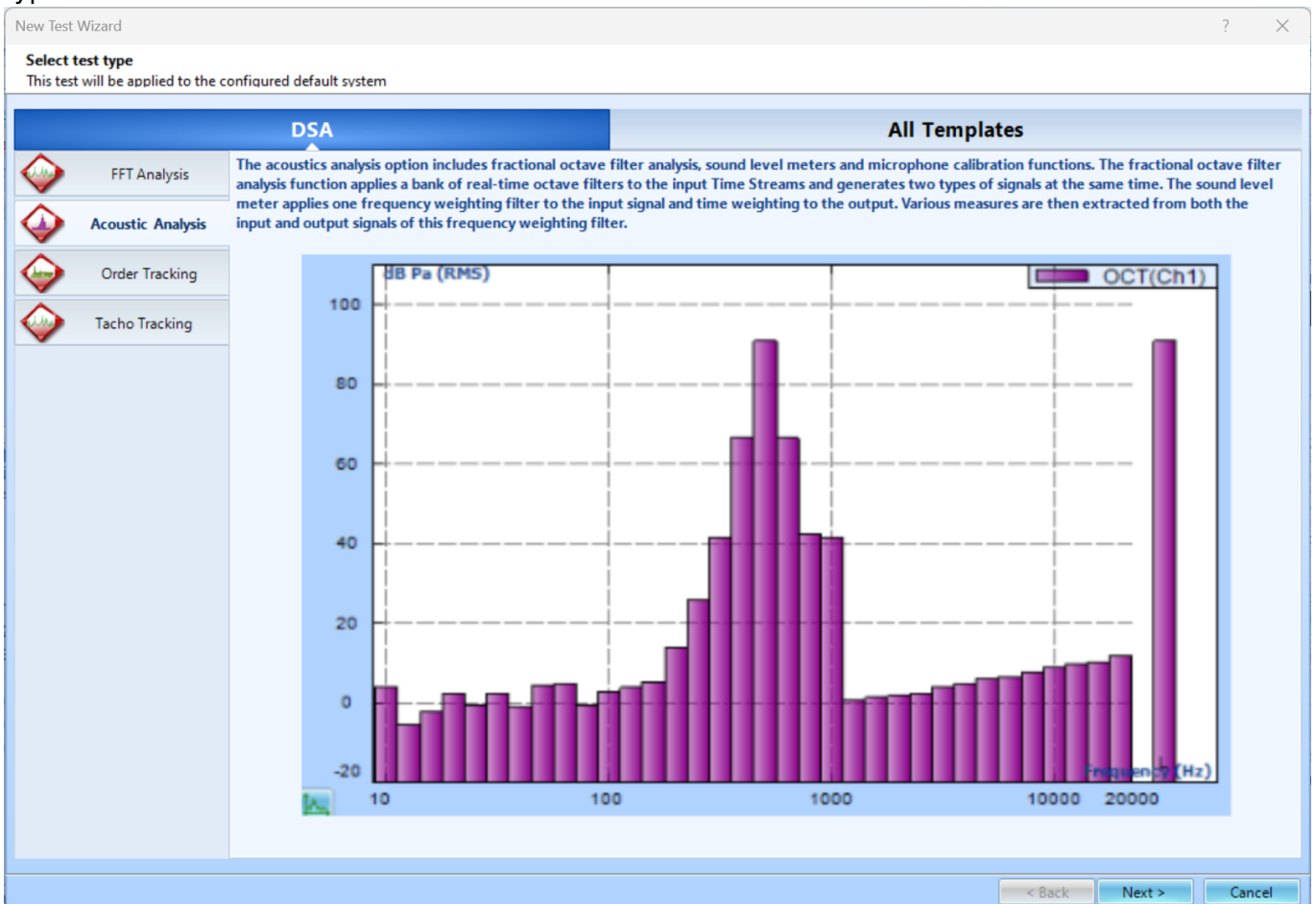


DSA Acoustic Analysis

Follow the guided steps below on how to set-up an Acoustic or Octave Analysis in EDM to use with Spider hardware.

Create Test

In EDM, select to create a new test. From the New Test Wizard, select the **Acoustic Analysis** test type.



Next, give the test a name and description.

New Test Wizard

Fill in the basic information for this test
Note: you will be able to search for this test by "Test name" or "Test description".

Create a new Acoustic Analysis test: **Acoustic**

Test name: Append the sequence number

Test description:

Use the default libraries of the previous test of the same type. If default libraries were not applied before the manufacturing settings will be used.

Create test by using a template.

