ArtemiS SUITE
Signal Processing

Code 51302

ASP 302
Data Preparation

The Data Preparation of ArtemiS SUITE is used to directly embed several processes for preparing measurement data in Automation Projects, Standardized Test Projects, and Metric Projects.

OVERVIEW

ASP 302
Data Preparation

Code 51302

ASP 302 provides several processes for preparing measurement data, which can be embedded into sequences of Automation Projects (APR 050 is required), Standardized Test Projects (APR 220 is required), and Metric Projects (APR 570 is required).

This enables users to combine their processes with other analysis and processing tasks in sequences of the project and perform them together automatically without user interaction.
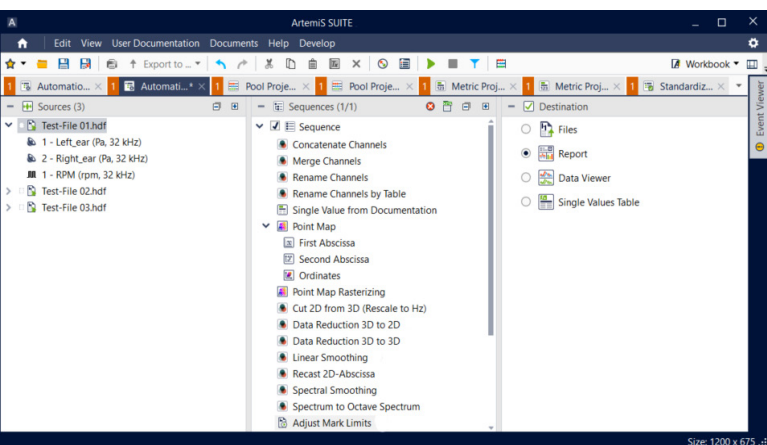
KEY FEATURES

Processes included in ASP 302:

› Mark by RPM
› Mark by Single Trigger
› Mark by Start/Stop Trigger
› Mark by Time
› Adjust Mark Limits
› Fragment Mark
› Linear Smoothing
› Spectral Smoothing
› Point Map
› Point Map (Gridded)
› Channel Difference Point Map
› Channel Statistic Point Map
› File Difference Point Map
› File Statistic Point Map
› Spectrum to Octave Spectrum
› Concatenate Channels
› Rename Channels by Table
› Merge Channels
› Rename Channels
› Cut 2D from 3D (Rescale to Hz)
› Data Reduction 3D to 3D
› Data Reduction 3D to 2D
› Single Value from Documentation
› Sort or Remove Channels
› Recast 2D-Abscissa

APPLICATIONS

› Creation and execution of processes for preparing measurement data in Automation Projects, ... for repetitive workflows without user interaction

DETIALS

INCLUDED IN ASP 302

MARK BY RPM

Mark definition on the basis of two values from the reference channel.

MARK BY SINGLE TRIGGER

Mark definition based on a single trigger.

MARK BY START/STOP TRIGGER

Mark definition based on two triggers.

MARK BY TIME

Mark definition on the basis of a time range.

ADJUST MARK LIMITS

Adjustment of mark limits.

FRAGMENT MARK

Automatic creation of many sections from one mark.

LINEAR SMOOTHING

Linear smoothing of 2D result data.

SPECTRAL SMOOTHING

Spectral smoothing of 2D result data.

POINT MAP

Graphical representation of a three-dimensional point cloud, thus typically a single value in dependence of two reference quantities.

POINT MAP (GRIDDED)

Process for data reduction of a point map data set.

CHANNEL / FILE DIFFERENCE POINT MAP

Difference formation (channel / files) from multiple point map data sets.

CHANNEL / FILE STATISTIC POINT MAP

Statistical processing (channel / files) of multiple point map data sets.

SPECTRUM TO OCTAVE SPECTRUM

Conversion of an arbitrary spectrum into a 1/n octave spectrum.

CONCATENATE CHANNELS

Concatenation of channels from similarly structured data sets.

RENAME CHANNELS BY TABLE

Subsequent renaming of channels using a table.

MERGE CHANNELS

Merge of channels from multiple data sets.

RENAME CHANNELS

Subsequent renaming of channels.

CUT 2D FROM 3D (RESCALE TO HZ)

Extraction of two-dimensional curves from a three-dimensional data set whose result will then be represented versus a frequency axis.

DATA REDUCTION 3D TO 3D

Reduction of the size of 3D HDF files. Thereby the abscissa resolution is decreased so that smaller result files are generated.

