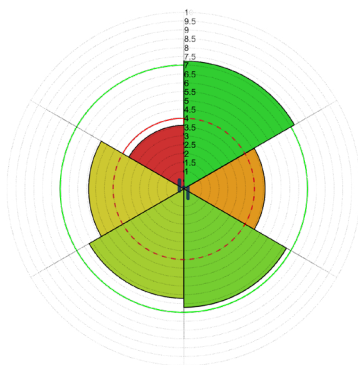
Export

Users can export their created metrics in order to provide them to co-workers in a company or to suppliers, for example.

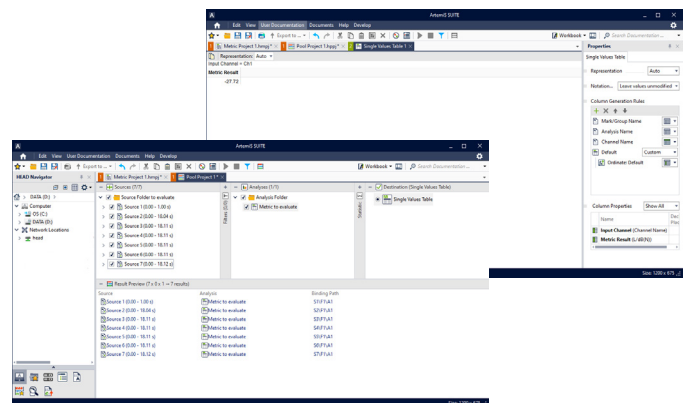
Core projects of ArtemiS SUITE, such as Pool Projects, Automation Projects, and Standardized Test Projects can process the metrics directly and also apply them to large amounts of data.

Quality index

The quality of a sound often depends on more than one parameter. With the help of calculation rules that combine different partial values and derive a characteristic single value, a meaningful quality index can be defined for a sound.



Edit and design modes.



A metric saved as HMSX file can be used in a Pool Project, for example, to calculate the specified metric for each individual channel of all input signals. The results can be exported as single values.

Required: APR 000 Framework (Code 50000)



Contact Information

Ebertstrasse 30a
52134 Herzogenrath, Germany
Phone: +49 (0) 2407 577-0
E-Mail: sales@head-acoustics.com
Website: www.head-acoustics.com