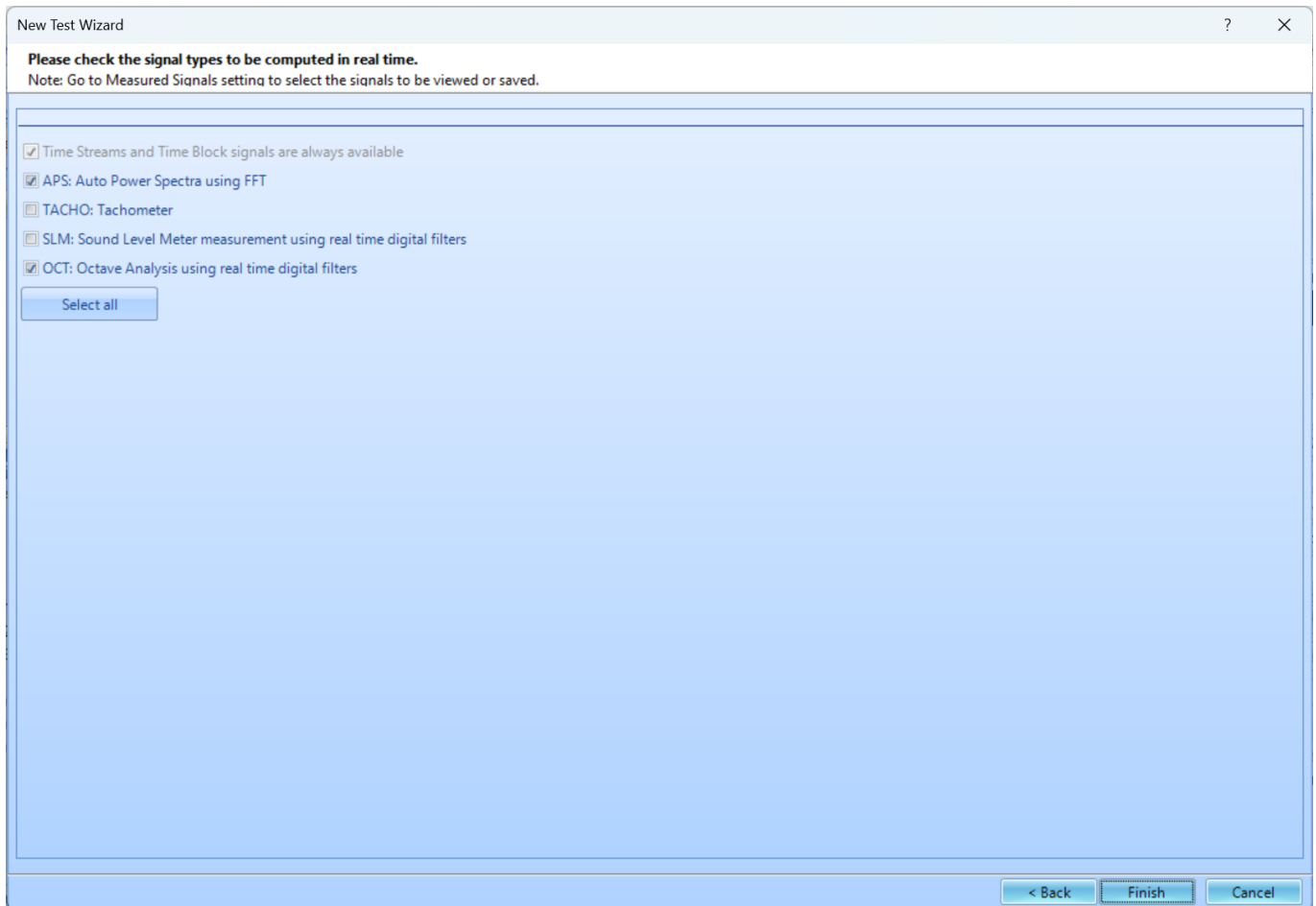
Select	Template Name	Description

Spider system:

Test directory:

Create new run folder for each run

Finally, select the signal types that are wanted. The options include Auto Power Spectra (APS), Tachometer (TACHO), Octave Analysis (OCT), and Sound Level Meter (SLM). You are **unable** to add more signal types to be computed once the test is created. Press **Finish** to create the test.



Test Configuration

For Acoustic Analysis, there are two unique parameters that may need to be set up, *Octave Filter* and *Sound Level Meter*. Please go here for more information on basic [FFT Analysis Parameters](#).

Octave Filter Parameters

If Octave Filters are being applied, their parameters must first be set.

Octave Resolution- Defines the octave resolution including: 1/1, 1/3, 1/6, 1/12, and 1/24.

Low/High Frequency Band- Defines the low and high frequency of the measurement in Hz.

Average Mode- Defines the averaging type: exponential, linear and peak hold.

Frequency Weighting- Defines the frequency weighting including A, B, C or Z.

Time Trace Frequency- Defines which center band frequency, overall or frequency weighted band is used to plot time traces.

Trace Update Times- Defines the time trace display duration. Select a larger update time to create longer time trace display duration.

Octave filter parameters	
Octave resolution	1/3
Low frequency band (Hz)	10
High frequency band (Hz)	10000
Average mode	Exponential
Frequency weighting	Z
Time trace frequency	Overall
Trace update times(s)	0.04

Sound Level Meter (SLM) Parameters

If the SLM is being used, the parameters must first be set.

Time Trace Type- Defines the time weighting including L, Leq and LE.

Analysis Period- Specifies the time duration for each analysis period.

Result Update Time(s)- Defines how many times the result will be updated.

Result History- Defines the measurement length of the result history.

Sound level meter parameter	
Time trace type	L Time-weighted
Analysis period	None
Result update time(s)	10
Result history	256
Frequency weighting	Z

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Permanent link: <https://help.go-ci.com/dsa:acoustic>

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