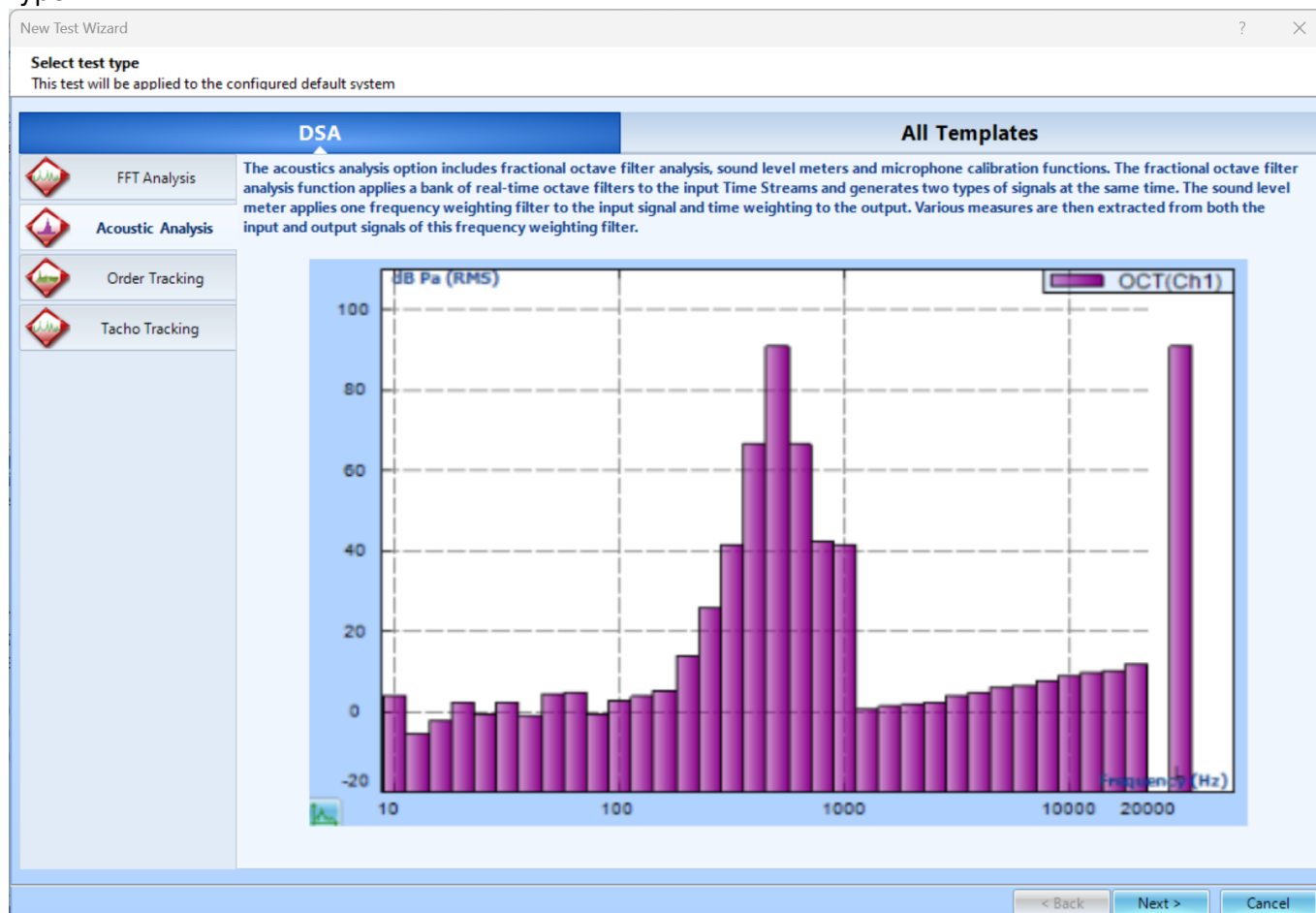


DSA Acoustic Analysis

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

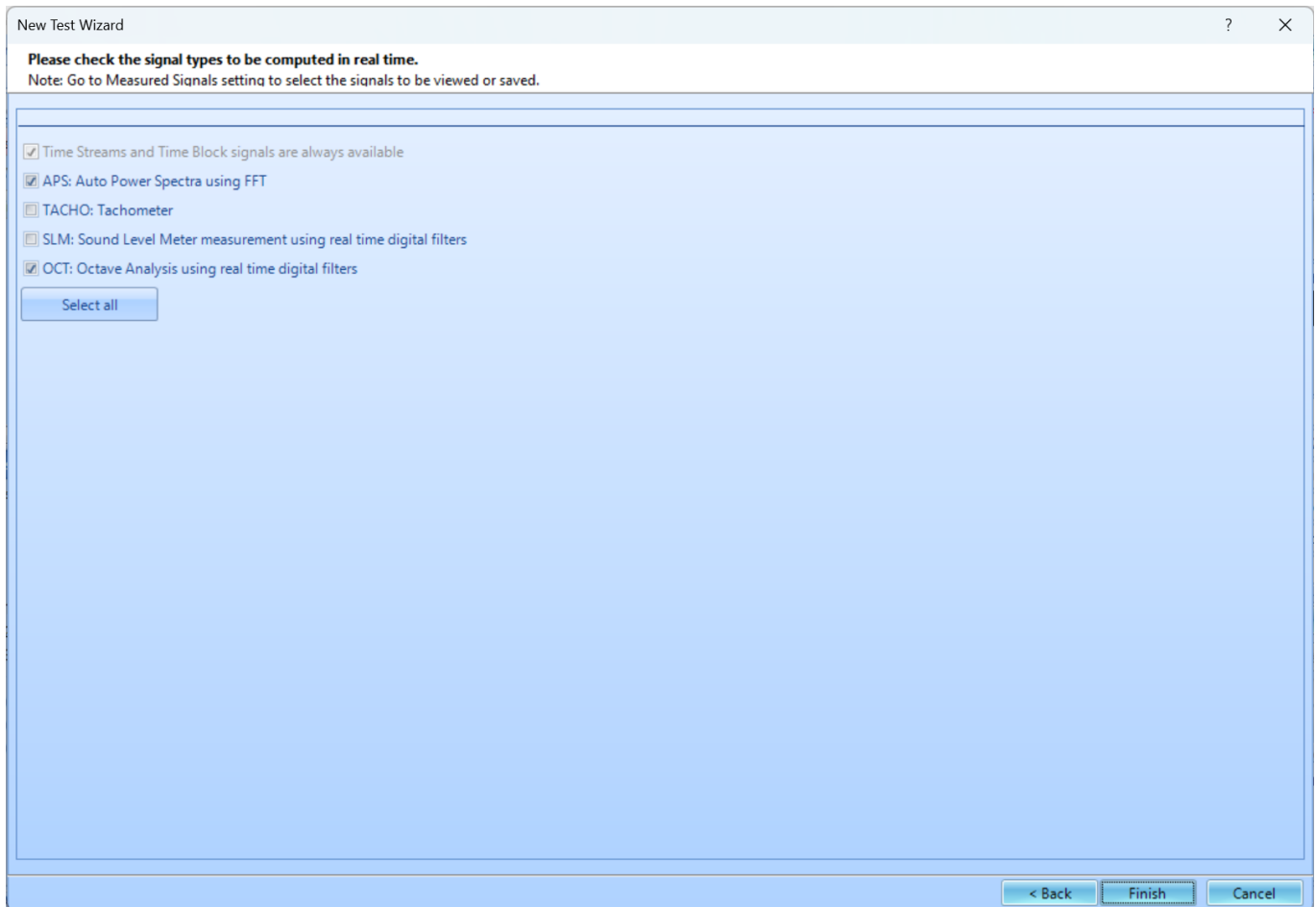
Spider system:

Test directory:

Create new run folder for each run

< Back Next > Cancel

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

Input Channels

Run Test

From:
<https://help.go-ci.com/> - **Crystal Instruments Help**

Permanent link:
<https://help.go-ci.com/dsa:acoustic?rev=1716305926>

Last update: **2024/05/21 15:38**