DATA REDUCTION 3D TO 2D

Aggregation of the spectra of 3D HDF files to 2D HDF files.
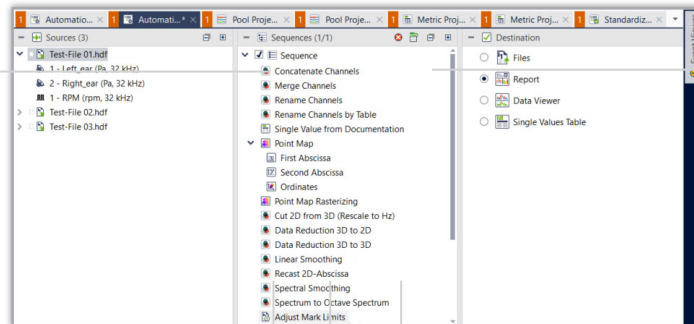
SINGLE VALUE FROM DOCUMENTATION

Analysis which returns a value from the User Documentation of an input signal as single value.

RECAST 2D-ABSCISSA

Transformation of the abscissa of a two-dimensional data set versus time or RPM.

AVAILABLE PROCESSES

In Automation Projects

MARK CREATION

› Adjust Mark Limits
› Mark by RPM
› Mark by Single Trigger
› Mark by Start/Stop Trigger
› Mark by Time
› Fragment Mark
› Spectral Smoothing
› Spectrum to Octave Spectrum

HDF TOOLS

› Concatenate Channels
› Rename Channels by Table
› Merge Channels
› Rename Channels

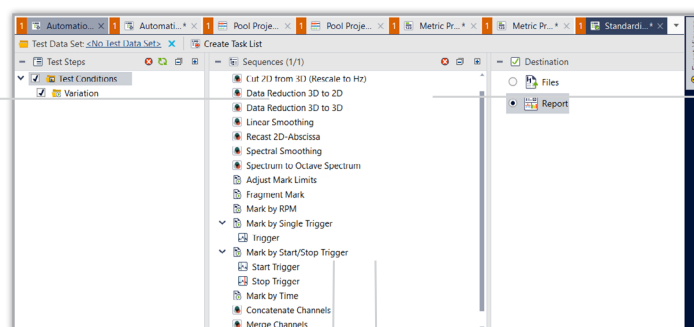### POINT MAPS

› Point Map / (Gridded)
› Channel / File Difference Point Map
› Channel / File Statistic Point Map

SINGLE VALUES

› Single Value from Documentation

MISCELLANEOUS

› Cut 2D from 3D (Rescale to Hz)
› Data Reduction 3D to 3D
› Data Reduction 3D to 2D
› Recast 2D-Abscissa
› Linear Smoothing
› Spectral Smoothing
› Spectrum to Octave Spectrum

In Standardized Test Projects

MARK CREATION

› Adjust Mark Limits
› Mark by RPM
› Mark by Single Trigger
› Mark by Start/Stop Trigger
› Mark by Time
› Fragment Mark

HDF TOOLS

› Concatenate Channels
› Merge Channels

SINGLE VALUES

› Single Value from Documentation

MISCELLANEOUS

› Cut 2D from 3D (Rescale to Hz)
› Data Reduction 3D to 3D
› Data Reduction 3D to 2D
› Recast 2D-Abscissa
› Linear Smoothing
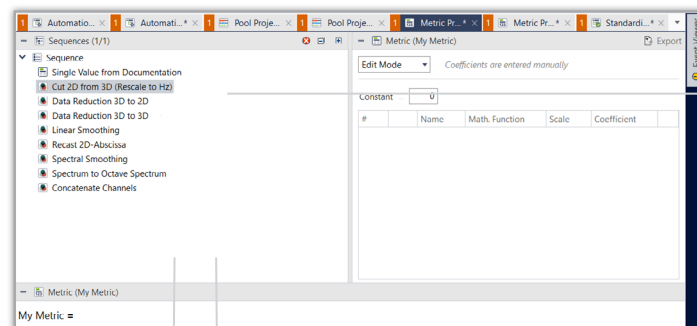› Spectral Smoothing
› Spectrum to Octave Spectrum

In Metric Projects

MISCELLANEOUS

› Cut 2D from 3D (Rescale to Hz)
› Data Reduction 3D to 3D
› Data Reduction 3D to 2D
› Recast 2D-Abscissa
› Linear Smoothing
› Spectral Smoothing
› Spectrum to Octave Spectrum

HDF TOOLS

› Concatenate Channels

SINGLE VALUES

› Single Value from Documentation

Required: APR Framework (Code 50000)

and/or: HEAD System Integration and Extension (ASX) programming interfaces

Contact Information

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